Q1.
COMMUNITY BENEFIT NARRATIVE REPORTING INSTRUCTIONS

The Maryland Health Services Cost Review Commission (HSCRC or Commission) is required to collect community benefit information from individual hospitals in Maryland and compile into an annual statewide, publicly available report. The Maryland General Assembly updated §19-303 of the Health General Article in the 2020 Legislative Session (HB1169/SB0774), requiring the HSCRC to update the community benefit reporting guidelines to address the growing interest in understanding the types and scope of community benefit activities conducted by Maryland's nonprofit hospitals in relation to community health needs assessments. The reporting is split into two components, a Financial Report and a Narrative Report. This reporting tool serves as the narrative report. In response to the legislation, some of the reporting questions have changed for FY 2021. Detailed reporting instructions are available here: https://hscrc.maryland.gov/Pages/init_cb.aspx

In this reporting tool, responses are mandatory unless specifically marked as optional. If you submit a report without responding to each question, your report may be rejected. You would then be required to fill in the missing answers before resubmitting. Questions that require a narrative response have a limit of 20,000 characters. This report need not be completed in one session and can be opened by multiple users.

For technical assistance, contact HCBHelp@hilltop.umbc.edu.

Q2. Section I - General Info Part 1 - Hospital Identification

Q3. Please confirm the information we have on file about your hospital for the fiscal year.

	Is this information correct? Yes	No	If no, please provide the correct information here:
The proper name of your hospital is: ChristianaCare, Union Hospital	○	◉	
Your hospital's ID is: 210032	◉	○	
Your hospital is part of the hospital system called Christiana Care Health Services, Inc..	○	◉	ChristianaCare Health System, Inc.
The primary Narrative contact at your hospital is Katie Coombes	◉	○	
The primary Narrative contact email address at your hospital is katie.w.coombes@christianacare.org	◉	○	
The primary Financial contact at your hospital is UNKNOWN	○	◉	Katie Coombes
The primary Financial email at your hospital is jkelly@uhcc.com	○	◉	katie.w.coombes@christianacare.org

Q4. The next group of questions asks about the area where your hospital directs its community benefit efforts, called the Community Benefit Service Area. You may find these community health statistics useful in preparing your responses.

Q5. Please select the community health statistics that your hospital uses in its community benefit efforts.

- ☐ Median household income
- ☐ Percentage below federal poverty line (FPL)
- ☐ Percent uninsured
- ☐ Percent with public health insurance
- ☐ Percent with Medicaid
- ☐ Mean travel time to work
- ☐ Percent speaking language other than English at home
- ☐ Race: percent white
- ☐ Race: percent black
- ☐ Ethnicity: percent Hispanic or Latino
- ☐ Life expectancy
- ☐ Crude death rate
- ☐ Other

Q6. Please describe any other community health statistics that your hospital uses in its community benefit efforts.

Q7. Attach any files containing community health statistics that your hospital uses in its community benefit efforts.

Q8. Section I - General Info Part 2 - Community Benefit Service Area

Q9. Please select the county or counties located in your hospital's CBSA.

- [ ] Allegany County
- [ ] Anne Arundel County
- [ ] Baltimore City
- [ ] Baltimore County
- [ ] Calvert County
- [ ] Caroline County
- [ ] Carroll County
- [x] Cecil County
- [ ] Charles County
- [ ] Dorchester County
- [ ] Frederick County
- [ ] Garrett County
- [ ] Harford County
- [ ] Howard County
- [ ] Kent County
- [ ] Montgomery County
- [ ] Prince George's County
- [ ] Queen Anne's County
- [ ] Somerset County
- [ ] St. Mary's County
- [ ] Talbot County
- [ ] Washington County
- [ ] Wicomico County
- [ ] Worcester County

Q10. Please check all Allegany County ZIP codes located in your hospital's CBSA.

This question was not displayed to the respondent.

Q11. Please check all Anne Arundel County ZIP codes located in your hospital's CBSA.

This question was not displayed to the respondent.

Q12. Please check all Baltimore City ZIP codes located in your hospital's CBSA.

This question was not displayed to the respondent.

Q13. Please check all Baltimore County ZIP codes located in your hospital's CBSA.

This question was not displayed to the respondent.

Q14. Please check all Calvert County ZIP codes located in your hospital's CBSA.

This question was not displayed to the respondent.

Q15. Please check all Caroline County ZIP codes located in your hospital's CBSA.

This question was not displayed to the respondent.

Q16. Please check all Carroll County ZIP codes located in your hospital's CBSA.

This question was not displayed to the respondent.

Q17. Please check all Cecil County ZIP codes located in your hospital's CBSA.

- [x] 21901
- [x] 21902
- [x] 21903
- [x] 21904
- [x] 21911
- [x] 21912
- [x] 21913
- [x] 21914
- [x] 21915
- [x] 21916
- [x] 21917
- [x] 21918
- [x] 21919
- [x] 21920
- [x] 21921
- [x] 21922
- [x] 21930

Q18. Please check all Charles County ZIP codes located in your hospital's CBSA.

This question was not displayed to the respondent.

Q19. Please check all Dorchester County ZIP codes located in your hospital's CBSA.

This question was not displayed to the respondent.

Q20. Please check all Frederick County ZIP codes located in your hospital's CBSA.

This question was not displayed to the respondent.

Q21. Please check all Garrett County ZIP codes located in your hospital's CBSA.

This question was not displayed to the respondent.

Q22. Please check all Harford County ZIP codes located in your hospital's CBSA.

This question was not displayed to the respondent.

Q23. Please check all Howard County ZIP codes located in your hospital's CBSA.

This question was not displayed to the respondent.

Q24. Please check all Kent County ZIP codes located in your hospital's CBSA.

This question was not displayed to the respondent.

Q25. Please check all Montgomery County ZIP codes located in your hospital's CBSA.

This question was not displayed to the respondent.

Q26. Please check all Prince George's County ZIP codes located in your hospital's CBSA.

This question was not displayed to the respondent.

Q27. Please check all Queen Anne's County ZIP codes located in your hospital's CBSA.

This question was not displayed to the respondent.

Q28. Please check all Somerset County ZIP codes located in your hospital's CBSA.

This question was not displayed to the respondent.

Q29. Please check all St. Mary's County ZIP codes located in your hospital's CBSA.

This question was not displayed to the respondent.

Q30. Please check all Talbot County ZIP codes located in your hospital's CBSA.

This question was not displayed to the respondent.

Q31. Please check all Washington County ZIP codes located in your hospital's CBSA.

This question was not displayed to the respondent.

Q32. Please check all Wicomico County ZIP codes located in your hospital's CBSA.

This question was not displayed to the respondent.

Q33. Please check all Worcester County ZIP codes located in your hospital's CBSA.

This question was not displayed to the respondent.

Q34. How did your hospital identify its CBSA?

- [ ] Based on ZIP codes in your Financial Assistance Policy. Please describe.

- [ ]

Based on ZIP codes in your global budget revenue agreement. Please describe.

- [ ] Based on patterns of utilization. Please describe.

- [x] Other. Please describe.

While most UHCC patients reside in Elkton (21921) and Northeast (21901), the hospital does serve patients from all zip codes in Cecil County. Because of this, we consider Cecil County to be our CBSA.

Q35. Provide a link to your hospital's mission statement.

https://www.uhcc.com/about-us/#:~:text=Our%20mission%20as%20an%20organization,caring%20partners%20in%20their%20health.&text=We%20want%20to%20care%20for,hospital%20located%20in%20Elkton%2C%20Maryland.

Q36. (Optional) Is there any other information about your hospital's Community Benefit Service Area that you would like to provide?

Q37. Section II - CHNAs and Stakeholder Involvement Part 1 - Timing & Format

Q38.
Within the past three fiscal years, has your hospital conducted a CHNA that conforms to IRS requirements?

- (x) Yes
- ( ) No

Q39. Please explain why your hospital has not conducted a CHNA that conforms to IRS requirements, as well as your hospital's plan and timeframe for completing a CHNA.

This question was not displayed to the respondent.

Q40. When was your hospital's most recent CHNA completed? (MM/DD/YYYY)

06/28/2019

Q41. Please provide a link to your hospital's most recently completed CHNA.

https://www.uhcc.com/wp-content/uploads/2019/06/CHNA-Report_FY19.pdf

Q42. Please upload your hospital's most recently completed CHNA.

CHNA-Report_FY19.pdf
3.2MB
application/pdf

Q43. Section II - CHNAs and Stakeholder Involvement Part 2 - Internal CHNA Partners

Q44. Please use the table below to tell us about the internal partners involved in your most recent CHNA development.

	CHNA Activities									
	N/A - Person or Organization was not Involved	N/A - Position or Department does not exist	Member of CHNA Committee	Participated in development of CHNA process	Advised on CHNA best practices	Participated in primary data collection	Participated in identifying priority health needs	Participated in identifying community resources to meet health needs	Provided secondary health data	Other (explain)	Other - If you selected "Other (explain)," please type your exp below:
CB/ Community Health/Population Health Director (facility level)	☐	☑	☐	☐	☐	☐	☐	☐	☐	☐	
CB/ Community Health/ Population Health Director (system level)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☑	Position did not exist when 2019 CHNA was develope
Senior Executives (CEO, CFO, VP, etc.) (facility level)	☐	☐	☐	☐	☐	☐	☐	☑	☐	☐	
Senior Executives (CEO, CFO, VP, etc.) (system level)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☑	System level did not exist when 2019 CHNA was develop
Board of Directors or Board Committee (facility level)	☐	☐	☐	☐	☐	☑	☑	☐	☐	☑	Approved the CHNA process prior to implementation
Board of Directors or Board Committee (system level)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☑	System level did not exist when 2019 CHNA was develop
Clinical Leadership (facility level)	☐	☐	☐	☐	☐	☐	☑	☐	☐	☐	
Clinical Leadership (system level)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☑	System level did not exist when 2019 CHNA was develop
Population Health Staff (facility level)	☐	☑	☐	☐	☐	☐	☐	☐	☐	☐	

	N/A - Person or Organization was not Involved	N/A - Position or Department does not exist	Member of CHNA Committee	Participated in development of CHNA process	Advised on CHNA best practices	Participated in primary data collection	Participated in identifying priority health needs	Participated in identifying community resources to meet health needs	Provided secondary health data	Other (explain)	Other - If you selected "Other (explain)," please type your exp below:
Population Health Staff (system level)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☑	System level did not exist when 2019 CHNA was develop
Community Benefit staff (facility level)	☐	☐	☑	☑	☑	☑	☑	☑	☑	☑	The Community Benefit Coordinator was involved in all aspe developing the CHNA including working closely with the Cecil Health Department (CCHD) to plan and carry out the proces gathering data, informing stakeholders of progress, compiling d writing the CHNA and CHIP reports.
Community Benefit staff (system level)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☑	System level did not exist when 2019 CHNA was develop
Physician(s)	☐	☐	☐	☐	☐	☐	☑	☑	☐	☐	
Nurse(s)	☐	☐	☐	☐	☐	☐	☑	☑	☐	☐	
Social Workers	☐	☐	☐	☐	☐	☐	☐	☑	☐	☐	
Hospital Advisory Board	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Other (specify) Community leaders/stakeholders and focus groups of special populations such as low-income, homeless, seniors, veterans, and minority	☐	☐	☐	☐	☐	☐	☑	☐	☐	☐	

Q45. Section II - CHNAs and Stakeholder Involvement Part 3 - Internal HCB Partners

Q46. Please use the table below to tell us about the internal partners involved in your community benefit activities during the fiscal year.

	Activities										
	N/A - Person or Organization was not Involved	N/A - Position or Department does not exist	Selecting health needs that will be targeted	Selecting the initiatives that will be supported	Determining how to evaluate the impact of initiatives	Providing funding for CB activities	Allocating budgets for individual initiativves	Delivering CB initiatives	Evaluating the outcome of CB initiatives	Other (explain)	Other - If you selected "Other (explain)," please type your explanation below:
CB/ Community Health/Population Health Director (facility level)	☐	☑	☐	☐	☐	☐	☐	☐	☐	☐	
CB/ Community Health/ Population Health Director (system level)	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Senior Executives (CEO, CFO, VP, etc.) (facility level)	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Senior Executives (CEO, CFO, VP, etc.) (system level)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☑	Union's President participated in community meetings such as Local Management Board and the Economic Development Commission.
Board of Directors or Board Committee (facility level)	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Board of Directors or Board Committee (system level)	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Clinical Leadership (facility level)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☑	Clinical leadership supported the COVID-19 vaccination clinics that we held for the latter half of this fiscal year.
Clinical Leadership (system level)	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Population Health Staff (facility level)	☐	☑	☐	☐	☐	☐	☐	☐	☐	☐	
Population Health Staff (system level)	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Community Benefit staff (facility level)	☐	☑	☐	☐	☐	☐	☐	☐	☐	☐	

	N/A - Person or Organization was not Involved	N/A - Position or Department does not exist	Selecting health needs that will be targeted	Selecting the initiatives that will be supported	Determining how to evaluate the impact of initiatives	Providing funding for CB activities	Allocating budgets for individual initiativves	Delivering CB initiatives	Evaluating the outcome of CB initiatives	Other (explain)	Other - If you selected "Other (explain)," please type your explanation below:
Community Benefit staff (system level)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☑	Community Benefit staff collected and reported on community benefit activity.
Physician(s)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☑	Multiple physicians volunteered to offer free sports physicals to 924 students.
Nurse(s)	☐	☐	☐	☐	☑	☐	☐	☑	☐	☐	RN Sheelagh Stewart served as the chair of the Cancer Task Force. a task force of the Community Health Advisory Committee which was tasked with increasing lung cancer screenings. Nurses also provided education to new and expecting mothers at local treatment providers. Nurses also provided vaccines at the COVID-19 vaccination clinics.
Social Workers	☐	☐	☐	☐	☐	☐	☐	☐	☐	☑	Social Worker participated in the Adult Disability Resource Committee collaboratively address the needs of the vulnerable elderly population
Hospital Advisory Board	☐	☑	☐	☐	☐	☐	☐	☐	☐	☐	
Other (specify) Registered Dietitians/Communications Manager	☐	☐	☐	☐	☐	☐	☐	☑	☐	☑	RDs provided diabetes education and facilitated cancer screenings. Communications manager supported COVID-19 vaccination clinics in partnership with Cecil County Health Department.

Q47. Section II - CHNAs and Stakeholder Involvement Part 4 - Meaningful Engagement

Q48. Community participation and meaningful engagement is an essential component to changing health system behavior, activating partnerships that improve health outcomes and sustaining community ownership and investment in programs. Please use the table below to tell us about the external partners involved in your most recent CHNA. In the first column, select and describe the external participants. In the second column, select the level of community engagement for each participant. In the third column, select the recommended practices that each stakeholder was engaged in. The Maryland Hospital Association worked with the HSCRC to develop this list of eight recommended practices for engaging patients and communities in the CHNA process.

Refer to the FY 2021 Community Benefit Guidelines for more detail on MHA's recommended practices. Completion of this self-assessment is optional for FY 2021, but will be mandatory for FY 2022.

	Level of Community Engagement						Recommended Practices							
	Informed - To provide the community with balanced & objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions	Consulted - To obtain community feedback on analysis, alternatives and/or solutions	Involved - To work directly with community throughout the process to ensure their concerns and aspirations are consistently understood and considered	Collaborated - To partner with the community in each aspect of the decision including the development of alternatives & identification of the preferred solution	Delegated - To place the decision-making in the hands of the community	Community-Driven/Led - To support the actions of community initiated, driven and/or led processes	Identify & Engage Stakeholders	Define the community to be assessed	Collect and analyze the data	Select priority community health issues	Document and communicate results	Plan Implementation Strategies	Implement Improvement Plans	Evaluate Progress
Other Hospitals -- Please list the hospitals here:	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

	Informed - To provide the community with balanced & objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions	Consulted - To obtain community feedback on analysis, alternatives and/or solutions	Involved - To work directly with community throughout the process to ensure their concerns and aspirations are consistently understood and considered	Collaborated - To partner with the community in each aspect of the decision including the development of alternatives & identification of the preferred solution	Delegated - To place the decision-making in the hands of the community	Community-Driven/Led - To support the actions of community initiated, driven and/or led processes	Identify & Engage Stakeholders	Define the community to be assessed	Collect and analyze the data	Select priority community health issues	Document and communicate results	Plan Implementation Strategies	Implement Improvement Plans	Evaluate Progress
Local Health Department -- Please list the Local Health Departments here: ______	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
	Informed - To provide the community with balanced & objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions	Consulted - To obtain community feedback on analysis, alternatives and/or solutions	Involved - To work directly with community throughout the process to ensure their concerns and aspirations are consistently understood and considered	Collaborated - To partner with the community in each aspect of the decision including the development of alternatives & identification of the preferred solution	Delegated - To place the decision-making in the hands of the community	Community-Driven/Led - To support the actions of community initiated, driven and/or led processes	Identify & Engage Stakeholders	Define the community to be assessed	Collect and analyze the data	Select priority community health issues	Document and communicate results	Plan Implementation Strategies	Implement Improvement Plans	Evaluate Progress
Local Health Improvement Coalition -- Please list the LHICs here: ______	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
	Informed - To provide the community with balanced & objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions	Consulted - To obtain community feedback on analysis, alternatives and/or solutions	Involved - To work directly with community throughout the process to ensure their concerns and aspirations are consistently understood and considered	Collaborated - To partner with the community in each aspect of the decision including the development of alternatives & identification of the preferred solution	Delegated - To place the decision-making in the hands of the community	Community-Driven/Led - To support the actions of community initiated, driven and/or led processes	Identify & Engage Stakeholders	Define the community to be assessed	Collect and analyze the data	Select priority community health issues	Document and communicate results	Plan Implementation Strategies	Implement Improvement Plans	Evaluate Progress
Maryland Department of Health	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
	Informed - To provide the community with balanced & objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions	Consulted - To obtain community feedback on analysis, alternatives and/or solutions	Involved - To work directly with community throughout the process to ensure their concerns and aspirations are consistently understood and considered	Collaborated - To partner with the community in each aspect of the decision including the development of alternatives & identification of the preferred solution	Delegated - To place the decision-making in the hands of the community	Community-Driven/Led - To support the actions of community initiated, driven and/or led processes	Identify & Engage Stakeholders	Define the community to be assessed	Collect and analyze the data	Select priority community health issues	Document and communicate results	Plan Implementation Strategies	Implement Improvement Plans	Evaluate Progress
Other State Agencies -- Please list the agencies here: ______	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
	Informed - To provide the community with balanced & objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions	Consulted - To obtain community feedback on analysis, alternatives and/or solutions	Involved - To work directly with community throughout the process to ensure their concerns and aspirations are consistently understood and considered	Collaborated - To partner with the community in each aspect of the decision including the development of alternatives & identification of the preferred solution	Delegated - To place the decision-making in the hands of the community	Community-Driven/Led - To support the actions of community initiated, driven and/or led processes	Identify & Engage Stakeholders	Define the community to be assessed	Collect and analyze the data	Select priority community health issues	Document and communicate results	Plan Implementation Strategies	Implement Improvement Plans	Evaluate Progress
Local Govt. Organizations -- Please list the organizations here: ______	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
	Informed - To provide the community with balanced & objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions	Consulted - To obtain community feedback on analysis, alternatives and/or solutions	Involved - To work directly with community throughout the process to ensure their concerns and aspirations are consistently understood and considered	Collaborated - To partner with the community in each aspect of the decision including the development of alternatives & identification of the preferred solution	Delegated - To place the decision-making in the hands of the community	Community-Driven/Led - To support the actions of community initiated, driven and/or led processes	Identify & Engage Stakeholders	Define the community to be assessed	Collect and analyze the data	Select priority community health issues	Document and communicate results	Plan Implementation Strategies	Implement Improvement Plans	Evaluate Progress
Faith-Based Organizations	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

	Informed - To provide the community with balanced & objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions	Consulted - To obtain community feedback on analysis, alternatives and/or solutions	Involved - To work directly with community throughout the process to ensure their concerns and aspirations are consistently understood and considered	Collaborated - To partner with the community in each aspect of the decision including the development of alternatives & identification of the preferred solution	Delegated - To place the decision-making in the hands of the community	Community-Driven/Led - To support the actions of community initiated, driven and/or led processes	Identify & Engage Stakeholders	Define the community to be assessed	Collect and analyze the data	Select priority community health issues	Document and communicate results	Plan Implementation Strategies	Implement Improvement Plans	Evaluate Progress
School - K-12 -- Please list the schools here: ______	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

	Informed - To provide the community with balanced & objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions	Consulted - To obtain community feedback on analysis, alternatives and/or solutions	Involved - To work directly with community throughout the process to ensure their concerns and aspirations are consistently understood and considered	Collaborated - To partner with the community in each aspect of the decision including the development of alternatives & identification of the preferred solution	Delegated - To place the decision-making in the hands of the community	Community-Driven/Led - To support the actions of community initiated, driven and/or led processes	Identify & Engage Stakeholders	Define the community to be assessed	Collect and analyze the data	Select priority community health issues	Document and communicate results	Plan Implementation Strategies	Implement Improvement Plans	Evaluate Progress
School - Colleges, Universities, Professional Schools -- Please list the schools here: ______	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

	Informed - To provide the community with balanced & objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions	Consulted - To obtain community feedback on analysis, alternatives and/or solutions	Involved - To work directly with community throughout the process to ensure their concerns and aspirations are consistently understood and considered	Collaborated - To partner with the community in each aspect of the decision including the development of alternatives & identification of the preferred solution	Delegated - To place the decision-making in the hands of the community	Community-Driven/Led - To support the actions of community initiated, driven and/or led processes	Identify & Engage Stakeholders	Define the community to be assessed	Collect and analyze the data	Select priority community health issues	Document and communicate results	Plan Implementation Strategies	Implement Improvement Plans	Evaluate Progress
Behavioral Health Organizations -- Please list the organizations here: ______	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

	Informed - To provide the community with balanced & objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions	Consulted - To obtain community feedback on analysis, alternatives and/or solutions	Involved - To work directly with community throughout the process to ensure their concerns and aspirations are consistently understood and considered	Collaborated - To partner with the community in each aspect of the decision including the development of alternatives & identification of the preferred solution	Delegated - To place the decision-making in the hands of the community	Community-Driven/Led - To support the actions of community initiated, driven and/or led processes	Identify & Engage Stakeholders	Define the community to be assessed	Collect and analyze the data	Select priority community health issues	Document and communicate results	Plan Implementation Strategies	Implement Improvement Plans	Evaluate Progress
Social Service Organizations -- Please list the organizations here: ______	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

	Informed - To provide the community with balanced & objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions	Consulted - To obtain community feedback on analysis, alternatives and/or solutions	Involved - To work directly with community throughout the process to ensure their concerns and aspirations are consistently understood and considered	Collaborated - To partner with the community in each aspect of the decision including the development of alternatives & identification of the preferred solution	Delegated - To place the decision-making in the hands of the community	Community-Driven/Led - To support the actions of community initiated, driven and/or led processes	Identify & Engage Stakeholders	Define the community to be assessed	Collect and analyze the data	Select priority community health issues	Document and communicate results	Plan Implementation Strategies	Implement Improvement Plans	Evaluate Progress
Post-Acute Care Facilities -- please list the facilities here: ______	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

	Informed - To provide the community with balanced & objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions	Consulted - To obtain community feedback on analysis, alternatives and/or solutions	Involved - To work directly with community throughout the process to ensure their concerns and aspirations are consistently understood and considered	Collaborated - To partner with the community in each aspect of the decision including the development of alternatives & identification of the preferred solution	Delegated - To place the decision-making in the hands of the community	Community-Driven/Led - To support the actions of community initiated, driven and/or led processes	Identify & Engage Stakeholders	Define the community to be assessed	Collect and analyze the data	Select priority community health issues	Document and communicate results	Plan Implementation Strategies	Implement Improvement Plans	Evaluate Progress
Community/Neighborhood Organizations -- Please list the organizations here: ______	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

	Informed - To provide the community with balanced & objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions	Consulted - To obtain community feedback on analysis, alternatives and/or solutions	Involved - To work directly with community throughout the process to ensure their concerns and aspirations are consistently understood and considered	Collaborated - To partner with the community in each aspect of the decision including the development of alternatives & identification of the preferred solution	Delegated - To place the decision-making in the hands of the community	Community-Driven/Led - To support the actions of community initiated, driven and/or led processes	Identify & Engage Stakeholders	Define the community to be assessed	Collect and analyze the data	Select priority community health issues	Document and communicate results	Plan Implementation Strategies	Implement Improvement Plans	Evaluate Progress
Consumer/Public Advocacy Organizations -- Please list the organizations here: [ ]	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
	Informed - To provide the community with balanced & objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions	Consulted - To obtain community feedback on analysis, alternatives and/or solutions	Involved - To work directly with community throughout the process to ensure their concerns and aspirations are consistently understood and considered	Collaborated - To partner with the community in each aspect of the decision including the development of alternatives & identification of the preferred solution	Delegated - To place the decision-making in the hands of the community	Community-Driven/Led - To support the actions of community initiated, driven and/or led processes	Identify & Engage Stakeholders	Define the community to be assessed	Collect and analyze the data	Select priority community health issues	Document and communicate results	Plan Implementation Strategies	Implement Improvement Plans	Evaluate Progress
Other -- If any other people or organizations were involved, please list them here: [ ]	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
	Informed - To provide the community with balanced & objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions	Consulted - To obtain community feedback on analysis, alternatives and/or solutions	Involved - To work directly with community throughout the process to ensure their concerns and aspirations are consistently understood and considered	Collaborated - To partner with the community in each aspect of the decision including the development of alternatives & identification of the preferred solution	Delegated - To place the decision-making in the hands of the community	Community-Driven/Led - To support the actions of community initiated, driven and/or led processes	Identify & Engage Stakeholders	Define the community to be assessed	Collect and analyze the data	Select priority community health issues	Document and communicate results	Plan Implementation Strategies	Implement Improvement Plans	Evaluate Progress

Q49. Section II - CHNAs and Stakeholder Involvement Part 5 - Follow-up

Q50. Has your hospital adopted an implementation strategy following its most recent CHNA, as required by the IRS?

- (●) Yes
- ( ) No

Q51. Please enter the date on which the implementation strategy was approved by your hospital's governing body.

02/08/2018

Q52. Please provide a link to your hospital's CHNA implementation strategy.

https://www.uhcc.com/wp-content/uploads/2019/06/CHNA-Report_FY19.pdf

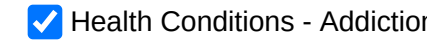
Q222. Please upload your hospital's CHNA implementation strategy.

CHNA-CHIP Report_FY19.pdf
3.2MB
application/pdf

Q53. Please explain why your hospital has not adopted an implementation strategy. Please include whether the hospital has a plan and/or a timeframe for an implementation strategy.

This question was not displayed to the respondent.

Q54. Please select the CHNA Priority Area Categories most relevant to your most recent CHNA. The list of categories is based on the Healthy People 2030 objectives available here. This list is not exhaustive. Please select "other" and describe any CHNA Priority Area Categories that are not captured by this list. Select all that apply even if a need was not addressed by a reported initiative.



☑ Health Conditions - Addiction ☑ Health Behaviors - Drug and Alcohol Use ☐ Populations - Women

- [ ] Health Conditions - Arthritis
- [ ] Health Conditions - Blood Disorders
- [x] Health Conditions - Cancer
- [ ] Health Conditions - Chronic Kidney Disease
- [ ] Health Conditions - Chronic Pain
- [ ] Health Conditions - Dementias
- [ ] Health Conditions - Diabetes
- [ ] Health Conditions - Foodborne Illness
- [ ] Health Conditions - Health Care-Associated Infections
- [ ] Health Conditions - Heart Disease and Stroke
- [ ] Health Conditions - Infectious Disease
- [x] Health Conditions - Mental Health and Mental Disorders
- [ ] Health Conditions - Oral Conditions
- [ ] Health Conditions - Osteoporosis
- [ ] Health Conditions - Overweight and Obesity
- [ ] Health Conditions - Pregnancy and Childbirth
- [ ] Health Conditions - Respiratory Disease
- [ ] Health Conditions - Sensory or Communication Disorders
- [ ] Health Conditions - Sexually Transmitted Infections
- [x] Health Behaviors - Child and Adolescent Development
- [ ] Health Behaviors - Emergency Preparedness
- [ ] Health Behaviors - Family Planning
- [ ] Health Behaviors - Health Communication
- [ ] Health Behaviors - Injury Prevention
- [ ] Health Behaviors - Nutrition and Healthy Eating
- [ ] Health Behaviors - Physical Activity
- [x] Health Behaviors - Preventive Care
- [ ] Health Behaviors - Safe Food Handling
- [ ] Health Behaviors - Sleep
- [x] Health Behaviors - Tobacco Use
- [ ] Health Behaviors - Vaccination
- [ ] Health Behaviors - Violence Prevention
- [x] Populations - Adolescents
- [x] Populations - Children
- [ ] Populations - Infants
- [ ] Populations – LGBT
- [ ] Populations - Men
- [ ] Populations - Older Adults
- [ ] Populations - Parents or Caregivers
- [ ] Populations - People with Disabilities
- [ ] Populations - Workforce
- [ ] Settings and Systems - Community
- [ ] Settings and Systems - Environmental Health
- [ ] Settings and Systems - Global Health
- [ ] Settings and Systems - Health Care
- [ ] Settings and Systems - Health Insurance
- [ ] Settings and Systems - Health IT
- [ ] Settings and Systems - Health Policy
- [ ] Settings and Systems - Hospital and Emergency Services
- [ ] Settings and Systems - Housing and Homes
- [ ] Settings and Systems - Public Health Infrastructure
- [ ] Settings and Systems - Schools
- [ ] Settings and Systems - Transportation
- [ ] Settings and Systems - Workplace
- [ ] Social Determinants of Health - Economic Stability
- [ ] Social Determinants of Health - Education Access and Quality
- [ ] Social Determinants of Health - Health Care Access and Quality
- [ ] Social Determinants of Health - Neighborhood and Built Environment
- [ ] Social Determinants of Health - Social and Community Context
- [x] Other (specify) Childhood Trauma

Q56. (Optional) Please use the box below to provide any other information about your CHNA that you wish to share.

In September 2017, Union Hospital's community health improvement process (CHNA and CHIP) was selected out of 128 hospitals nationwide as a top 10 best practice site by Health Resources in Action (HRiA) for a case study analysis funded by the Robert Wood Johnson Foundation. Union Hospital was selected based on its competency in meeting all study criteria. The collaboration with Cecil County Health Department in particular demonstrated effective alignment of process, resources, and support for assessing and addressing community health needs. In March 2018, HRiA conducted a 2-day site visit in Cecil County to gather information about our collaborative CHNA process. HRiA facilitated interviews with Community Benefit staff and leadership from Union Hospital and Cecil County Health Department. HRiA also held focus groups with community partners who participated in the most recent CHNA and CHIP. Results from the HRiA site visit were published in the case study report in mid 2019 (https://hria.org/resources/chi-processes-evaluation-evaluating-the-promise-of-community-health-improvement-processes/). The CCHD and Union Hospital leads also participated in a CDC policy webinar about their collaborative work on the CHNA. CDC Policy Lecture Series: Using the community benefit process to improve public health: an example from Cecil County, MD. Since Union Hospital joined ChristianaCare in 2020, our focus was centered on responding to the pandemic and ensuring we were serving our communities by providing testing, vaccination, COVID care, prevention, education, and expanding services. We will continue to partner with Cecil County Health Department as we undertake our 2022 CHNA and will bring best practices from ChristianaCare as we seek to understand and serve the community needs.

Q57. (Optional) Please attach any files containing information regarding your CHNA that you wish to share.

Q58. Section II - CHNAs and Stakeholder Involvement Part 6 - Initiatives

Q59. Please use the questions below to provide details regarding the initiatives to address the CHNA Priority Area Categories selected in the previous question.

For those hospitals completing the ***optional*** CHNA financial reporting in FY 2021, please ensure that these tie directly to line item initiatives in the financial reporting template.

For those hospitals **not** completing the ***optional*** CHNA financial template, please provide this information for as many initiatives as you deem feasible.

Please note that hospitals will be required to report on each CHNA-related initiative in FY 2022.

Q163. Please describe the initiative(s) addressing Health Conditions - Addiction.

	Health Conditions - Addiction Initiative Details			
	Initiative Name	Initiative Goal/Objective	Initiative Outcomes to Date	Data Used to Measure Outcomes
Initiative A	Peer Recovery Advocates Program	1) Provide Peer Recovery Specialists to engage those patients with substance use disorders; 2) Facilitate access to relevant community supports and community treatment programs; and 3) Maintain a strong support network and follow-up with patients post-intervention (managed by Cecil County Health Department).	Due to the COVID-19 pandemic, peers were not on-site at the hospital for most of the year. They were only present for the final couple weeks of FY 21. 119 referrals from caregivers were sent to the off-site peers.	Number of referrals.

	Initiative Name	Initiative Goal/Objective	Initiative Outcomes to Date	Data Used to Measure Outcomes
Initiative B	Newborn Education at Serenity Treatment Center	ChristianaCare caregivers provides weekly education classes for expectant mothers at Serenity Treatment Center in Elkton. Topics they cover are Neonatal Abstinence Syndrome, what to expect at the hospital, breastfeeding, newborn care, safe sleep, and infant CPR.	Classes were suspended due to COVID-19 until June 2021 when one class was held.	Number of classes.
Initiative C				
Initiative D				
Initiative E				
Initiative F				
Initiative G				
Initiative H				
Initiative I				
Initiative J				
All Other Initiatives				

Q182. Please describe the initiative(s) addressing Health Conditions - Arthritis.

This question was not displayed to the respondent.

Q183. Please describe the initiative(s) addressing Health Conditions - Blood Disorders.

This question was not displayed to the respondent.

Q184. Please describe the initiative(s) addressing Health Conditions - Cancer.

	Health Conditions - Cancer Initiative Details			
	Initiative Name	Initiative Goal/Objective	Initiative Outcomes to Date	Data Used to Measure Outcomes
Initiative A	Low-dose lung CT screenings and increasing awareness for lung cancer prevention	The primary objective of this initiative is to increase the number of individuals receiving low-dose lung cancer CT screens by 5% by June 30, 2022 to raise awareness for lung cancer prevention. In calendar years 2016, 2017, and 2018, 556 people were screened and so to meet the 5% increase goal, 584 people will have to be screened in calendar years 2019, 2020, and 2021.	In FY20, 241 individuals received low-dose lung CT scans and in FY22, 298 individuals received low-dose lung CT scans.	Number of low-dose lung CT scans given.
Initiative B	Educator Mammograms	Encourage educators to undergo mammography screening.	In August 2020, 41 Cecil County Public School educators received mammography screening.	Number of screens.
Initiative C				
Initiative D				
Initiative E				
Initiative F				
Initiative G				
Initiative H				
Initiative I				
Initiative J				
All Other Initiatives				

Q185. Please describe the initiative(s) addressing Health Conditions - Chronic Kidney Disease.

This question was not displayed to the respondent.

Q186. Please describe the initiative(s) addressing Health Conditions - Chronic Pain.

This question was not displayed to the respondent.

Q187. Please describe the initiative(s) addressing Health Conditions - Dementias.

This question was not displayed to the respondent.

Q188. Please describe the initiative(s) addressing Health Conditions - Diabetes.

This question was not displayed to the respondent.

Q189. Please describe the initiative(s) addressing Health Conditions - Foodborne Illness.

This question was not displayed to the respondent.

Q190. Please describe the initiative(s) addressing Health Conditions - Health Care-Associated Infections.

This question was not displayed to the respondent.

Q191. Please describe the initiative(s) addressing Health Conditions - Heart Disease and Stroke.

This question was not displayed to the respondent.

Q192. Please describe the initiative(s) addressing Health Conditions - Infectious Disease.

This question was not displayed to the respondent.

Q193. Please describe the initiative(s) addressing Health Conditions - Mental Health and Mental Disorders.

	Health Conditions - Mental Health and Mental Disorders Initiative Details			
	Initiative Name	Initiative Goal/Objective	Initiative Outcomes to Date	Data Used to Measure Outcomes
Initiative A				
Initiative B				
Initiative C				
Initiative D				
Initiative E				
Initiative F				
Initiative G				
Initiative H				
Initiative I				
Initiative J				
All Other Initiatives				

Q194. Please describe the initiative(s) addressing Health Conditions - Oral Conditions.

This question was not displayed to the respondent.

Q195. Please describe the initiative(s) addressing Health Conditions - Osteoporosis.

This question was not displayed to the respondent.

Q196. Please describe the initiative(s) addressing Health Conditions - Overweight and Obesity.

This question was not displayed to the respondent.

Q197. Please describe the initiative(s) addressing Health Conditions - Pregnancy and Childbirth.

This question was not displayed to the respondent.

Q198. Please describe the initiative(s) addressing Health Conditions - Respiratory Disease.

This question was not displayed to the respondent.

Q199. Please describe the initiative(s) addressing Health Conditions - Sensory or Communication Disorders.

This question was not displayed to the respondent.

Q200. Please describe the initiative(s) addressing Health Conditions - Sexually Transmitted Infections.

This question was not displayed to the respondent.

Q201. Please describe the initiative(s) addressing Health Behaviors - Child and Adolescent Development.

	Health Behaviors - Child and Adolescent Development Initiative Details			
	Initiative Name	Initiative Goal/Objective	Initiative Outcomes to Date	Data Used to Measure Outcomes
Initiative A				
Initiative B				
Initiative C				

Initiative D				
Initiative E				
Initiative F				
Initiative G				
Initiative H				
Initiative I				
Initiative J				
All Other Initiatives				

Q202. Please describe the initiative(s) addressing Health Behaviors - Drug and Alcohol Use.

	Health Behaviors - Drug and Alcohol Use Initiative Details			
	Initiative Name	Initiative Goal/Objective	Initiative Outcomes to Date	Data Used to Measure Outcomes
Initiative A	Peer Recovery Advocates Program	1) Provide Peer Recovery Specialists to engage those patients with substance use disorders; 2) Facilitate access to relevant community supports and community treatment programs; and 3) Maintain a strong support network and follow-up with patients post-intervention (managed by Cecil County Health Department).	Due to the COVID-19 pandemic, peers were not on-site at the hospital for most of the year. They were only present for the final couple weeks of FY 21. 119 referrals from caregivers were sent to the off-site peers.	Number of referrals.
Initiative B				
Initiative C				
Initiative D				
Initiative E				
Initiative F				
Initiative G				
Initiative H				
Initiative I				
Initiative J				
All Other Initiatives				

Q203. Please describe the initiative(s) addressing Health Behaviors - Emergency Preparedness.

This question was not displayed to the respondent.

Q204. Please describe the initiative(s) addressing Health Behaviors - Family Planning.

This question was not displayed to the respondent.

Q205. Please describe the initiative(s) addressing Health Behaviors - Health Communication.

This question was not displayed to the respondent.

Q206. Please describe the initiative(s) addressing Health Behaviors - Injury Prevention.

This question was not displayed to the respondent.

Q207. Please describe the initiative(s) addressing Health Behaviors - Nutrition and Healthy Eating.

This question was not displayed to the respondent.

Q208. Please describe the initiative(s) addressing Health Behaviors - Physical Activity.

This question was not displayed to the respondent.

Q209. Please describe the initiative(s) addressing Health Behaviors - Preventive Care.

	Health Behaviors - Preventive Care Initiative Details			
	Initiative Name	Initiative Goal/Objective	Initiative Outcomes to Date	Data Used to Measure Outcomes
Initiative A	Educator Mammograms	Encourage educators to undergo mammography screening.	In August 2020, 41 Cecil County Public School educators received mammography screening.	Number of screens.
Initiative B				
Initiative C				

Initiative D				
Initiative E				
Initiative F				
Initiative G				
Initiative H				
Initiative I				
Initiative J				
All Other Initiatives				

Q210. Please describe the initiative(s) addressing Health Behaviors - Safe Food Handling.

This question was not displayed to the respondent.

Q211. Please describe the initiative(s) addressing Health Behaviors - Sleep.

This question was not displayed to the respondent.

Q212. Please describe the initiative(s) addressing Health Behaviors - Tobacco Use.

	Health Behaviors - Tobacco Use Initiative Details			
	Initiative Name	Initiative Goal/Objective	Initiative Outcomes to Date	Data Used to Measure Outcomes
Initiative A	Low-dose lung CT screenings and increasing awareness for lung cancer prevention	The primary objective of this initiative is to increase the number of individuals receiving low-dose lung cancer CT screens by 5% by June 30, 2022 to raise awareness for lung cancer prevention. In calendar years 2016, 2017, and 2018, 556 people were screened and so to meet the 5% increase goal, 584 people will have to be screened in calendar years 2019, 2020, and 2021.	In FY20, 241 individuals received low-dose lung CT scans and in FY22, 298 individuals received low-dose lung CT scans.	Number of low-dose lung CT scans given.
Initiative B				
Initiative C				
Initiative D				
Initiative E				
Initiative F				
Initiative G				
Initiative H				
Initiative I				
Initiative J				
All Other Initiatives				

Q213. Please describe the initiative(s) addressing Health Behaviors - Vaccination.

This question was not displayed to the respondent.

Q214. Please describe the initiative(s) addressing Health Behaviors - Violence Prevention.

This question was not displayed to the respondent.

Q215. Please describe the initiative(s) addressing Populations - Adolescents.

	Populations - Adolescents Initiative Details			
	Initiative Name	Initiative Goal/Objective	Initiative Outcomes to Date	Data Used to Measure Outcomes
Initiative A				
Initiative B				
Initiative C				
Initiative D				
Initiative E				
Initiative F				
Initiative G				
Initiative H				

Initiative I				
Initiative J				
All Other Initiatives				

Q216. Please describe the initiative(s) addressing Populations - Children.

	Populations - Children Initiative Details			
	Initiative Name	Initiative Goal/Objective	Initiative Outcomes to Date	Data Used to Measure Outcomes
Initiative A				
Initiative B				
Initiative C				
Initiative D				
Initiative E				
Initiative F				
Initiative G				
Initiative H				
Initiative I				
Initiative J				
All Other Initiatives				

Q217. Please describe the initiative(s) addressing Populations - Infants.

This question was not displayed to the respondent.

Q218. Please describe the initiative(s) addressing Populations - LGBT.

This question was not displayed to the respondent.

Q219. Please describe the initiative(s) addressing Populations - Men.

This question was not displayed to the respondent.

Q220. Please describe the initiative(s) addressing Populations - Older Adults.

This question was not displayed to the respondent.

Q221. Please describe the initiative(s) addressing Populations - Parents or Caregivers.

This question was not displayed to the respondent.

Q222. Please describe the initiative(s) addressing Populations - People with Disabilities.

This question was not displayed to the respondent.

Q223. Please describe the initiative(s) addressing Populations - Women.

This question was not displayed to the respondent.

Q224. Please describe the initiative(s) addressing Populations - Workforce.

This question was not displayed to the respondent.

Q225. Please describe the initiative(s) addressing Settings and Systems - Community.

This question was not displayed to the respondent.

Q226. Please describe the initiative(s) addressing Settings and Systems - Environmental Health.

This question was not displayed to the respondent.

Q227. Please describe the initiative(s) addressing Settings and Systems - Global Health.

This question was not displayed to the respondent.

Q228. Please describe the initiative(s) addressing Settings and Systems - Health Care.

This question was not displayed to the respondent.

Q229. Please describe the initiative(s) addressing Settings and Systems - Health Insurance.

This question was not displayed to the respondent.

Q230. Please describe the initiative(s) addressing Settings and Systems - Health IT.

This question was not displayed to the respondent.

Q231. Please describe the initiative(s) addressing Settings and Systems - Health Policy.

This question was not displayed to the respondent.

Q232. Please describe the initiative(s) addressing Settings and Systems - Hospital and Emergency Services.

This question was not displayed to the respondent.

Q233. Please describe the initiative(s) addressing Settings and Systems - Housing and Homes.

This question was not displayed to the respondent.

Q234. Please describe the initiative(s) addressing Settings and Systems - Public Health Infrastructure.

This question was not displayed to the respondent.

Q235. Please describe the initiative(s) addressing Settings and Systems - Schools.

This question was not displayed to the respondent.

Q236. Please describe the initiative(s) addressing Settings and Systems - Transportation.

This question was not displayed to the respondent.

Q237. Please describe the initiative(s) addressing Settings and Systems - Workplace.

This question was not displayed to the respondent.

Q238. Please describe the initiative(s) addressing Social Determinants of Health - Economic Stability.

This question was not displayed to the respondent.

Q239. Please describe the initiative(s) addressing Social Determinants of Health - Education Access and Quality.

This question was not displayed to the respondent.

Q240. Please describe the initiative(s) addressing Social Determinants of Health - Health Care Access and Quality.

This question was not displayed to the respondent.

Q241. Please describe the initiative(s) addressing Social Determinants of Health - Neighborhood and Built Environment.

This question was not displayed to the respondent.

Q242. Please describe the initiative(s) addressing Social Determinants of Health - Social and Community Context.

This question was not displayed to the respondent.

Q243. Please describe the initiative(s) addressing other priorities.

	Other Initiative Details			
	Initiative Name	Initiative Goal/Objective	Initiative Outcomes to Date	Data Used to Measure Outcomes
Initiative A				
Initiative B				
Initiative C				
Initiative D				
Initiative E				

Initiative F				
Initiative G				
Initiative H				
Initiative I				
Initiative J				
All Other Initiatives				

Q130. Were all the needs identified in your most recently completed CHNA addressed by an initiative of your hospital?

- ○ Yes
- ◉ No

Q131.
In your most recently completed CHNA, the following community health needs were identified:
Health Conditions - Addiction, Health Conditions - Cancer, Health Conditions - Mental Health and Mental Disorders, Health Behaviors - Child and Adolescent Development, Health Behaviors - Drug and Alcohol Use, Health Behaviors - Preventive Care, Health Behaviors - Tobacco Use, Populations - Adolescents, Populations - Children, Other (specify)
Other: Childhood Trauma

Using the checkboxes below, select the needs that appear in the list above that were NOT addressed by your community benefit initiatives.

- ☐ Access to Health Services: Health Insurance
- ☐ Access to Health Services: Practicing PCPs
- ☐ Access to Health Services: Regular PCP Visits
- ☐ Access to Health Services: ED Wait Times
- ☐ Access to Health Services: Outpatient Services
- ☑ Adolescent Health
- ☐ Arthritis, Osteoporosis, and Chronic Back Conditions
- ☑ Behavioral Health, including Mental Health and/or Substance Abuse
- ☐ Cancer
- ☑ Children's Health
- ☐ Chronic Kidney Disease
- ☐ Community Unity
- ☐ Dementias, including Alzheimer's Disease
- ☐ Diabetes
- ☐ Disability and Health
- ☐ Educational and Community-Based Programs
- ☐ Environmental Health
- ☐ Family Planning
- ☐ Food Safety
- ☐ Global Health
- ☐ Health Communication and Health Information Technology
- ☐ Health Literacy
- ☐ Health-Related Quality of Life & Well-Being
- ☐ Heart Disease and Stroke
- ☐ HIV
- ☐ Immunization and Infectious Diseases
- ☐ Injury Prevention
- ☐ Lesbian, Gay, Bisexual, and Transgender Health
- ☐ Maternal and Infant Health
- ☐ Nutrition and Weight Status
- ☐ Older Adults
- ☐ Oral Health
- ☐ Physical Activity
- ☐ Respiratory Diseases
- ☐ Sexually Transmitted Diseases
- ☐ Sleep Health
- ☐ Telehealth
- ☑ Tobacco Use
- ☐ Violence Prevention
- ☐ Vision
- ☐ Wound Care
- ☐ Housing & Homelessness
- ☐ Transportation
- ☐ Unemployment & Poverty
- ☐ Other Social Determinants of Health
- ☑ Other (specify) Childhood Trauma

Q132. Why were these needs unaddressed?

The list included in section II, part 5 follow-up and the list above are not the same and so in the list above, the needs most similar were chosen, but they do not match perfectly. For example, we did have substance use disorder programming, but within the list above, we could only choose Behavioral Health, including mental health and/or substance abuse. Childhood trauma among Cecil County residents, (which we consider to include Child and Adolescent Development and Populations - Children and Adolescents) was not addressed, nor did we implement new programs for mental health and mental disorders. The CHNA areas of need and the implementation plan was done in collaboration with the Cecil County Health Department and the Cecil County Community Health Advisory Committee, who implemented programming to address those needs. We addressed tobacco use indirectly with our promotion of Low Dose CT scans for lung cancer and participation on the cancer task force of the Community Health Advisory Committee. ChristianaCare Union Hospital joined ChristianaCare in January 2020, at which time we focused on the integration of Union into the larger health system. Shortly thereafter, in March 2020, the Covid-19 pandemic hit. While continuing our integration work, we at the same time shifted our focus to responding to the pandemic and ensuring we were serving our communities by providing testing, vaccination, COVID care, prevention, education, and expanding services. We are committed to working to address these issues including a focus on children, adolescents, mental health and mental disorders, childhood trauma, and tobacco use as we continue to move forward.

Q244. Please describe the hospital's efforts to track and reduce health disparities in the community it serves.

ChristianaCare is committed to identifying, tracking, and reducing health disparities in all the communities it serves. The Office of Health Equity leads the coordination of work to capture race, ethnicity and language (REL) data, to identify disparities in outcomes across demographics, to identify and implement clinical interventions, and to provide and support the social care infrastructure, including the Unite Us platform to connect patients to social care resources to address barriers to improved health outcomes.

Q245. If your hospital reported rate support for categories other than Charity Care, Graduate Medical Education, and the Nurse Support Programs in the financial report template, please select the rate supported programs here:

- ☐ Regional Partnership Catalyst Grant Program
- ☐ The Medicare Advantage Partnership Grant Program
- ☐ The COVID-19 Long-Term Care Partnership Grant
- ☐ The COVID-19 Community Vaccination Program
- ☐ The Population Health Workforce Support for Disadvantaged Areas Program
- ☐ Other (Describe)

Q129. If you wish, you may upload a document describing your community benefit initiatives in more detail.

Q60. Section III - CB Administration

Q61. Does your hospital conduct an internal audit of the annual community benefit financial spreadsheet? Select all that apply.

- ☐ Yes, by the hospital's staff
- ☐ Yes, by the hospital system's staff
- ☐ Yes, by a third-party auditor
- ☑ No

Q246. Please describe the third party audit process used.

This question was not displayed to the respondent.

Q62. Does your hospital conduct an internal audit of the community benefit narrative?

- ○ Yes
- ● No

Q63. Please describe the community benefit narrative audit process.

This question was not displayed to the respondent.

Q64. Does the hospital's board review and approve the annual community benefit financial spreadsheet?

- ○ Yes
- ● No

Q65. Please explain:

ChristianaCare Office of Health Equity senior leadership reviewed the community benefit narrative and leadership within the finance department reviewed and approved the financial spreadsheet prior to submission. Union Hospital joined ChristianaCare in January 2020 just prior to the pandemic arrived and became our primary focus. As we have become acclimated to operating in a pandemic and the merging of Union Hospital and ChristianaCare has progressed, we are eager to continue learning about the community health needs of our neighbors in Cecil County. We look forward to our 2022 CHNA, which we are currently planning, as this will be the first one completed as ChristianaCare Union Hospital. As we develop the CHNA and our strategies for addressing health needs, we also expect to formalize the involvement of the Board in regards to the annual HSCRC reporting.

Q66. Does the hospital's board review and approve the annual community benefit narrative report?

- ○ Yes
- ● No

Q67. Please explain:

ChristianaCare Office of Health Equity senior leadership reviewed the community benefit narrative and leadership within the finance department reviewed and approved the financial spreadsheet prior to submission. Union Hospital joined ChristianaCare in January 2020 just prior to the pandemic arrived and became our primary focus. As we have become acclimated to operating in a pandemic and the merging of Union Hospital and ChristianaCare has progressed, we are eager to continue learning about the community health needs of our neighbors in Cecil County. We look forward to our 2022 CHNA, which we are currently planning, as this will be the first one completed as ChristianaCare Union Hospital. As we develop the CHNA and our strategies for addressing health needs, we also expect to formalize the involvement of the Board in regards to the annual HSCRC reporting.

Q68. Does your hospital include community benefit planning and investments in its internal strategic plan?

- ( ) Yes
- (•) No

Q69. Please describe how community benefit planning and investments are included in your hospital's internal strategic plan.

This question was not displayed to the respondent.

Q70. If available, please provide a link to your hospital's strategic plan.

This question was not displayed to the respondent.

Q133. Do any of the hospital's community benefit operations/activities align with the Statewide Integrated Health Improvement Strategy (SIHIS)? Please select all that apply and describe how your initiatives are targeting each SIHIS goal. More information about SIHIS may be found here.

- [ ] Diabetes - Reduce the mean BMI for Maryland residents
- [x] Opioid Use Disorder - Improve overdose mortality
- [ ] Maternal and Child Health - Reduce severe maternal morbidity rate
- [ ] Maternal and Child Health - Decrease asthma-related emergency department visit rates for children aged 2-17

Q134. (Optional) Did your hospital's initiatives during the fiscal year address other state health goals? If so, tell us about them below.

Q135. Section IV - Physician Gaps & Subsidies

Q223. Did your hospital report physician gap subsidies on Worksheet 3 of its community benefit financial report for the fiscal year?

- ( ) No
- (•) Yes

Q218. As required under HG§19-303, please select all of the gaps in physician availability resulting in a subsidy reported in the Worksheet 3 of financial section of Community Benefit report. Please select "No" for any physician specialty types for which you did not report a subsidy.

	Is there a gap resulting in a subsidy?		What type of subsidy?
	Yes	No	
Allergy & Immunology	○	●	
Anesthesiology	○	●	
Cardiology	○	●	
Dermatology	○	●	
Emergency Medicine	○	●	
Endocrinology, Diabetes & Metabolism	○	●	
Family Practice/General Practice	○	●	
Geriatrics	○	●	
Internal Medicine	○	●	
Medical Genetics	○	●	

Neurological Surgery	○	◉	
Neurology	○	◉	
Obstetrics & Gynecology	○	◉	
Oncology-Cancer	○	◉	
Ophthamology	○	◉	
Orthopedics	○	◉	
Otololaryngology	○	◉	
Pathology	○	◉	
Pediatrics	○	◉	
Physical Medicine & Rehabilitation	○	◉	
Plastic Surgery	○	◉	
Preventive Medicine	○	◉	
Psychiatry	○	◉	
Radiology	○	◉	
Surgery	○	◉	
Urology	○	◉	
Other. (Describe)	○	◉	

Q219. Please explain how you determined that the services would not otherwise be available to meet patient demand and why each subsidy was needed, including relevant data. Please provide a description for each line-item subsidy listed in Worksheet 3 of the financial report.

Q139. Please attach any files containing further information and data justifying physician subsidies your hospital.

Q140. Section VI - Financial Assistance Policy (FAP)

Q141. Upload a copy of your hospital's financial assistance policy.

F-415-Financial-Assistance-Policy-and-Procedure.pdf
268.8KB
application/pdf

Q220. Provide the link to your hospital's financial assistance policy.

https://www.uhcc.com/about-us/patients-guests/patient-financial-services/financial-assistance-policy/

Q147. Has your FAP changed within the last year? If so, please describe the change.

- ◉ No, the FAP has not changed.
- ○ Yes, the FAP has changed. Please describe:

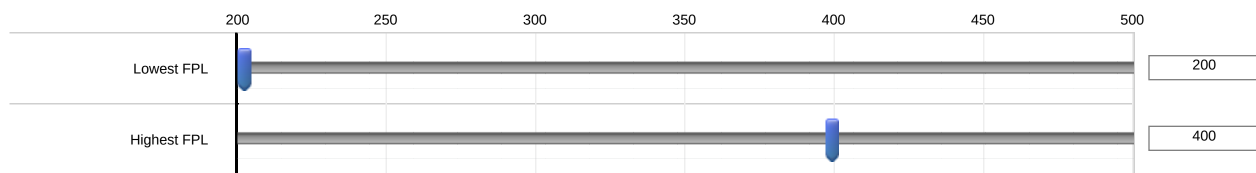
Q143. Maryland hospitals are required under Health General §19-214.1(b)(2)(i) COMAR 10.37.10.26(A-2)(2)(a)(i) to provide free medically necessary care to patients with family income at or below 200 percent of the federal poverty level (FPL).

Please select the percentage of FPL below which your hospital's FAP offers free care.

100 150 200 250 300 350 400 450 500

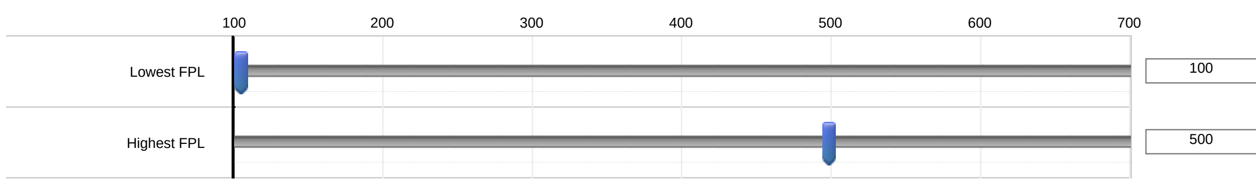
Q144. Maryland hospitals are required under COMAR 10.37.10.26(A-2)(2)(a)(ii) to provide reduced-cost, medically necessary care to low-income patients with family income between 200 and 300 percent of the federal poverty level.

Please select the range of the percentage of FPL for which your hospital's FAP offers reduced-cost care.

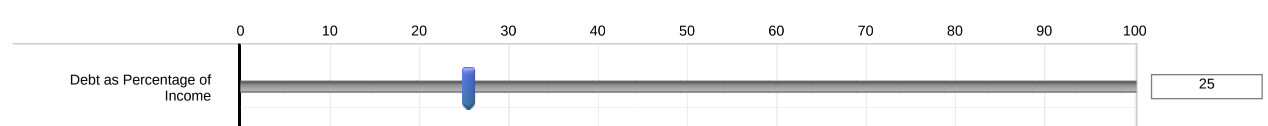


Q145. Maryland hospitals are required under Health General §19-214.1(b)(2)(iii) COMAR 10.37.10.26(A-2)(3) to provide reduced-cost, medically necessary care to patients with family income below 500 percent of the federal poverty level who have a financial hardship. Financial hardship is defined in Health General §19-214.1(a)(2) and COMAR 10.37.10.26(A-2)(1)(b)(i) as a medical debt, incurred by a family over a 12-month period that exceeds 25 percent of family income.

Please select the range of the percentage of FPL for which your hospital's FAP offers reduced-cost care for financial hardship.



Q146. Please select the threshold for the percentage of medical debt that exceeds a household's income and qualifies as financial hardship.



Q221. Per Health General Article §19-303 (c)(4)(ix), list each tax exemption your hospital claimed in the preceding tax able year (select all that apply)

- [x] Federal corporate income tax
- [x] State corporate income tax
- [x] State sales tax
- [x] Local property tax (real and personal)
- [ ] Other (Describe)

Q150. Summary & Report Submission

Q151.

Attention Hospital Staff! IMPORTANT!

You have reached the end of the questions, but you are not quite finished. Your narrative has not yet been fully submitted. Once you proceed to the next screen using the right arrow button below, you cannot go backward. You cannot change any of your answers if you proceed beyond this screen.

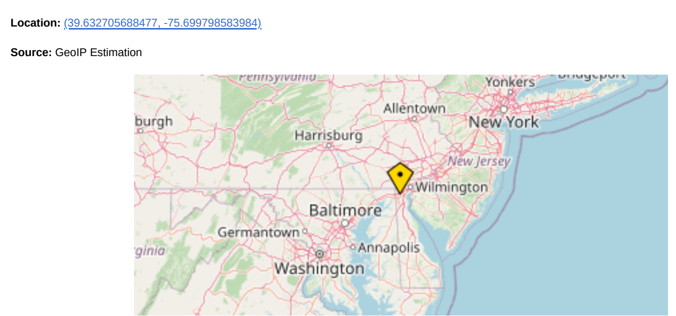
We strongly urge you to contact us at hcbhelp@hilltop.umbc.edu to request a copy of your answers. We will happily send you a pdf copy of your narrative that you can share with your leadership, Board, or other interested parties. If you need to make any corrections or change any of your answers, you can use the Table of Contents feature to navigate to the appropriate section of the narrative.

Once you are fully confident that your answers are final, return to this screen then click the right arrow button below to officially submit your narrative.

Location Data

Location: (39.632705688477, -75.699798583984)

Source: GeoIP Estimation



Community Health Needs Assessment

Cecil County

Fiscal Year 2019

This report was prepared by:

Jean-Marie Kelly, MPH
Community Benefit
Union Hospital of Cecil County

&

Daniel Coulter, MPH
Health Planning
Cecil County Health Department

TABLE OF CONTENTS

EXECUTIVE SUMMARY **5**

Collaboration **5**
Key Partners 5
Community Characteristics **6**
Location & Population 6
Age & Sex 7
Race & Ethnicity 8
Origins & Languages Spoken 8
Income & Poverty 8
Veterans 10
Assessing Community Health Needs **10**
Methodology 10

CECIL COUNTY HEALTH PRIORITIES **14**

Health Priorities **14**
Cancer 14
Behavioral Health 19
Childhood Trauma 25
Health Needs Not Prioritized **27**

PRIMARY DATA COLLECTION & ANALYSIS **31**

Online Community Survey **31**
Demographics 31
Community Health 33
Quality of Life 36
Access to Care 37
Additional Information 41
Focus Groups **43**
Sessions 43
Responses 43
Interviews **45**
Sessions 45
Responses 45

SECONDARY DATA ANALYSIS **47**

Secondary Data **47**
Health Resources 47
Quality of Life 48
Social Determinants of Health 49
Societal Health 57
Behavioral Risk Factors 61
Environmental Health 62
Maternal & Child Health 68
Communicable Disease 70
Mortality 73

COMMUNITY HEALTH IMPROVEMENT PLAN **75**

Prioritizing Health Needs 75

CHAC Meeting – January 2019 75

CHNA Planning Team Meeting – February 2019 77

Strategic Planning 79

CHIP Work Plans 79

EXECUTIVE SUMMARY

Collaboration

Union Hospital collaborated with the Cecil County Health Department and the Cecil County Community Health Advisory Committee (CHAC) to conduct the Community Health Needs Assessment (CHNA). The CHNA planning team included Union Hospital's Community Benefit and Cecil County Health Department's Health Planning and Health Officer and Deputy Health Officer. The CHNA planning team was responsible to facilitate all component parts of the CHNA process, including writing and submitting the reports to the Internal Revenue Service (IRS) and updating CHAC. In addition, the CHNA planning team partnered with several community and governmental organizations to plan and prime for the implementation of the Community Health Improvement Plan (CHIP).

Key Partners

Union Hospital of Cecil County

Union Hospital is an award-winning, full-service, community hospital located in Elkton, Maryland. Nationally recognized for clinical excellence in the treatment and prevention of disease, this 84-bed, not-for-profit hospital is dedicated to providing superior, personalized, and quality health care to neighbors, families and friends. Union Hospital's values include: caring and compassion, leadership, integrity, and shared learning. Union Hospital is also in the community offering doctors, imaging, physical therapy, and other services to help people stay well.

Cecil County Health Department

Cecil County Health Department's mission is to improve the health of Cecil County and its residents in partnership with the community, by providing leadership to find solutions to the community's health problems through assessment, policy development, and assurance of quality health services and education. The health department offers services to all county residents through six divisions: 1) Administrative Services; 2) Addiction Services (Alcohol and Drug Recovery Center); 3) Community Health Services; 4) Environmental Health Services; 5) Health Promotion; and 6) Special Populations Services. The health department's goals include: preventing epidemics and the spread of disease, protecting against environmental hazards, preventing injury, promoting and encouraging healthy behavior and mental health, responding to disasters and assisting communities in recovery, and assuring the quality and accessibility of health services.

Community Health Advisory Committee

The Cecil County Community Health Advisory Committee (CHAC) is a partnership of community organizations, government, groups, and individuals committed to improve the overall quality of health in Cecil County. CHAC serves as Cecil County's Local Health Improvement Coalition and is comprised of the five health task forces: 1) Cancer Task Force; 2) Tobacco Task Force; 3) Drug and Alcohol Abuse Council; 4) Core Services Agency Mental Health Advisory Board; and 5)

Healthy Lifestyles Task Force. Annual CHAC meetings are held to report progress on the Community Health Improvement Plan (CHIP) strategies from the five task forces. CHAC membership includes the following active organizations (attending since July 2017):

Ashley Treatment Center
Cecil College
Cecil County Dept of Community Services
Cecil County Dept of Emergency Services
Cecil County Dept of Social Services
Cecil County Government
Cecil County Health Department
Cecil County Public Schools
Health Care Professionals
Healthy Harford/Healthy Cecil WATCH Program
Maryland State Representatives
On Our Own of Cecil County
Private Citizens
The Paris Foundation
Union Hospital of Cecil County
United HealthCare
Upper Bay Counseling & Support Services
Voices of Hope
West Cecil Health Center
WIN Family Health
Meadow Wood Behavioral Health System
Youth Empowerment Source

Community Characteristics

Union Hospital and Cecil County Health Department are responsible to meet the needs of a county with broad health and socio-economic factors. These factors can impact many health issues, so it is important to address them according to community need and in partnership with community organizations. According to NACCHO, when assessing the health and wellbeing of a community, it is important to analyze the population's demographics, health resources, quality of life, social determinants of health, societal health, behavioral risk factors, environmental health, maternal and child health, communicable disease, and mortality.

Location & Population

Cecil County is located in the upper northeastern corner of the Chesapeake Bay in Maryland and borders Pennsylvania and Delaware. The county seat is located in Elkton, Maryland, and there are eight towns and seven unincorporated communities in the county.

Union Hospital and Cecil County Health Department serve all of Cecil County, providing services and care for residents in the zip codes listed in **Table 1**. These zip codes also make-up Union Hospital's primary and secondary service areas, as denoted in Table 10, and collectively are known as the Community Benefit Service Area (CBSA) for Union Hospital.

Table 1. Cecil County Zip Codes

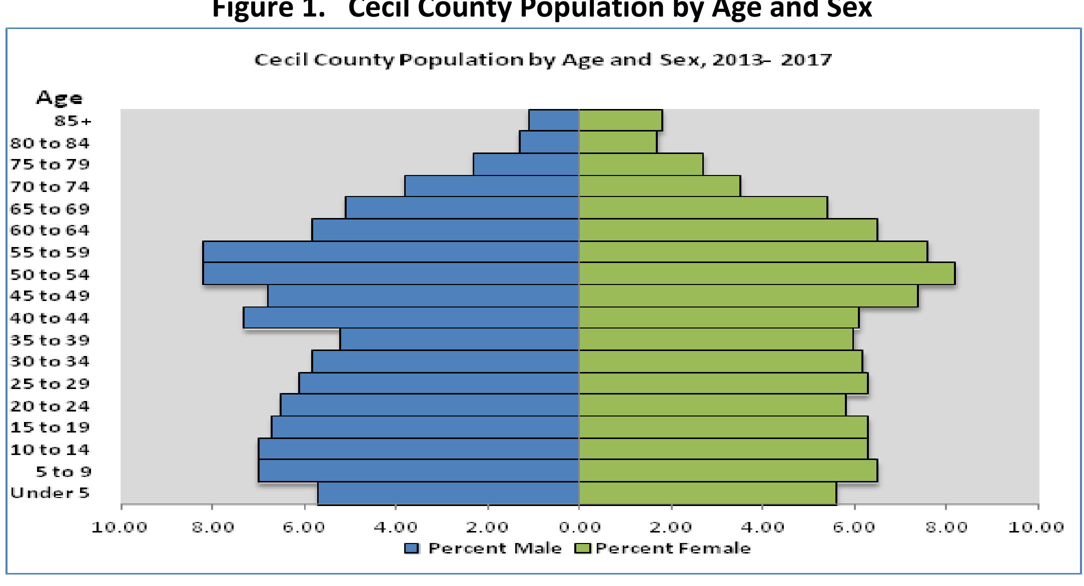
Primary Service Area	Secondary Service Area
21921 – Elkton	21902 – Perrypoint
21922 – Elkton	21903 – Perryville
21901 – North East	21904 – Port Deposit
21916 – Childs	21917 – Colora
21920 – Elk Mills	21918 – Conowingo
21915 – Chesapeake City	
21914 – Charlestown	
21911 – Rising Sun	
21912 – Warwick	
21913 – Cecilton	
21919 – Earleville	

In 2017, the total population of Cecil County was estimated to be 102,416. This is an increase of 2.3% from the estimated population in 2010 (100,139). By zip code the largest population centers in Cecil County are 21921 (44,397), 21901 (17,538) and 21911 (11,385).[1]

Age & Sex

Approximately 23.3% of Cecil County residents were under 18 years of age from 2013-2017, while 14.4% were 65 years of age or older. During this time period, the median age in Cecil County was 40.3 years, with females having a slightly higher median age than males (40.7 years vs. 39.9 years). The largest age groups for both males and females in Cecil County were 50 to 54 years. **Figure 1** shows a population pyramid for Cecil County residents by age and sex.[2]

Figure 1. Cecil County Population by Age and Sex



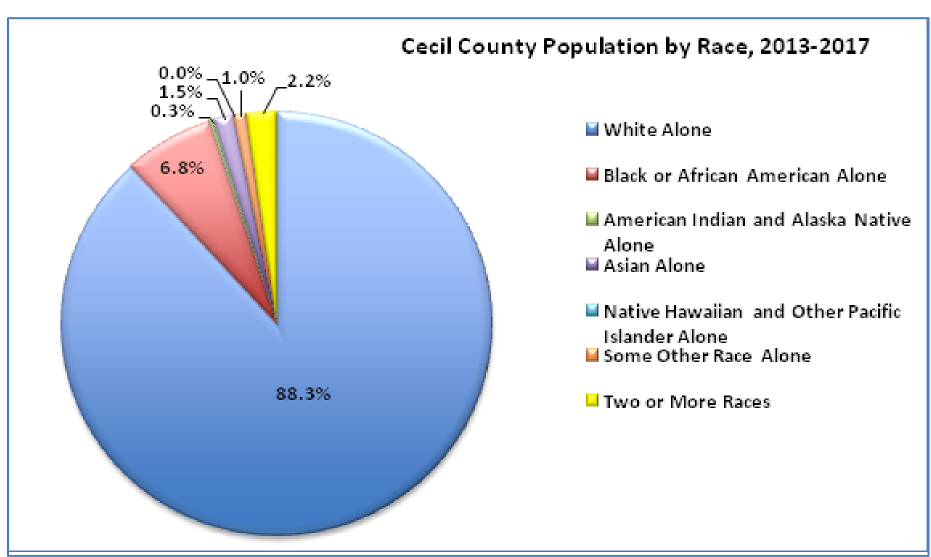
[1] US Census Bureau. American Community Survey, 5-Year Estimates, 2013-2017. Population by zip code [data file]. Accessed at: https://factfinder.census.gov

[2] US Census Bureau. American Community Survey, 5-Year Estimates, 2013-2017. Population by age and sex [data file]. Accessed at: https://factfinder.census.gov

Race & Ethnicity

Cecil County is less racially diverse than the State of Maryland, with 88.3% of Cecil County residents identifying as White alone from 2013-2017, compared to 56.6% in Maryland. Likewise, only 4.1% of Cecil County residents identify as Hispanic/Latino compared to 9.6% statewide. A majority of Cecil County residents (95.1%) speak only English at home. The town of Elkton has a greater proportion of minority populations than the rest of the county. **Figure 2** shows a breakdown of Cecil County residents by race.[3]

Figure 2. Cecil County Population by Race



Origins & Languages Spoken

From 2013-2017 an estimated 3,460 foreign born individuals resided in Cecil County. A majority of Cecil County residents (95.1%) speak only English at home. Among Cecil County residents who speak a language other than English at home, an estimated 30.8% (1,460 individuals) speak English less than very well. The most common language spoken is Spanish (2.5%).[4]

Income & Poverty

From 2013-2017, the median household income in Cecil County was $70,516 and the median family income was $85,539. This was significantly lower than the median household income of $78,916 and median family income of $95,597 for Maryland during this time period. In Cecil County, an estimated 9.4% of individuals live below the Federal Poverty Level (FPL) from 2013-2017, compared to 9.7% in Maryland. Certain populations in Cecil County are more likely to live below the FPL. **Figure 3** show the percentage of individuals below the poverty level by race/ethnicity.[5]

[3] US Census Bureau. American Community Survey, 5-Year Estimates, 2013-2017. Population by Race [data file]. Accessed at: https://factfinder.census.gov

[4] US Census Bureau. American Community Survey, 5-Year Estimates, 2013-2017. Population by Language Spoken [data file]. Accessed at: https://factfinder.census.gov

[5] US Census Bureau. American Community Survey, 5-Year Estimates, 2013-2017. Poverty by Race and Ethnicity [data file]. Accessed at: https://factfinder.census.gov

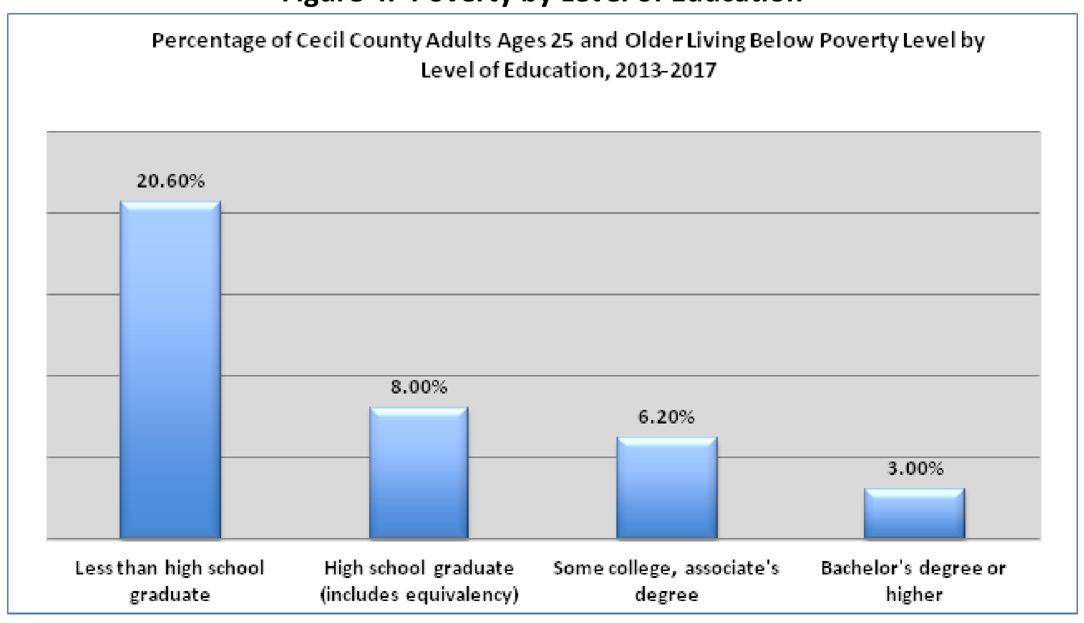
Figure 3. Poverty by Race & Ethnicity

Percentage of Cecil County Population Living Below Poverty Level by Race & Ethnicity, 2013- 2017

White alone	Black or African American alone	American Indian and Alaska Native alone	Asian alone	Native Hawaiian and Other Pacific Islander alone	Some other race alone	Two or more races	Hispanic or Latino origin (of any race)
7.90%	18.90%	2.10%	18.30%	0.00%	13.40%	36.60%	21.60%

Adults with less than a high school education in Cecil County are significantly more likely to be below the poverty level than those with at least a high school education. **Figure 4** shows the percentage of individuals ages 25 and older that are below the poverty level by educational attainment.[6]

Figure 4. Poverty by Level of Education



[6] US Census Bureau. American Community Survey, 5-Year Estimates, 2013-2017. Poverty by Level of Education [data file]. Accessed at: https://factfinder.census.gov

Cecil County families with a female householder and no husband present are also significantly more likely to live in poverty (18.0%) than married couple families (2.7%). Among female householder families with children this percentage is even higher (27.4%).

Employment status is also a major influencing factor in the burden of poverty in an area, especially for families where there is only one parent present. From 2013-2017, the unemployment rate in Cecil County was at 5.8%.[7]

Estimates of poverty do not tell the whole picture when it comes to population struggling to afford basic needs. The United Way's ALICE (Asset Limited, Income Constrained, Employed) captures households that earn more than the FPL, but less than the basic cost of living for the county. In 2016 an estimated 30% of Cecil County households met these criteria in addition to 9% of households that were below the FPL. Certain areas of the county are more likely to be struggling. Households in the towns of Cecilton (66%), Elkton (56%), Port Deposit (56%), Chesapeake City (54%) and North East (52%) were most likely to be below the threshold for ALICE or the FPL in 2016.[8]

Veterans

From 2013-2017 an estimated 7,314 veterans resided in Cecil County. This is roughly 9.3% of the civilian population 18 years of age and older. The veteran population is largely male (92.5%) and has a higher burden of disability (24.8%) than the general population (14.8%).[9]

Assessing Community Health Needs

The CHNA, conducted during Fiscal Year (FY) 2019, reflects the current status of the medical and social determinants of health for Cecil County and provides a quantitative and qualitative data analysis for key health issues. The health issues that were prioritized as a result of these data analyses were:

1) Cancer;
2) Behavioral Health (comprised of Substance Use and Mental Health); and
3) Childhood Trauma.

Methodology

The CHNA, an IRB-exempt process, consisted of collecting and analyzing primary and secondary data, as well as facilitating strategic planning sessions to create the Community Health Improvement Plan (CHIP).

---

[7] US Census Bureau. American Community Survey, 5-Year Estimates, 2013-2017. Unemployment [data file]. Accessed at: https://factfinder.census.gov

[8] United Way. *ALICE Report: A Study of Financial Hardship in Maryland. County Data, 2018*. Accessed at: https://www.uwcm.org/main/alice/

[9] US Census Bureau. American Community Survey, 5-Year Estimates, 2013-2017. Veterans [data file]. Accessed at: https://factfinder.census.gov

Data Collection

Primary data collection consisted of:

- **Facilitating an online community survey.** The online community survey developed during the FY 2016 CHNA was used again with the FY 2019 CHNA (see Appendix A). The intention of this is to build previous data with each CHNA conducted. The survey was available from July 2018 to September 2018 through an online link and by paper (available at several community-based locations, like Cecil County Public Libraries and Union Hospital Multi-Specialty Practices). The survey consisted of twenty questions – multiple choice, Likert Scale selections, and free text entry – and covered four topics: 1) demographics; 2) community health; 3) quality of life; and 4) access to health care. The survey took 15-20 minutes to complete and 1,403 people completed the survey (more than double the number of respondents that completed the FY 2016 online community survey). Paper surveys received were manually entered as submissions into the online community survey. All data collected was managed by Cecil County Health Department using Survey Monkey's analytical tools.
- **Hosting focus groups with vulnerable populations.** Focus groups were hosted with five vulnerable populations in Cecil County: low-income housing, homeless, older adults, veterans, and a minority group. Sessions were held in the community at a location that was convenient to the participants. Food was provided. Sessions lasted 1.5-2 hours and included one Facilitator and one Scribe. Sessions were well attended (averaged 10 people per group). Feedback from participants was handwritten on large Post-it™ notes by the Scribe and information was reviewed in session with participants to ensure all feedback was accurately captured.
- **Conducting interviews with community leaders**. Interviews were conducted to garner a community leadership perspective about the health and quality of life in Cecil County. Interviews, made by appointment, were conducted by Union Hospital and took 1-2 hours to complete. Interviews were conducted in a location convenient for the interviewees and all answers were confidential, accessible only by the CHNA planning team. Feedback was audio recorded (with permission), transcribed, and the audio files, notes, and transcriptions have been stored in a secure Google drive managed by Cecil County Health Department to maintain respondents' confidentiality.

Secondary data collection consisted of consulting and analyzing a variety of local, state, and national resources in order to create a comprehensive demographic, socio-economic, and health profile for Cecil County. Data sources consulted for this assessment included:

ARCGIS: Business Analyst, Delorme map data, ESRI, & US Census Tigerline Files	Maryland Department of Human Resources	National Provider Identification File
Area Health Resource File	Maryland Department of the Environment	Prevention and Health Promotion Administration, DHMH
Centers for Medicare and Medicaid Services	Maryland Health Services Cost Review Commission	Substance Abuse and Mental Health Services Administration

Center for Sexually Transmitted Infection Prevention, DHMH	Maryland Medicaid Service Utilization	The Maryland Uniform Crime Reporting Program
Children's Bureau	Maryland Vital Statistics Administration	US Census Bureau
Claritas, Inc.	Maryland Youth Risk Behavioral Survey	US Department of Agriculture: Economic Research Services
County Health Rankings	Maryland Youth Tobacco Survey	US Department of Education
Fatality Analysis Reporting System	Meditech 6.1	US Department of Health and Human Services
Feeding America	National Center for Education Statistics	US Department of Housing and Urban Development
Healthy Communities Institute	National Association for city and County Health Officials	US Department of Justice
Maryland Behavioral Risk Factor Surveillance System	National Vital Statistics System – Mortality	United Way

CHIP Planning

The strategic planning portion of the CHNA involved the CHNA planning team meeting with Community Health Advisory Committee (CHAC) membership to create the Community Health Improvement Plan (CHIP). This usually requires several CHAC meetings held in the spring of a CHNA year to formulate objectives and strategies to address the prioritized health needs. The product of this process is a strategic plan created from scratch based on the expertise that is in the room during the meetings.

For this third cycle of CHNA, the CHNA planning team decided to try a different approach. The planning team met with several community groups who are currently connected with the prioritized health needs in order to determine what strategies currently exist to reduce the burden in the community regarding the priority health needs. The table below shows which groups were consulted per health priority.

Table 2. Community Groups Consulted by Health Priority

Cancer	Cecil County Cancer Task Force
Behavioral Health	Substance Use • Cecil County Drug and Alcohol Abuse Council • Cecil County Drug-Free Communities Coalition • Opioid Misuse Prevention Project Mental Health • Core Service Agency Mental Health Advisory Board
Childhood Trauma	Cecil County Local Management Board: Childhood Trauma Subcommittee

Work plans per group were consulted to identify strategies where CHAC membership could help support current activities, promote prevention and education, and/or provide additional

in-kind support – the goal being to enhance the work already being done in the community around these issues.

Input from the Community

The Community Health Needs Assessment must include input from people that represent the community. Required groups include: residents, local government, public health, community leadership, minorities, vulnerable populations (medically underserved, low-income, the poor, and working poor), and organizations representing these populations.

Union Hospital and Cecil County Health Department decided to work through the Cecil County Community Health Advisory Committee (CHAC), a major health coalition with sector representation from all the required groups as well as additional groups, to gather input for the CHNA. Information gathering included an online community survey (with a written comments section), focus groups, and interviews. The CHNA also conducted strategic planning sessions that engaged organizations and advocacy groups that represented vulnerable populations. These groups were identified according to their alignment with the health priorities selected in January 2019 by CHAC and the CHNA planning team.

Reporting

The CHNA process reflects the collaboration of community partners working together to achieve the same health improvement goals for Cecil County. The information presented in this CHNA report examines the processes involved in conducting the CHNA, the health needs prioritization process resulting in selected health priorities, and implementation planning resulting in the creation of the CHIP that will measure progress for community health improvement activities from FY 2020 – FY 2022.

Cecil County Health Priorities

Health Priorities

The health needs prioritized by the Cecil County CHNA collaborative during the FY 2019 CHNA are as follows:

1) Cancer
2) Behavioral Health (comprised of Substance Use and Mental Health)
3) Childhood Trauma

The following sections explain each of these priority areas in greater detail. Each synopsis includes Cecil County data. Where applicable/available, there may also be comparisons between data reported in the previous CHNA (FY 2016) and this current assessment.

Cancer

In 2016 the following cancer death rates were measured for Cecil County:[10]

- All cancers: 201.6 deaths/100,000 population
- Lung cancer: 61.5 deaths/100,000 population
- Prostate cancer: 27.2 deaths/100,000 population
- Breast cancer: 23.5 deaths/100,000 population
- Colorectal cancer: 17.2 deaths/100,000 population

The information presented in the following sections explains each of these cancers. For more information on the impact of cancer in Cecil County, please refer to the Union Hospital Cancer Needs Assessment (https://www.uhcc.com/services-2/cancer-program/). The Cancer Needs Assessment was compiled to meet the accreditation requirements for the Commission on Cancer in association with the Union Hospital Cancer Program, the Union Hospital Breast Center, and the Union Hospital Cancer Committee. The assessment also includes a Community Outreach Plan which describes the cancer supports in place to reduce barriers to cancer care created by the social determinants of health.

Lung Cancer

The risk for lung cancer increases for people who use tobacco products, especially those who smoke tobacco products. In 2017, an estimated 24.8% of adults reported smoking cigarettes in Cecil County. This is an increase from the last CHNA where data from 2014 showed that an estimated 12.4% of adults reported smoking cigarettes. The 2017 data is significantly more important when considering the age of the adults who smoked. Nearly 27% of adult smokers in 2017 were between the ages of 45 and 64 years old – the prime age group eligible for the low-

[10] National Cancer Institute. Age-Adjusted Death Rate due to All Cancers, Lung Cancer, Prostate Cancer, Breast Cancer, and Colorectal Cancer, Cecil County, Maryland [data files]. Accessed at: https://statecancerprofiles.cancer.gov

dose lung CT screening. Again, this showed an increase from the last CHNA which reported an estimated 24% of adult smokers in this age group.[11]

Low-Dose Lung CT Screenings

A screening protocol has been established to detect malignant tumors early, before symptoms appear, so that disease can be more successfully treated. This protocol uses a Low Dose Computed Topography (LDCT) scan with special X-ray equipment to detect malignant growths. The LDCT screening protocol is non-invasive and requires only stillness while the machine scans the chest and back areas (about 15 minutes). The earlier that lung cancer can be diagnosed and staged, the better the chances are of survival. With the LDCT scans available in Cecil County, there have been more lung cancers diagnosed in the Localized stage, which could correlate to a higher percentage of relative survival. A study by the National Cancer Institute and the National Lung Screening Trial found that LDCT scans can decrease lung cancer deaths by 15-20% (or 3 fewer deaths per 1,000 patients screened).[12]

Union Hospital's Lung Health Program includes the LDCT scan as a screening protocol for lung cancer. Annual lung cancer screenings with LDCT scans are recommended for patients that meet the following criteria:

- Aged between 55 and 74 years
- Current smoking status or have quit smoking within the past 15 years
- Have no symptoms of lung cancer
- Have a 30-pack year smoking history *(pack year = number of packs of cigarettes smoked per day multiplied by number of years as a smoker)*

Prostate Cancer

Prostate cancer is the leading cause of cancer death in men in the United States (US). The American Cancer Society states that 1 in 7 men will be diagnosed with prostate cancer and 1 in 36 men will die from it. In the US, Men over the age of 65 years and African American men have the highest risk for prostate cancer.[13] In Cecil County, the incidence rate for prostate cancer has been on the decline over the last several years (Figure 5), especially among African American males (Figure 6).

[11] Maryland Behavioral Risk Factor Surveillance System. Adults who Smoke [data file]. Accessed at: https://www.uhcc.com/about-us/community-benefit/cecil-county-health-data/

[12] National Cancer Institute. National Lung Screening Trial: Questions and Answers [webpage]. Accessed at: https://www.cancer.gov/types/lung/research/nlst-qa

[13] American Cancer Society. Key statistics for prostate cancer [webpage]. Accessed at: http://www.cancer.org/cancer/prostatecancer/detailedguide/prostate-cancer-key-statistics

Figure 5. Prostate Cancer Incidence Rate, Cecil County[14]

Figure 6. Prostate Cancer Incidence Rate, by Race, Cecil County[15]

Prostate Screenings

Each September, Union Hospital provides free prostate cancer screenings for men in Cecil County through Prostate Specific Antigen (PSA) testing. **Table 3** shows the number of clients served by the Union Hospital free prostate screening program each September.

[14] National Cancer Institute. State Cancer Profiles: Incidence Rate Report for Maryland by County, Prostate, All Races (includes Hispanic), Both Sexes, All Ages, Cecil County, Maryland [data file]. Accessed at: https://statecancerprofiles.cancer.gov/incidencerates/

[15] National Cancer Institute. State Cancer Profiles: Incidence Rate Report for Maryland by County, Prostate, Black (includes Hispanic), Males, All Ages, Cecil County, Maryland [data file]. Accessed at: https://statecancerprofiles.cancer.gov/incidencerates/

Table 3. Clients Screened at Union Hospital

Year	# Clients Screened
2011	72
2012	70
2013	47
2014	60
2015	48
2016	60
2017	No data reported
2018	25

Breast Cancer

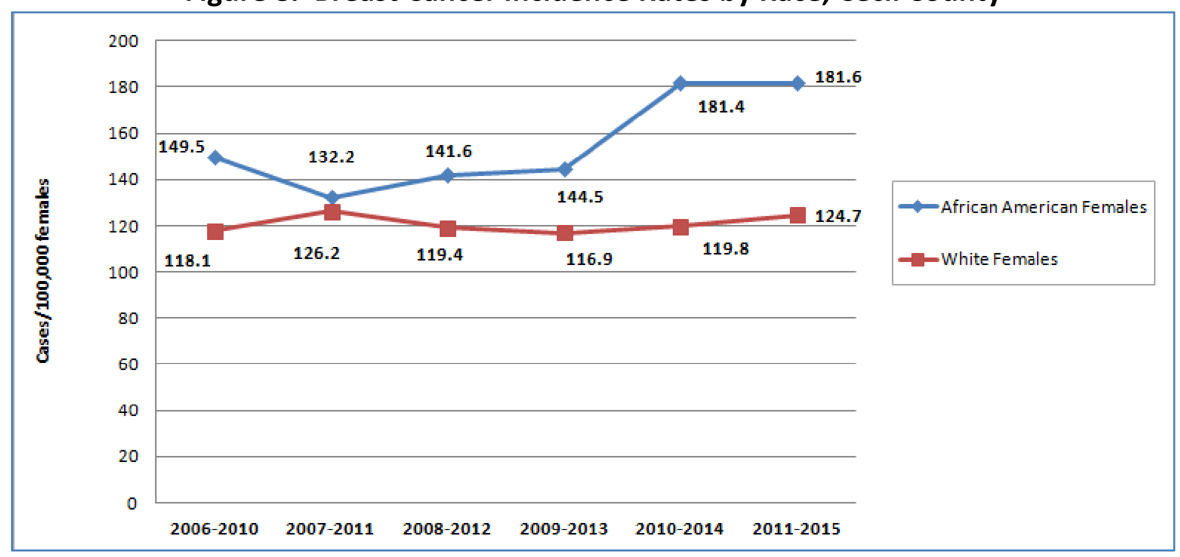
Breast cancer is the second leading cause of cancer death for women in the US (second to lung cancer). The American Cancer Society states that 1 in 8 women will develop breast cancer and 1 in 38 women will die from it. However, death rates have dropped 40% since 1989, showing steady decline since 2007 in older women. Currently, there are more than 3.1 million breast cancer survivors in the US.[16] In comparison, Cecil County has shown a steady decrease in breast cancer incidence rates among women over the last ten years (Figure 7). Cecil County data also shows a racial disparity for African American women whose breast cancer incidence has steadily increased when compared to white women (Figure 8). In the US, higher incidence is historically uncharacteristic among African American women. However, according to a report called *Breast Cancer Facts & Figures 2015-2016*, published by the American Cancer Society, the breast cancer death rate for African American women by 2012 was 42% higher than that of white women. The report further explained that "Black women are more likely than other racial/ethnic groups to be diagnosed at later stages and have the lowest survival at each stage of diagnosis. They are also more likely to be diagnosed with triple negative breast cancer, an aggressive subtype that is linked to poorer survival."[17]

Figure 7. Breast Cancer Incidence Rate, Cecil County

[16] American Cancer Society. *How Common is Breast Cancer?* [webpage]. Accessed at: https://www.cancer.org/cancer/breast-cancer/about/how-common-is-breast-cancer.html

[17] American Cancer Society. *Report: Breast Cancer Rates Rising Among African-American Women.* Accessed at: https://www.cancer.org/latest-news/report-breast-cancer-rates-rising-among-african-american-women.html#citations

Figure 8. Breast Cancer Incidence Rates by Race, Cecil County



Screening Mammograms

While the number of new breast cancer cases for women are declining in Cecil County, the Union Hospital Breast Health Center has noted that there are still pockets in the female population in Cecil County that are not regularly receiving screening mammograms, if at all, despite the 6,000 screening mammograms provided by the Center each year.

Historically, screening mammograms have been provided every year for women 50 years or older. However, the US Preventive Services Task Force (USPSTF) now recommends that women 50-74 years old should receive screening mammograms every other year (on a biennial cycle).[18] This directly conflicts with the recommendation that the American Cancer Society, the American College of Radiology, and the National Comprehensive Cancer Network, which states that women should receive a screening mammogram every year starting at the age of 40 or 45 years. This mixed messaging can be confusing to women, especially if they are not already seeking screening mammograms.

Furthermore, health insurance carriers are mandated by the Affordable Care Act and the US Department of Health and Human Services to follow the USPSTF recommendation for receipt of biennial screening mammograms. This means that insurance benefits would not provide the beneficiary's "cost sharing" benefit for a screening mammogram performed in the off year of a biennial screening cycle.[19] Therefore, the beneficiary would be responsible to pay for "non-covered" services rendered. Cost reporting in 2014 at Union Hospital showed that the out-of-pocket expense for a screening mammogram was $206. This amount does not include radiology fees of $144 and any additional costs related to follow-up care.

---

[18] US Preventive Services Task Force. Breast Cancer: Screening [webpage]. Accessed at: https://www.uspreventivservicestaskforce.org/Page/Document/UpdateSummaryFinal/breast-cancer-screening1

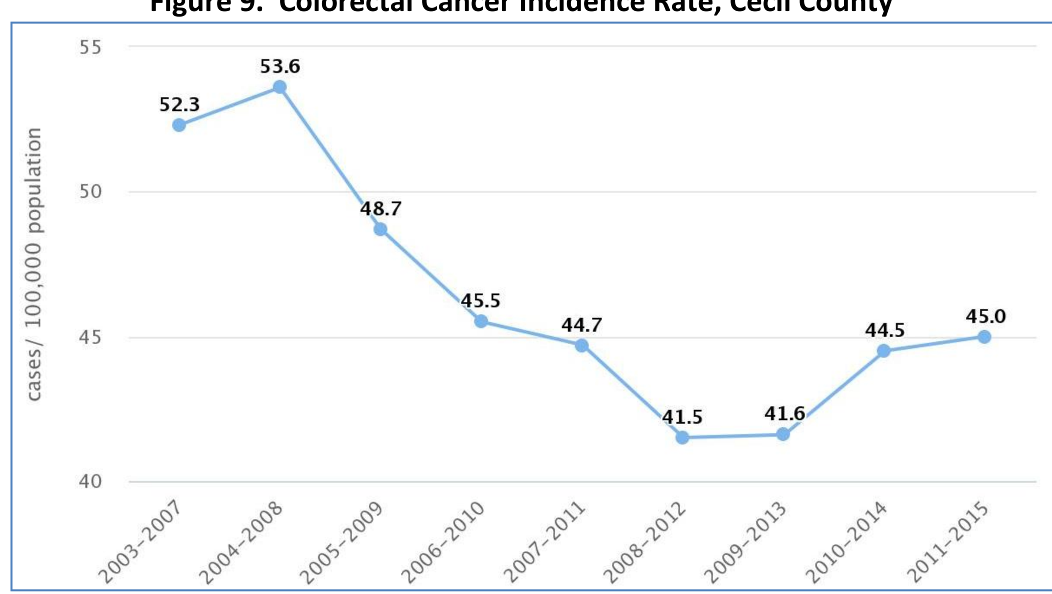
[19] Kaiser Family Foundation. Preventive Services Covered by Private Health Plans under the Affordable Care Act [webpage]. Accessed at: http://kff.org/health-reform/fact-sheet/preventive-services-covered-by-private-health-plans/

The Union Hospital Breast Health Center encourages women to receive their screening mammogram every year, but if health insurance benefits do not cover the screening, the Center's staff encourages patients to contact the Cecil County Health Department for breast cancer screening assistance.

Colorectal Cancer

Colorectal cancer is the third most diagnosed cancer in the US for both men and women. The lifetime risk for developing colorectal cancer is 1 in 21 for men and 1 in 23 for women.[20] Recent data for incidence of colorectal cancer in the US shows that there were 41 colorectal cancer cases/100,000 population and 15.1 deaths/100,000 population.[21] In Cecil County incidence for colorectal cancer has been steadily declining over the last nine years (Figure 9).

Figure 9. Colorectal Cancer Incidence Rate, Cecil County[22]



Colon Screenings

Colorectal cancer screenings can help detect polyps in the colon and rectum to be removed for prevention and/or biopsy if considered to be pre-cancerous based on size and shape. Early detection of colorectal cancer can increase chances of survival, especially if the cancer is diagnosed in an earlier stage. Over the last thirty years new diagnoses of colorectal cancer in the US have decreased by 30% which is believed to be directly linked to increased awareness and screening.[23] Union Hospital provides colorectal cancer screenings through the Union Gastroenterology outpatient practice for patients with insurance that will cover the procedures.

---

[20] American Cancer Society. Key Statistics for Colorectal Cancer [webpage]. Accessed at: http://www.cancer.org/cancer/colon-rectal-cancer/about/key-statistics.html

[21] National Cancer Institute: Surveillance, Epidemiology, and End Results Program. Cancer Stat Facts: Colon and Rectum Cancer [webpage]. Accessed at: https://seer.cancer.gov/statfacts/html/colorect.html

[22] National Cancer Institute. Incidence Rate Report for Maryland by County, Colon & Rectum, All Races (includes Hispanic), Both Sexes, All Ages [data file]. Accessed at: https://statecancerprofiles.cancer.gov/incidencerates/

[23] National Cancer Institute: Surveillance, Epidemiology, and End Results Program. Cancer Stat Facts: Colon and Rectum Cancer [webpage]. Accessed at: https://seer.cancer.gov/statfacts/html/colorect.html

Cecil County Health Department provides assistance with colorectal screenings through its small media grant.

Behavioral Health

Substance use (related deaths, overdoses, prevention, treatment, recovery, and public safety) and mental health (services, access, treatment, and special population health) have been top priorities in Cecil County for at least the last ten years. In fact, the first and second CHNAs (conducted FY 2013 and FY 2016 respectively) revealed substance abuse as the number one health priority, followed by mental health as number two. As a result several resources have been advocated for and created over the last several years to address substance abuse prevention and treatment, as well as access to mental health services.

Substance Use

Illicit drug use has steadily increased in Cecil County over the last several years, starting with prescription drug abuse and now more prominent with opioid abuse. Due to the county's geographic position along the I-95 corridor, which provides a more fluid movement of drugs throughout Maryland and to nearby states, stemming opioid trafficking continues to be a large priority for local and state law enforcement. In addition, the county's opioid crisis continues to have a major negative impact on co-occurring mental health issues.

Youth Substance Use

Table 4 shows Maryland Youth Risk Behavior Survey (YRBS) data for the percentage of high school student substance use in 2014 (reported in the previous CHNA report) and 2016. There are significant percentage decreases from 2014 to 2016 which could be attributed to the great work being done in youth prevention in Cecil County, spearheaded by the Cecil County Drug-Free Communities Coalition, a part of the larger super coalition – Drug Free Cecil. In the last three years there has been an increase in the amount of prevention activities geared toward youth and today there is even a youth coalition, led by youth, which focuses on prevention, advocacy, and health promotions in the community and at the state and national levels.

Table 4. Substance Use among Cecil County High School Students[24]

Survey Item	2014	2016
Percentage of students who used marijuana one or more times during their life	38%	↓ 34.8%
Percentage of students who used marijuana one or more times in the last 30 days	23.8%	↓ 20.9%
Percentage of students who have taken a prescription drug, (ex. OxyContin, Percocet, Vicodin, codeine, Adderall, Ritalin, or Xanax), without a doctor's prescription one or more times during their life	15.5%	↓ 13.3%

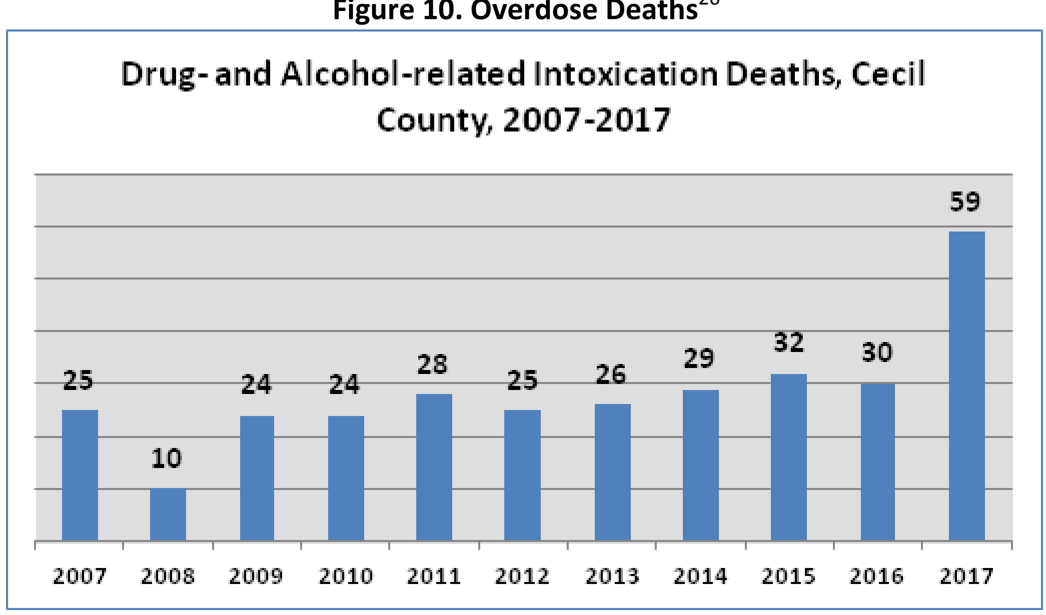
[24] Maryland Youth Risk Behavior Survey/Youth Tobacco Survey (YRBS/YTS). 2016 and 2014 Youth Risk Behavior Survey Data [webpage]. Accessed at: https://phpa.health.maryland.gov/ccdpc/Reports/Pages/YRBS-Main.aspx

Percentage of students who have injected any illegal drug (ex. used a needle to inject any illegal drug into their body) one or more times during their life	3.4%	= 3.5%
Percentage of students who used heroin one or more times during their life	4.2%	↓ 2.7%
Percentage of students who used any form of cocaine, (ex. powder, crack, or freebase), one or more times during their life	5.6%	↓ 4.6%
Percentage of students who were offered, sold, or given an illegal drug by someone on school property during the past 12 months	25.7%	↓ 16.1%

Overdose Deaths

Overall in the US: "Opioids contribute largely to drug overdose deaths; since 2000, there has been a 200 percent increase in deaths involving opioids."[25] **Figure 10** shows a steady increase in overdose deaths for Cecil County from 2012-2016, but then there is a huge spike in 2017. As you can see from the graph, 57 of the deaths involved opioids, further solidifying the breadth and depth of the opioid crisis in Cecil County.

Figure 10. Overdose Deaths[26]



In 2014, right before the second cycle of CHNA was conducted, county health, government, and law enforcement leadership created an action plan to address prevention of drug overdose deaths in Cecil County. This plan was called for and supported by the Governor's office. In the second cycle of CHNA in 2016, substance use was again identified as the number one health

[25] Centers for Disease Control and Prevention. Increases in Drug and Opioid Overdose Deaths — United States, 2000–2014. *MMWR Morb Mortal Wkly Rep.* 2016; 64(50);1378-82.

[26] Maryland Vital Statistics Administration. Vital Statistics and Reports [webpage]. Accessed at: https://health.maryland.gov/vsa/Pages/reports.aspx

issue in Cecil County. The sustained increase in overdose deaths was one of many reasons that prompted instituting an office of the Heroin Coordinator.

In 2016, the Cecil County Executive hired a Heroin Coordinator to help address the opioid problem in the county. The Heroin Coordinator developed a digital tracking system that is used by first responders and law enforcement in the county to input data related to all substance-related arrests, overdoses, deaths, and other related infractions. This system was identified as a best practice by the White House and the digital platform was shared on a national scale to assist other communities in addressing the opioid crisis with real-time data.

Today, the Heroin Coordinator tracks opioid-related data and provides support to a number of community organizations and agencies on what the data means and what to expect with trending information. The Heroin Coordinator also participates in ride-alongs with law enforcement to educate officers on how to use the digital tracking system and witness first-hand what goes into the arrests and/or calls and how law enforcement is tracking applicable data.

Emergency Room Visits

The substance use emergency room (ER) visit rate has decreased between 2014 and 2017. This is the result of many factors, one of which could include more emergencies being handled at home or in the community due to the unrestrained access to and use of Naloxone which reverses the effects of an overdose.

Table 5. ER Rate – Alcohol & Substance Abuse[27]

	Age-Adjusted ER Rate due to Alcohol/Substance Abuse (per 100,000 population)						
	2010	2011	2012	2013	2014	2016	2017
Cecil	1,538.6	2,121.9	2,234.8	2,057.6	2,165.7	2,133.2	2,084.1
Maryland	1,122.4	1,237.5	1,398.2	1,474.6	1,591.3	1,940.5	2,017
					Previous CHNA		Current CHNA

Cecil County Health Department provides free NARCAN certification classes for the community to educate on the use and administration of NARCAN to reverse the effects of an overdose. To give a frame of reference for the availability and use of NARCAN, Cecil County Health Department's Alcohol and Drug Recovery Center reported that from April 2014 to May 2019, there were 3,583 community members trained and 258 lives were reported as saved.
For the same time frame there were 345 law enforcement officers trained and 253 lives reported as saved.

Opioid-Related Deaths

Heroin, prescription opioids, and fentanyl were the three substances that caused a majority of opioid-related deaths in Cecil County in 2017 (Figure 11).

[27] Maryland Health Services Cost Review Commission. Research Level Statewide Outpatient Data Files. Emergency Department Visits for Addictions-Related Conditions [data file]. Accessed at: http://cecil.md.networkofcare.org/ph/ship-detail.aspx?id=md_ship45

Figure 11. Opioid-Related Deaths[28]

Number of Opioid-Related Deaths, by Substance, 2017

	Cecil	Maryland
Heroin	37	1078
Prescription Opioids	8	413
Fentanyl	44	1594

Heroin, prescription opioids, and fentanyl are highly addictive and each is classified by a Schedule by the Drug Enforcement Administration. Heroin is a Schedule I drug and prescription opioids and fentanyl are Schedule II drugs. Schedule I drugs have no currently accepted medical use and have a high potential for abuse. Schedule II drugs have a high potential for abuse and their use may lead to severe psychological or physical dependence, making them extremely dangerous.[29] In addition, Heroin is often cut with other substances, like fentanyl and carfentanyl, to make its effect stronger but which also results in the greater likelihood of overdose and even death. In fact, recent data from the office of the Heroin coordinator showed that 85% of overdose deaths in Cecil County were attributed to fentanyl.

Mental Health

The Maryland Behavioral Risk Factor Surveillance System (BRFSS) surveyed Cecil County adults in 2010, and while adults reported that they felt supported mentally and socially (81%),[30] there were adults that reported experiencing four poor mental health days per month.[31] In addition to the impact on adults, youth experienced mental health issues too. **Table 6** shows comparative Maryland Youth Risk Behavior Survey (YRBS) data for youth mental health from 2014 (reported in the previous CHNA) and 2016.

[28] Maryland Vital Statistics Administration. Drug-Induced Death Rate [data file]. Accessed at: http://cecil.md.networkofcare.org/ph/ship-detail.aspx?id=md_ship29

[29] United States Drug Enforcement Administration. Drug Scheduling [webpage]. Accessed at: https://www.dea.gov/drug-scheduling

[30] Maryland Behavioral Risk Factor Surveillance System. Adequate Social and Emotional Support [data file]. Accessed at: https://www.uhcc.com/about-us/community-benefit/cecil-county-health-data/

[31] County Health Rankings. Poor Mental Health Days [data file]. Accessed at: http://www.countyhealthrankings.org/app/maryland/2019/measure/outcomes/42/data

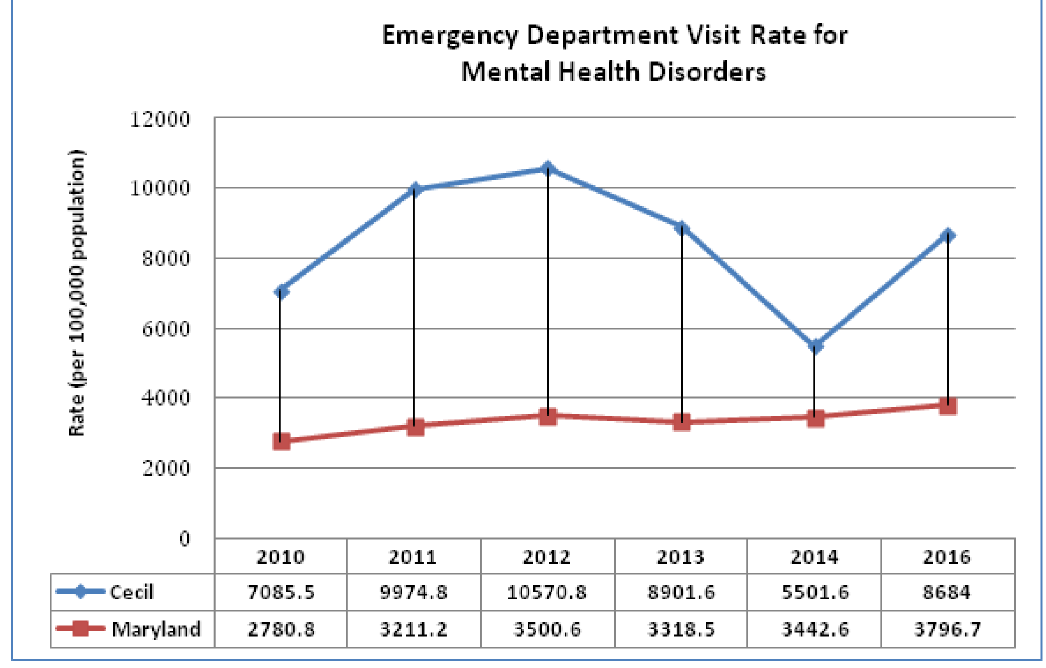
Table 6. Depression and Thoughts of Suicide among Cecil County High School Students[32]

Survey Item	2014	2016
Percentage of students who felt so sad or hopeless almost every day for two weeks or more in a row that they stopped doing some usual activities during the past 12 months	29.4%	= 29.7%
Percentage of students who seriously considered attempting suicide during the past 12 months	18.5%	↓ 16.9%

Emergency Room Visits

Cecil County has experienced a steady decrease in the number of ER visits related to behavioral health disorders, which include: adjustment disorders, anxiety disorders, attention deficit disorders, disruptive behavior disorders, mood disorders, personality disorders, schizophrenia and other psychotic disorders, suicide and intentional self-inflicted injury, and miscellaneous mental disorders. **Figure 12** shows a year-to-year comparison between Cecil County and Maryland.

Figure 12. Emergency Room Visits for Mental Health Disorders[33]



The 2017 Maryland State Health Improvement Process (SHIP) goal for rate of ER visits due to behavioral health disorders was 3,152.6 visits per 100,000 population. During the period from

[32] Maryland Youth Risk Behavior Survey/Youth Tobacco Survey (YRBS/YTS). 2016 and 2014 Youth Risk Behavior Survey Data [webpage]. Accessed at: https://phpa.health.maryland.gov/ccdpc/Reports/Pages/YRBS-Main.aspx

[33] Health Services Cost Review Commission. Research Level Statewide Outpatient Data Files. Rate of emergency room visits related to mental health disorders [data file]. Accessed at: https://www.uhcc.com/about-us/community-benefit/cecil-county-health-data/

2010-2013, Cecil County more than doubled the state's ER visit rate, primarily because of the increase of substance abuse and decrease of available health care providers to treat both substance abuse and behavioral health disorders. Improvements in 2014 may reflect the impact of programming established during the 2013-2016 Local Health Improvement Plan process where strategies focused on increasing access to behavioral health services and intervening with peer recovery advocates in the ER for patients with diagnoses of mental health disorders, as well as co-occurring diagnoses of mental health disorders and substance abuse.

Childhood Trauma

According to the Substance abuse and Mental Health Services Administration (SAMHSA), trauma results from "an event, series of events, or set of circumstances experienced by an individual as physically or emotionally harmful or life-threatening with lasting adverse effects on the individual's functioning and mental, physical, social, emotional, or spiritual well-being."[34] Traumatic events can take many forms, including: psychological, physical, or sexual abuse; neglect; serious accidents or life-threatening illness; community or school violence; witnessing or experiencing domestic violence; national disasters or terrorism; sexual exploitation; sudden or violent loss of a loved one; refugee or war experiences; military family-related stressors; and physical or sexual assault.[35]

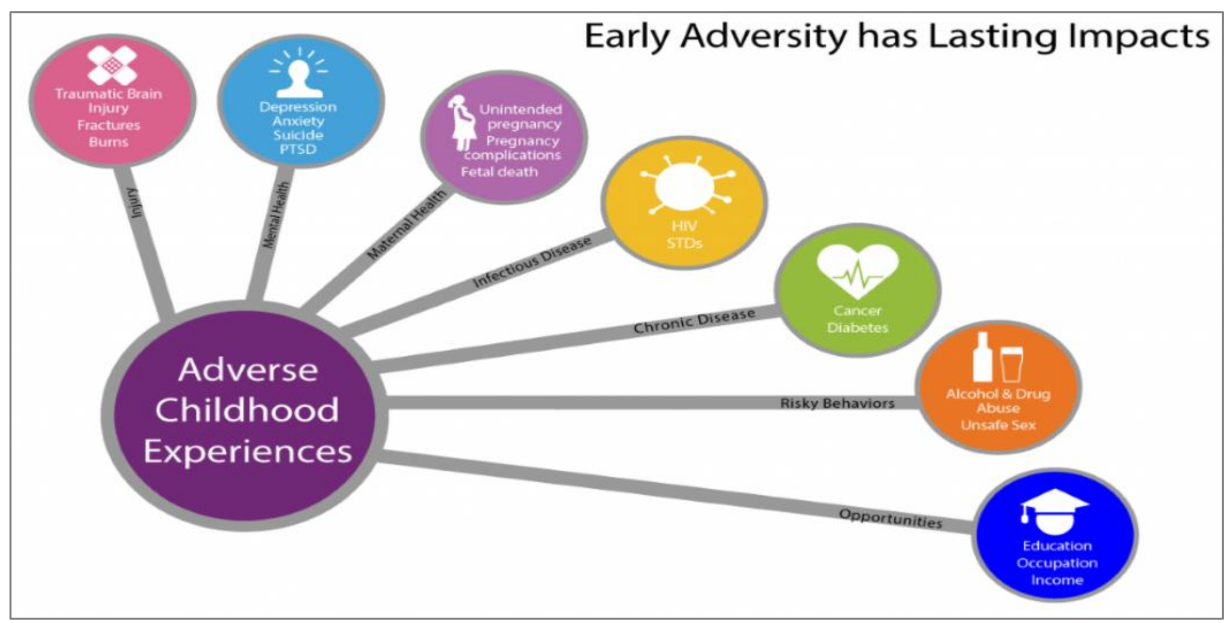
Adverse Childhood Experiences (ACEs) is the term commonly used to describe all types of abuse, neglect, and other potentially traumatic experiences that occur to people under the age of 18. ACEs have been linked to an increase in risky behaviors, chronic health conditions, low life potential and premature death. As the number of ACEs an individual has experienced increases, so does the risk for negative outcomes across an individual's life course. **Figure 13** details the many different negative consequences linked to ACEs.[36]

[34] Substance abuse and Mental Health Services Administration. Trauma [webpage]. Accessed at: https://www.integration.samhsa.gov/clinical-practice/trauma

[35] Substance abuse and Mental Health Services Administration. Understanding Childhood Trauma [webpage]. Accessed at: https://www.integration.samhsa.gov/child-trauma/understanding-child-trauma

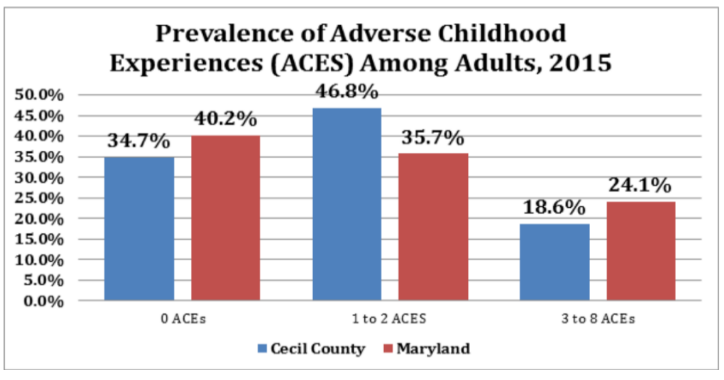
[36] Centers for Disease Control and Prevention. About Adverse Childhood Experiences [webpage]. Assessed at: https://www.cdc.gov/violenceprevention/childabuseandneglect/acestudy/aboutace.html

Figure 13. Impacts of Early Adversity[37]



The BRFSS Adverse Childhood Experiences module measures eight types of childhood trauma. Three types deal with abuse (physical abuse, emotional abuse, sexual abuse) and five types are related to household challenges (intimate partner violence, substance abuse in the household, mental illness in the household, parental separation or divorce, incarcerated household member). **Figure 14** shows the estimated prevalence of ACEs among Cecil County and Maryland adults in 2015. In Cecil County, nearly two-thirds (65.3%) of adults reported having experienced at least one of these ACEs during their childhood. This was higher than the estimated prevalence of ACEs among Maryland adults (59.8%) during this time period. Among Cecil County Adults at least one ACE, 18.6% reported experiencing at least three of the ACEs included in the BRFSS questionnaire. It is important to note that the ACE score does not capture the frequency or severity of any given ACE and is not comprehensive of all types of childhood trauma.

Figure 14. Prevalence of ACEs among Adults[38]



[37] Centers for Disease Control and Prevention. About Adverse Childhood Experiences [webpage]. Assessed at: https://www.cdc.gov/violenceprevention/childabuseandneglect/acestudy/aboutace.html

[38] Maryland Behavioral Risk Factor Surveillance System. 2015 Maryland BRFSS ACEs Data Tables 9 [data file]. Accessed at: https://phpa.health.maryland.gov/ccdpc/Reports/Documents/MD-BRFSS/2015_MD_BRFSS_ACEs_Data_Tables.pdf

Figure 15 details the prevalence of different types of ACEs included in Maryland's BRFSS questionnaire during 2015. The most commonly reported ACEs among Cecil County adults were Emotional Abuse (38.3%), Household Substance Use (25.4%), Parental Separation or Divorce (19.9%) and Household Mental Illness (15.8%).

Figure 15. Prevalence of ACES among Adults by Type[39]

Prevalence of Adverse Childhood Experiences (ACEs) among Adults, 2015		
	Cecil County	Maryland
Household Mental Illness	15.8%	15.0%
Household Substance Abuse	25.4%	24.9%
Incarcerated Household Member	*	7.6%
Parental Separation or Divorce	19.9%	27.5%
Intimate Partner Violence	*	17.4%
Emotional Abuse	38.3%	31.2%
Physical Abuse	*	16.9%
Sexual Abuse	*	11.1%

*Data suppressed due to denominator < 50

Health Needs Not Prioritized

There were health needs and barriers to care that were not feasible to address due to factors, like resource availability and community resources already in play (Table 7). For additional information on community resources available, please refer to **Appendix B** which provides an **Asset Inventory** of Cecil County community resources.

Table 7. Health Needs & Barriers to Care Identified but not Prioritized

Health Need	Rationale
Access to care	Ongoing efforts through health services to bring more providers into the community covering a range of specialties, including primary care and geriatric services.
Homelessness	CHAC does not have enough resources to manage this problem. Homeless providers in the area meet through the Cecil County Interagency Council on Homelessness to work through issues and find additional supports.
Chronic disease	Chronic diseases identified: arthritis, Asthma, COPD, heart disease, hypertension, obesity, stroke, and diabetes. There are simply not enough resources or time to address every single

[39] Maryland Behavioral Risk Factor Surveillance System. 2015 Maryland BRFSS ACEs Data Tables [data file]. Accessed at: https://phpa.health.maryland.gov/ccdpc/Reports/Documents/MD-BRFSS/2015_MD_BRFSS_ACEs_Data_Tables.pdf

	chronic disease. However, there are many programs in the community that manage these conditions and provide support.
Dental health	With the dental clinic closure starting a new effort to manage dental health needs in vulnerable communities was not feasible. The Dental Advisory Committee is currently working on strategies to increase awareness around dental health in vulnerable and underserved neighborhoods, primarily working through neighborhood community centers and local libraries.
Tobacco use	Tobacco use is a risk factor that is addressed through programs at the Cecil County Health Department and through the Maryland QuitLine.
Infectious & Communicable Diseases	There are programs in place through the Cecil County Health Department to address infectious and communicable disease.
Vaccination	Addressed by the schools, Cecil County Health Department, Union Hospital, and physician practices
Environmental health	Addressed by Dept of Natural Resources and Cecil County Heath Dept. Lack of available resources; too broad.
Injuries – Motor vehicle & pedestrian	Addressed by law enforcement and the Dept of Transportation
Child abuse and neglect	Handled through reports to CPS and medical exams from the Cecil County Child Advocacy Center
Domestic violence	Addressed by the domestic violence shelter, a part of the Department of Social Services, and local law enforcement
Violent Crime	Addressed by local and state law enforcement in Cecil County. Agencies and health care services also partner with law enforcement to support their efforts.
Suicide	Addressed through inpatient and outpatient programs in the community, mediation services like Eastern Shore Mobile Crisis, Upper Bay Counseling Services, and hot- and warm-lines providing real-time interventions to those at-risk for suicide
Barrier to Care	**Rationale**
Income & Poverty	May be addressed as part of each of the health priority areas. Requires stronger political will and funding to support overcoming these barriers. CHAC does not have either.
Employment	May be addressed as part of the Behavioral health priority. Otherwise addressed by Susquehanna Workforce Network, Cecil College, and other local non-profits, like those that assist veterans.
Health insurance availability & coverage	Addressed through the Maryland Health Connection and Seedco
Transportation	Addressed through voucher programs at Dept of Community Services and through local partnerships

Health care costs	Addressed through programs like: Union Hospital Community Assisted Medication Program (CAMP), the Union Hospital Cancer Program community outreach support, many outreach programs at the Cecil County Health Department, local pharmacy assistance programs, and the Department of Community Services assistance programs through MAPP, options counseling, and Community First Choice
Home Health eligibility	Addressed through programs that assist persons with the application process (ex. the county Department of Community Services)
Lack of knowledge (incl. low health literacy, lack of access to health information)	Opportunities to address health literacy are being explored for all priority areas
Public assistance qualifications	Addressed through Cecil County Health Department, the Department of Community Services, the Department of Social Services, and the certified health insurance navigators through Seedco and the Maryland Health Connection
Need for more medical and social supports	Addressed by Dept of Social Services, Dept of Community Services, Cecil County Health Department, and other social services
Educational Attainment	Addressed by local non-profits work with special and vulnerable populations who experience barriers to getting a GED; local federal credit unions provide education on how to affordably finance education; Cecil College offers scholarships to eligible individuals; and workplaces provide tuition reimbursement for applicable educational attainment (ex. workplace certifications or degrees)
Affordable housing	Affordable housing is a large barrier in Cecil County, especially among the poor and low-income. While wait lists are long for most housing programs, there are agencies in the community that manage this issue. Also, there are limited resources available to purchase existing or new properties to rehab in order to assist with programs like transitional housing. Land for new development is expensive. Some community work has been done to strike compromises with landlords to house homeless and other tenants who can demonstrate the ability to sustain housing.
Language barriers	Language barriers can be addressed through the use of interpreters. Most programs in the county have access to medical and social interpreters or contracted interpreter services. If access is a problem then there is opportunity to partner with organizations that have these resources. For patients or clients

	having trouble with language barriers there is opportunity for organizations to provide materials in other languages and/or hire or borrow professionals that can speak other languages.
Time limitations	In all the focus groups it was voiced that there are not enough doctors' offices open in the evening hours. Union Hospital and many other providers in the community have added evening and weekend hours for frequently used services, like primary care and urgent care.

PRIMARY DATA COLLECTION & ANALYSIS

Online Community Survey

The online community survey was developed by the Director of Health Planning (Cecil County Health Department) and Community Benefits Coordinator (Union Hospital) with input from the Community Health Advisory Committee (CHAC). The survey was created using Survey Monkey and consisted of twenty questions – a variety of multiple choice, Likert Scale selections, and free text entry (Appendix A). The survey was divided into four sections and asked questions about demographics, community health, quality of life, and access to health care. The survey took approximately 15 to 20 minutes to complete and 1,403 people completed the survey. The following sections provide an overview of the results from the online community survey.

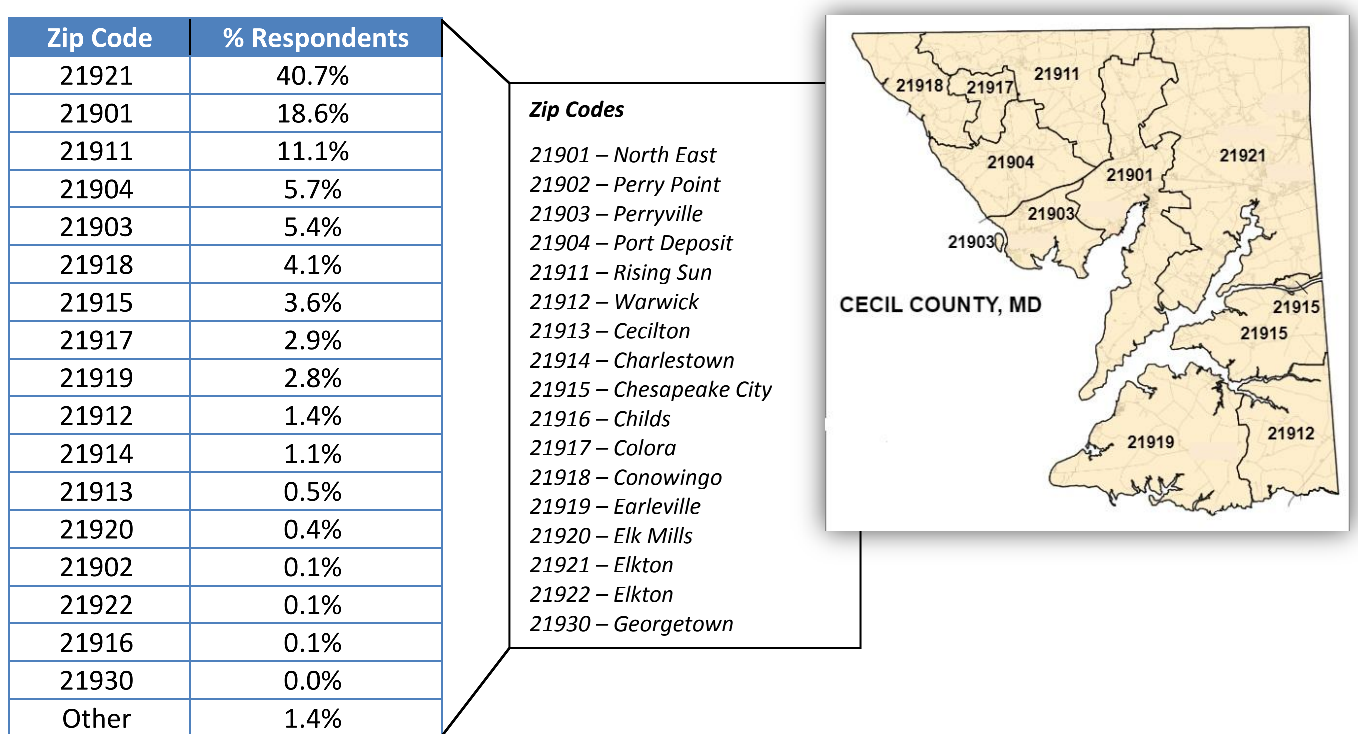
Demographics

In this section of the survey respondents were asked to answer questions related to their demographics.

Zip Codes

Survey respondents were asked to provide their zip code. Respondents to the survey were distributed across Cecil County zip codes. The highest proportion of survey respondents (40.7%) were from the 21921 zip code area. Another 18.6% and 11.1% of survey respondents reside in the 21901 and 21911 zip code areas respectively. **Table 8** contains a listing of respondents' zip codes.

Table 8. Zip Codes in Cecil County



Zip Code	% Respondents
21921	40.7%
21901	18.6%
21911	11.1%
21904	5.7%
21903	5.4%
21918	4.1%
21915	3.6%
21917	2.9%
21919	2.8%
21912	1.4%
21914	1.1%
21913	0.5%
21920	0.4%
21902	0.1%
21922	0.1%
21916	0.1%
21930	0.0%
Other	1.4%

Demographic Profile

A demographic profile of respondents who completed the online community survey is included in **Table 9.** Females made up 81.2% of survey respondents, while males made up 18.6%. An additional 0.1% of survey respondents identified as gender fluid. By age, the largest proportion of respondents (35.9%) was between 40 and 54 years of age. An additional 24.8% of respondents were between 55 and 64 years of age, 19.1% were between 35 and 44 years of age, 13.2% were between 25 and 34 years of age, 12.7% were 65 years of age or older, and 4.4% were between 18 and 24 years of age. Residents identifying as White comprised 95.3% of survey respondents, with Black or African Americans representing 2.9% of respondents, Some Other Race representing 2.1% of respondents, American Indians or Alaskan Natives representing 1.2% of respondents, and Asians representing 0.6% of respondents. An additional 2.4% of respondents identified their ethnicity as being Hispanic, Latino or of Spanish origin.

The survey also asked respondents about their marital status, level of educational attainment and household income. Among respondents, nearly two thirds (64.6%) identified as being married. The largest proportion of respondents (29.9%) answered that they have Some College, No Degree, followed by High School Graduate or GED (19.0%), Graduate or Professional Degree (18.2%), Bachelor's Degree (17.4%), and Associate's Degree (11.9%). Nearly two percent of respondents had not completed high school. Among those answering "Other," most had completed a technical or trade school. In addition, 30.9% of respondents have a household income of over $100,000, while 5.2% have a household income of less than $15,000.

Table 9. Demographics of Survey Respondents

Gender	
Male	18.6%
Female	81.2%
Gender-fluid	0.1%
Age	
18-25	7.9%
26-39	23.0%
40-54	37.1%
55-64	23.2%
65 or Older	8.7%
Race (All that Apply)	
White	95.3%
Black or African American	2.9%
Asian	0.6%
American Indian or Alaskan Native	1.2%
Native Hawaiian or Other Pacific Islander	0.0%
Some Other Race	2.1%

Ethnicity	
Hispanic, Latino, or Spanish Origin	2.4%
Marital Status	
Married	64.6%
Divorced	15.6%
Widowed	4.7%
Separated	2.1%
Never Married	13.0%
Educational Attainment	
No High School	0.4%
Some High School, No Diploma	1.4%
High School Graduate or GED	19.0%
Some College, No Degree	29.9%
Associate's Degree	11.9%
Bachelor's Degree	17.4%
Graduate or Professional Degree	18.2%
Other	1.7%
Household Income	
Less than $15,000	5.2%
$15,000 - $24,999	
$25,000 - $ 34,999	13.5%
$35,000 - $49,999	18.3%
$50,000 - $74,999	18.1%
$75,999 - $99,999	43.0%
$100,000 or More	30.9%

Community Health

In this section of the survey respondents were asked to answer questions related to the health of the Cecil County community.

Important Health Issues

Survey respondents were asked to select the three most important health issues in Cecil County from a list of 26 health issues. Substance Abuse was by far the most concerning health issue, with three out of every four (75.3%) of survey respondents choosing it as one of the three most important health issues in the county. Additionally, Mental Health (37.7%) and Homelessness (32.9%) were both selected as one of the three most important health issues by approximately one third of survey respondents. A complete listing of responses is included in the table below.

Table 10. Important Health Issues

Rank	Health Issue	% Respondents
1	Substance Abuse	75.3%
2	Mental Health	37.7%
3	Homelessness	32.9%
4	Access to Health Services	18.9%
5	Poverty	15.7%
6	Obesity	14.2%
7	Affordable Housing	13.9%
8	Child Abuse and Neglect	13.5%
9	Dental Health	10.9%
10	Cancer	10.7%
11	Violent Crime	7.9%
12	Unemployment	6.8%
13	Childhood Trauma	5.9%
14	Educational Attainment	5.6%
15	Diabetes	5.0%
16	Heart Disease and Stroke	4.5%
17	Domestic Violence	4.4%
18	Tobacco Use	4.4%
19	Environmental Health	4.3%
20	Maternal, Infant and Child Health	3.8%
21	Motor Vehicle/ Pedestrian Injuries	3.3%
22	High Blood Pressure	2.9%
23	Suicide	2.9%
24	Respiratory/ Lung Disease	1.7%
25	Sexually Transmitted Diseases (STDs)	1.2%
26	Immunization and Infectious Disease	1.1%

Respondents were also given the opportunity to write in other important health issues in the county that were not among those listed. Of the 74 responses, the majority of comments were related to substance abuse (24) and the accessibility and quality of health services in the county (15). Responses included:

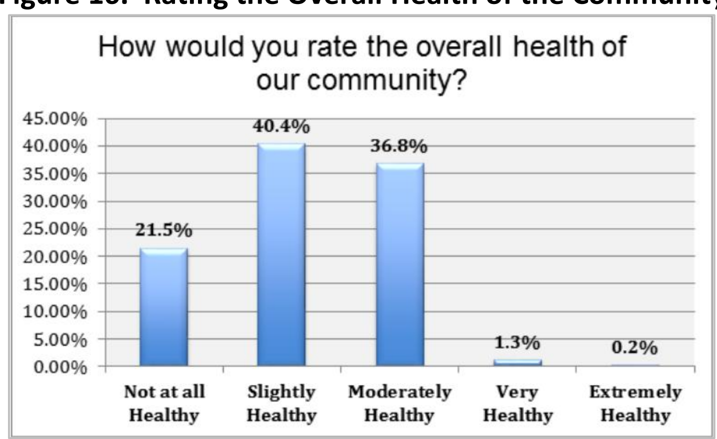
- *“Affordability of health services”*
- *“Senior healthcare. Seniors have no dental or eye care and medication costs are very high”*
- *“Senior care (dementia, alzheimer's, etc)”*
- *“Drug addiction”*
- *“ Lack of public transportation and walkways”*
- *“Young people dying of overdoses. We can do better”*
- *“The out of control Oxy-pill epidemic”*

- *“Doctors are overwhelmed with patients . Getting appointments is almost impossible for a new patient”*
- *“Affordable insurance”*
- *“Helping someone with a disability”*
- *“Finding doctors to listen to your concerns”*
- *“Doctors available for people with state insurance”*
- *“Medical Specialists”*
- *“Heroin! Our community is losing the battle”*
- *“Healthy diets and lifestyle choices”*
- *“Care for adults with certain disabilities from childhood”*
- “Smoking”
- “*Drinkable water”*
- *“The mental health issue is first all other are interlinked.”*
- *“Behavior in school. Need therapy for these kids.”*
- “*Lack of public transportation and walkways.”*
- *“Child mental health”*
- *“Mental health services for children and adults with disabilities”*
- *“Sexual assault”*
- *“Radon; well water safety”*
- *“Quality Professional Medical Providers + Sub-specialty”*
- “*Help with transporting elderly to appointments”*
- *“Nonviolent crime”*
- *“Tick and mosquito illnesses”*
- *“Unemployable due to substance abuse”*

Health of the Community

Survey respondents were asked to rate the overall health of the community (Figure 16). A majority of respondents (61.9%) rated the overall health of the community as being not at all healthy or slightly healthy while only 1.5% rated the overall health of the community as being very healthy or extremely healthy. In general, respondents feel that the overall health of the community in Cecil County is poor.

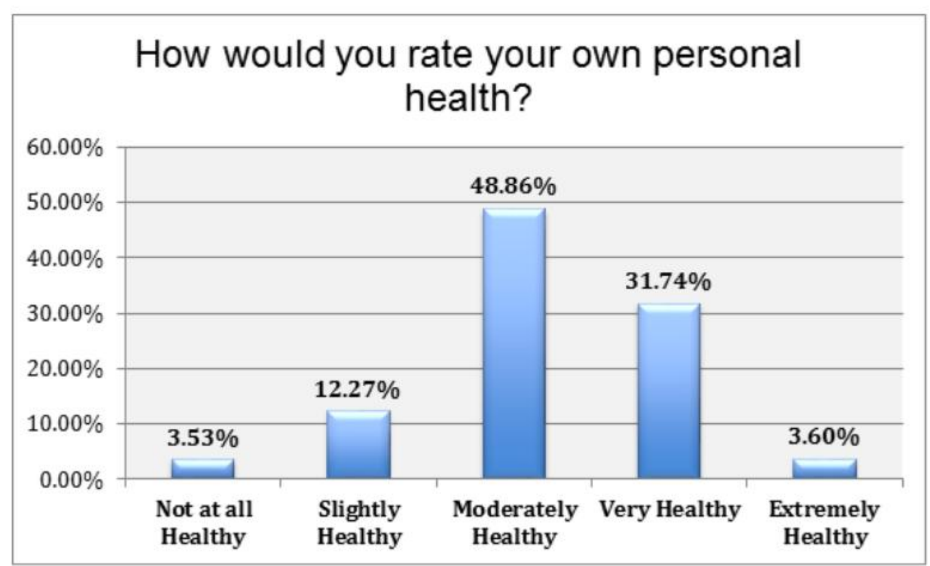
Figure 16. Rating the Overall Health of the Community



Personal Health

Survey respondents were also asked to rate their own personal health (Figure 17). Nearly half (48.9%) of respondents rated their personal health as moderately healthy, while approximately one third (35.3%) rated their personal health as being very healthy or extremely healthy and less than a quarter (21.6%) rated their personal health as being slightly healthy or not at all healthy. In general, respondents feel more positive about their personal health than the overall health of the community.

Figure 17. Rating Personal Health



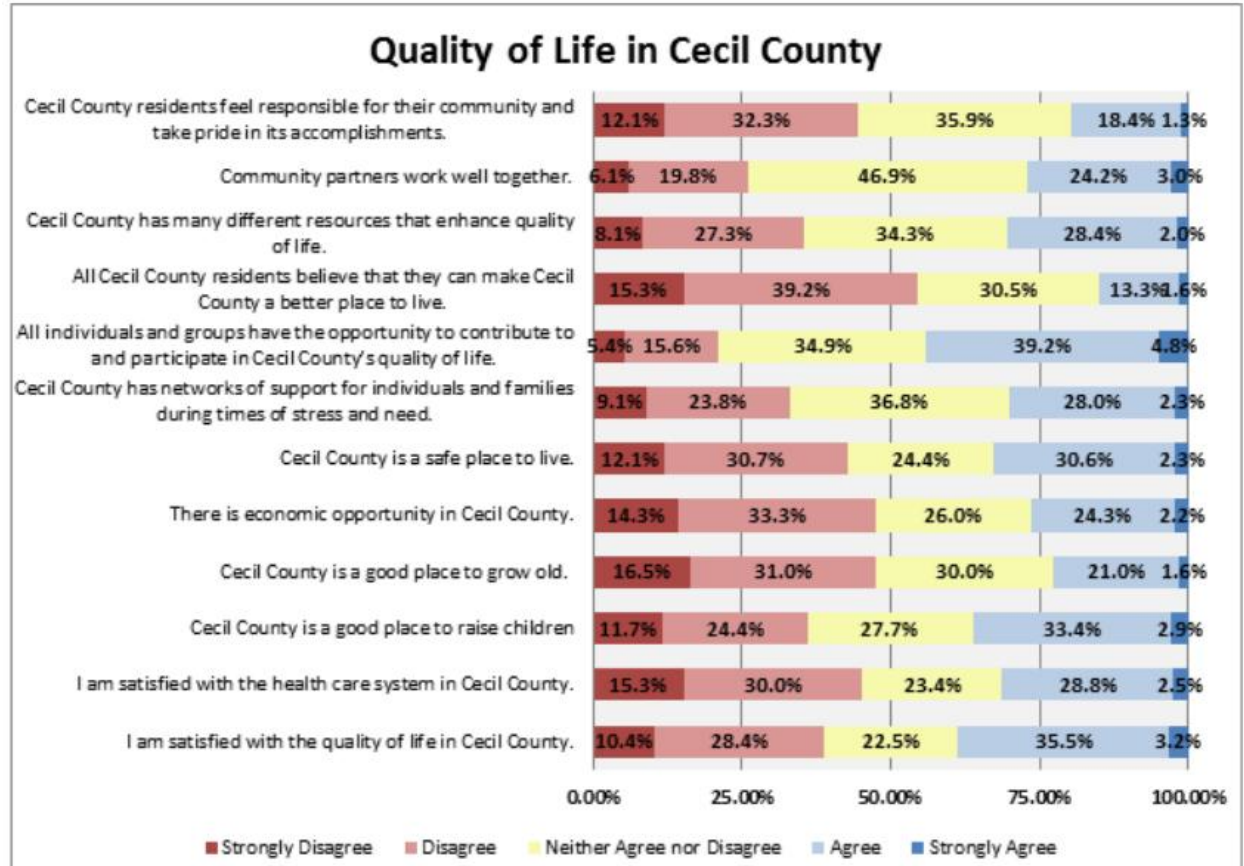
Quality of Life

In this section of the survey respondents were asked about the quality of life in Cecil County.

Quality of Life in Cecil County

Survey respondents were asked to rate twelve statements about the quality of life in Cecil County on a scale from 1 (strongly disagree) through 5 (strongly agree) (Figure 18). There were a higher proportion of negative responses (disagree or strongly disagree) than positive responses (agree or strongly agree) for 9 out of 12 statements. Respondents felt most negatively about the statements “All Cecil County residents believe that they can make Cecil County a better place to live,” “There is economic opportunity in Cecil County,” and “Cecil County is a good place to grow old. For each of these statements, approximately half of respondents answered “strongly disagree” or “disagree.” Respondents felt most positively about the statement “All individuals and groups have the opportunity to contribute to and participate in Cecil County’s quality of life”. This statement received nearly double the amount of positive responses than negative responses. There is an interesting juxtaposition between belief data (top negative response) and opportunity data (top positive response).

Figure 18. Quality of Life Perceptions



Access to Health Care

In this section of the survey respondents were asked questions related to health care access in Cecil County.

Health Literacy

Respondents were asked to rate their ability to get health information, understand it and use it (Figure 19). Health literacy can play a large role in a person's ability to understand health information and act upon the information they receive. Over half of respondents (58.6%) answered that they are either very able or extremely able to get health information, understand it, and use it.

Figure 19. Personal Use of Health Information

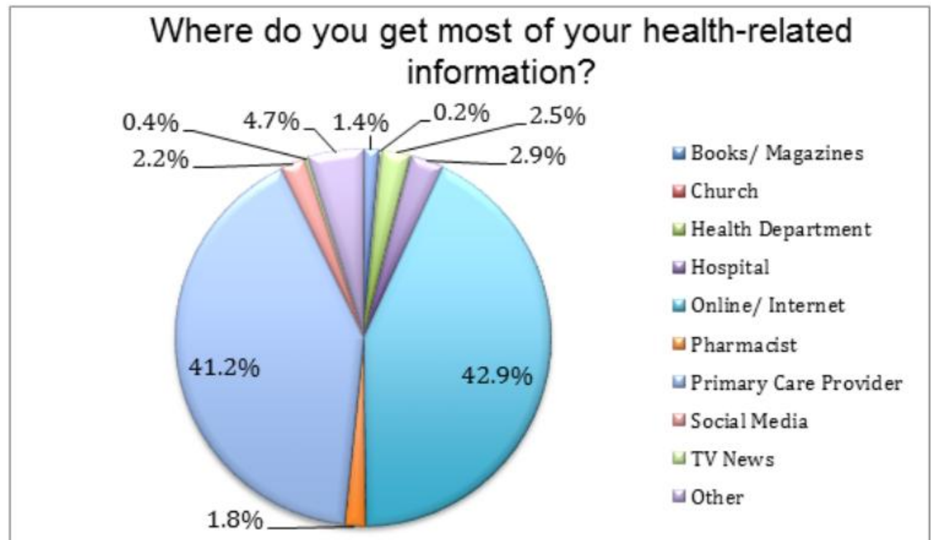
How would you rate your ability to get health information, understand it and use it?

	Responses
Not at all Able	2.5%
Slightly Able	12.0%
Moderately Able	26.8%
Very Able	34.8%
Extremely Able	23.9%

Source of Health Information

Respondents were asked where they get most of their health-related information from (Figure 20). A majority of respondents reported getting most of their health related information from either the internet (42.9%) or from their primary care provider (41.2%). Among those respondents selecting other, the most common responses were professional journals and through their employment in the health care field.

Figure 20. Sources of Health Information

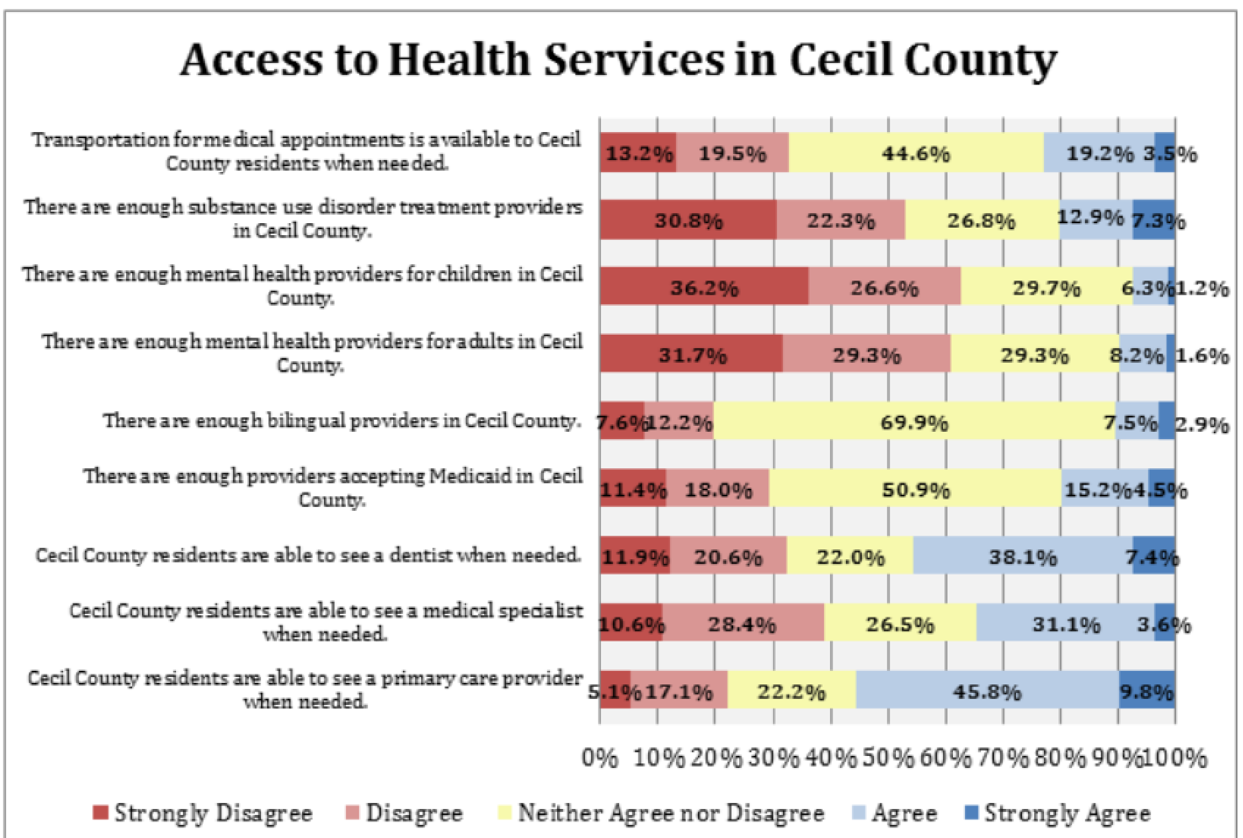


Health Care Access

Respondents were asked to rate nine statements about access to health care services in Cecil County on a scale from 1 (strongly disagree) through 5 (strongly agree) (Figure 21). There were a higher proportion of negative responses (disagree or strongly disagree) than positive responses (agree or strongly agree) for 7 out of 9 statements. Respondents felt most negatively about the statements "There are enough mental health providers for children

in Cecil County," "There are enough mental health providers for adults in Cecil County," and "There are enough substance use disorder treatment providers for adults in Cecil County," with over half of respondents answering negatively. Respondents felt most positively about the statement "Cecil County residents are able to see a primary care provider when needed," with over half of respondents answering positively and "Cecil County residents are able to see a dentist when needed," with 45.5% of respondents answering positively.

Figure 21. Health Services Access



Barriers to Care

Respondents were asked to select the three most significant barriers to accessing health services in Cecil County (Figure 22). The most commonly reported barrier was the inability to pay out of pocket expenses (57.2%). Health care coverage not covering needed services (33.8%), the availability of doctors or other providers/ appointments (30.4%), time limitations (25.9%), and basic needs not being met (25.6%) were also reported as significant barriers by many respondents. Many of the written responses focused on insufficient health insurance coverage, the availability of providers and specialists in Cecil County, and an individual's personal choices in seeking services.

Figure 22. Indentifying Barriers to Care

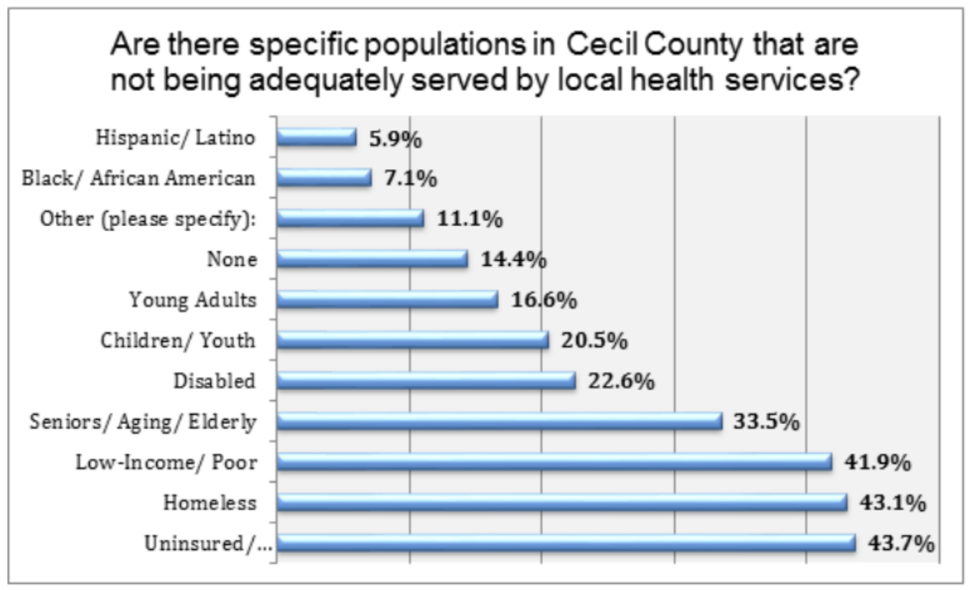
What are the most significant barriers to accessing health services in Cecil County?

Language/ Cultural Barriers 2.6%
No Barriers 5.1%
Other 6.0%
Lack of Child Care 6.5%
Lack of Trust in Medical Services 12.8%
Difficult to Understand/ Navigate Health... 18.7%
Lack of Health Insurance 21.5%
Lack of Dental Insurance 22.2%
Lack of Transportation 22.9%
Basic Needs Not Met 25.6%
Time Limitations 25.9%
Availability of Doctors or Other Providers/... 30.4%
Health Care Coverage Does Not Cover... 33.8%
Inability to Pay Out of Pocket Expenses 57.2%

Under-Served Populations

Respondents were asked if there were specific populations in Cecil County that are not being adequately served by local health services (Figure 23). The most commonly reported populations were the uninsured/underinsured (43.7%), homeless (43.1%), low-income and poor (41.9%), and Seniors/Aging/Elderly (33.5%). In addition to the populations identified below, the middle class, veterans, those living outside of Elkton, LGBTQ, and individuals with behavioral health disorders were mentioned as populations that are not being adequately served.

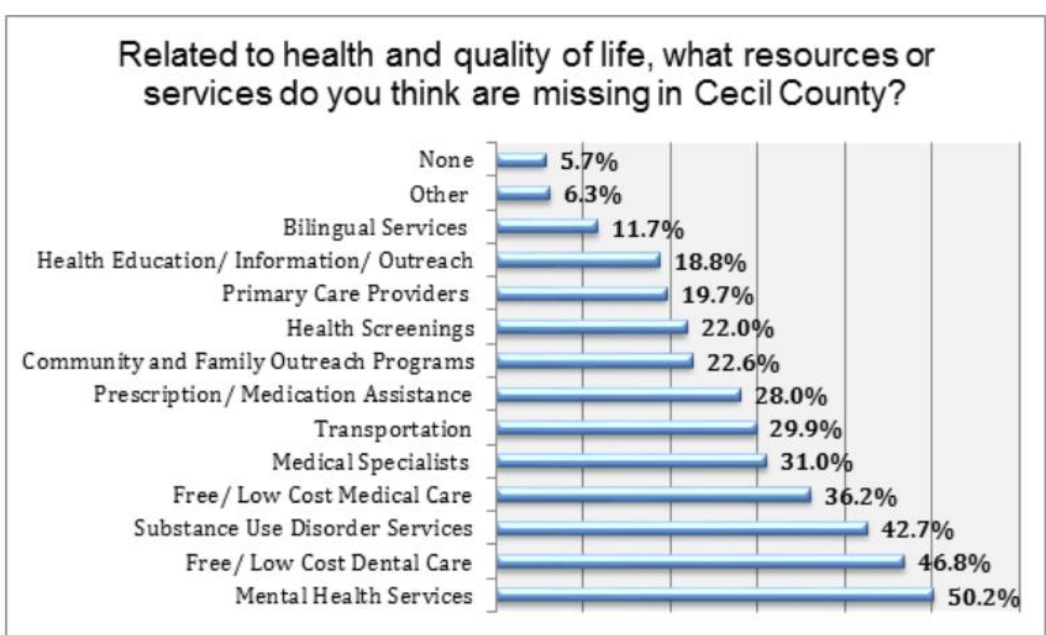
Figure 23. Identifying Under-Served Populations



Missing Resources and Services

Respondents were asked to identify resources or services related to health and quality of life that are missing in Cecil County (Figure 24). The most commonly reported resources or services that are missing in the county are mental health services (50.2%), free or low cost dental care (46.8%), substance use disorder services (42.7%), and free or low cost medical care (36.2%). Other resources or services that are missing in Cecil County mentioned by survey respondents include transportation, job training, parks and recreation, assistance for elderly individuals, mental and behavioral health services for children and adults, trauma therapy, quality health care, homeless services, and a one stop shop for services.

Figure 24. Identifying Missing Resources



Additional Information

Health and Quality of Life

Survey respondents were asked to share additional information about the health and quality of life of Cecil County residents. Many of the responses were related to the availability of medical specialists and high rates of substance abuse in Cecil County. Lack of mental health providers, homelessness, the cost of health services, and the need for transportation services were also frequently mentioned as concerns. Respondents also indicated the need for more health education in the community and the need for people to take personal responsibility for their health. A selection of responses is provided below:

- *"We need to increase funding for education and prevention as it relates to substance abuse and the drug epidemic!"*
- *"People have a hard time justifying preventative health and dental care because they can't afford the cost. They wait until they NEED to go. That's not good for their overall health. Most people in Cecil County barely make a living wage to pay the rent. Medical needs aren't a priority until it's an emergency or the self-medicate."*

- *“The community needs to be motivated to get healthy. Not everyone will take the opportunity but start with providing the children somewhere to go and play safely like a community center in each town that offers programs free to more than just one age group. If the children stay active and positive the chances of drug abuse are reduced dramatically.”*
- *“There basically are no psychiatrists or psychologists in the county that anyone can see quickly or regularly unless on assistance or court ordered.”*
- *“I really think two of the big issues that need to be addressed in Cecil County is substance abuse and homelessness (especially homelessness in Elkton, it worries me that there aren't enough services being provided to help these people). Also the topic of substance abuse is concerning to me because it makes me wary of raising my kids in Cecil County (or at least in Elkton) in the future.”*
- *“Not enough specialists in the area. To see a Hepatologist, Oncologist, Orthopedic, Rheumatoid etc...you're required to travel to Delaware or Baltimore. Cecil County needs to start recruiting for specialists in all fields for its residents.”*
- “*Many people have health insurance but they can’t afford their deductible or copays or medications.”*
- *“The drug use is out of control and the children growing up in these homes are exposed to trauma and abuse. When they come to school, they are often have difficulty in the areas of academics or behaviors. When you are living in trauma you aren’t going to be able to learn-your brain is not ready to learn. Often times these children bring unwanted behaviors to school. They are not “bad” children-they just don’t have the upbringing and support to succeed. This in turn exposes the other children in the classroom to 2nd hand trauma. And there are not enough mental health providers to support the children and their families. So...the cycle of trauma and poverty continues.”*
- *“We need to find adequate ways of helping our substance abuse population. Most of the negative issues in the county stem from addiction. We need to start substance abuse education at the elementary school level and have more free after school opportunities for children. Hopefully that would allow them to not be home alone and getting into trouble.”*

How Respondents Heard about the Survey

The last question of the survey asked respondents how they heard about the online community survey. Over half of respondents reported hearing about the survey through Facebook or other social media postings. The Health Department, Union Hospital, Cecil Whig, Cecil County Public Library, Cecil County Fair, West Cecil Health Center and word of mouth were also common responses.

Focus Groups

The CHNA planning team held focus groups with four vulnerable populations to get input on the health and quality of life issues in Cecil County. Populations included: homeless, veterans, older adults, and low-income or ALICE. There was also a fifth focus group held with African Americans who discussed health disparities in Cecil County.

Sessions

Each session included a description of the CHNA, the purpose of the focus group, an introduction of the facilitators, the rules of engagement, and a reference worksheet with session questions. Participation was anonymous; no sign-in information was collected. A head count provided number of participants. The average was 10 participants. Focus group sessions lasted 1-1.5 hours based on group size, when the meal or food was accessed, and how many participants chose to participate.

Facilitation

There was a facilitator and a scribe. The scribe recorded session information up on large wall-hanging sheets visible to the whole group. Participants were asked to respond to the following questions:

1) What are the greatest strengths of our community?
2) What do you think are the most important health issues in Cecil County?
3) What would most improve the quality of life in Cecil County?
4) What are the most significant barriers to accessing health care in Cecil County?
5) Related to health and quality of life, what resources or services do you think are missing in Cecil County?

Responses

Because of the richness of the data, responses were analyzed based on the number of times a health or quality of life theme was referenced. Information listed in the table below collates responses from all focus groups. Additional information about responses specific to each focus group is available upon request. Major health themes included: diabetes, mental health, nutrition, and substance use. Major quality of life themes included: access to health services, transportation, aging, and health insurance.

Table 11. Focus Group Responses

Health Theme	# Mentions
Diabetes	3
Mental health	3
Nutrition	3
Substance use	3
Cancer	2
Tobacco use	2
Allergies	1
Arthritis	1

COPD	1
Dental health	1
Hygiene	1
Hypertension	1
Lung disease	1
Obesity	1
Stroke	1

Quality of Life Theme	# Mentions
Access to health services	4
Transportation	4
Aging	3
Health insurance	3
Poverty	2
Resource availability	2
Community trust	1
Cost of care	1
Education	1
Homelessness	1
Law enforcement	1
Trash	1

Interviews

The CHNA planning team added interviews to this year's CHNA in order to add another layer of depth to the primary data collection process. Interviews also provided key insights into health care and access to care from the perspectives of community leaders engaged in supporting the community. Each interview was conducted with between 2 and 5 community leaders, depending on the organization or group consulted. Altogether there were 12 interviews.

Sessions

Each session included a description of the CHNA, the purpose of the interview, and a reference worksheet with session questions. All interviews are anonymous and all were recorded with permission of the interviewees obtained prior to the start of the interviews. All recorded material is confidential and is stored in the cloud. Data is only accessible by Jean-Marie Kelly (hospital) and Dan Coulter (health department).

Facilitation

One interviewer facilitated the sessions which lasted 30 minutes-1.5 hours, depending on the number of interviewees and the amount of time spent on each question. The average time was one hour. Interviewees were asked to answer the following questions:

1) What work do you/your organization do in the community?
2) How would you rate the health and quality of life in Cecil County?
3) Has the health and quality of life in Cecil County improved, stayed the same, or declined over the past few years?
4) Are there groups of people in Cecil County whose health or quality of life is not as good as others?
5) What barriers, if any, exist to improving the health and quality of life of Cecil County residents?
6) Do you feel a person's ability to access and use health information is important? Why?
7) What are the most important health and quality of life issues in Cecil County?
8) What needs to be done to address these issues?
9) If you had unlimited funds, what is the one thing you would do to improve the health and quality of life of Cecil County residents?
10) Is there anything else you would like to add?

Responses

Because of the richness of the data, responses were analyzed based on the number of times a health or quality of life theme was referenced. Information listed in the table below collates responses from all focus groups. Additional information about responses specific to each focus group is available upon request. <u>Major health themes included</u>: substance use, mental health, and cancer. <u>Major quality of life themes included</u>: access to health services, transportation, homelessness, and poverty.

Table 12. Interview Responses by Theme

Health Theme	# Mentions
Substance use	8
Mental health	7
Cancer	5
COPD	2
Dental health	2
Diabetes	2
Heart disease	2
Nutrition	2
Obesity	2
Tobacco use	2
Arthritis	1
Asthma	1
Child & Family health	1
Childhood trauma	1
Chronic disease (all)	1
Lung disease	1
Stroke	1

Quality of Life Theme	# Mentions
Access to health services	7
Transportation	7
Homelessness	6
Poverty	5
Economic issues	4
Health insurance	4
Resource availability	3
Care coordination	2
Funding	2
Health literacy	2
Public perception	2
Utilization	2
Cultural competency	1
Aging	1
Disabilities	1
Education	1
Emergency preparedness	1
Health disparities	1
Housing	1
Language	1
Partnerships	1
Provider support	1
Reimbursement	1
Social determinants (all)	1

SECONDARY DATA ANALYSIS

Secondary Data

Secondary data for the CHNA was obtained from local, state, and national sources and the data analysis was formatted according to data categories from the "Community Health Status Assessment Core Indicators List" from the National Association for County and City Health Officials (NACCHO).[40] The data categories include:

- Health Resources
- Quality of Life
- Social Determinants
- Societal Health
- Behavioral Risk Factors
- Environmental Health
- Maternal and Child Health
- Communicable Disease
- Mortality

The categories are described in greater detail below and include Cecil County health and socio-economic data per category.

Health Resources

Health care provider availability can influence whether the population is able to regularly seek care. The health care landscape is defined by the following factors in Cecil County:

- Union Hospital has 16 physician practices, including two primary care practices;
- Many private practice providers have offices around the county;
- Local and chain pharmacies provide minute-clinics with quick access to primary care services; and
- There are around five urgent care centers with extended hours.

The following changes in health care provider data for Cecil County have been observed between the previous CHNA and this current assessment:

- **Personal health care provider**[41] **decrease**
  - Current: In 2016, 85.9% of people reported that they had a personal doctor or health care provider
  - Previous: In 2014, 90.5% of people reported that they had a regular source of primary care

---

[40] NACCHO. *White Paper: Community Health Status Assessment Core Health Indicators List.* Accessed at: https://www.naccho.org/

[41] Maryland Behavioral Risk Factor Surveillance System. Personal Doctor or Health Care Provider [data file]. Accessed at: https://phpa.health.maryland.gov/ccdpc/Reports/Pages/brfss.aspx

- **Primary care provider rate**[42] increase
  - Current: In 2016, there were 38 primary care providers per 100,000 population
  - Previous: In 2012, there were 35 primary care providers per 100,000 population
- **Non-physician primary care providers**[43] increase
  - Current: In 2018, there were 52 providers per 100,000 population
  - Previous: In 2014, there were 29 providers per 100,000 population
- **Dental providers**[44] no change
  - Current: In 2016, the ratio of population to dentists was 2,503 people to 1 dentist
  - Previous: In 2014, the ratio of population to dentists was 2,560 people to 1 dentist

Despite the increasing rate of providers, two factors remain constant. First, in Cecil County there are significant wait times for gap services like endocrinology and OB/GYN. These services are not widely available in the county and therefore many patients rely on the medical care provided. Also, there are services that have left the county altogether, like cardio-pulmonary rehabilitation, a primary resource for patients with heart and lung conditions. Without available appointments, patients are forced to seek care either down-state in the Baltimore area or out-of-state, which both require longer drive times and the possibility care being out-of-network. Furthermore, if patients with access issues have Medicaid, out-of-state options are not open to them because their insurance will not cover the care.

Second, the health care provider workforce is changing. More and more providers are aging out of the field (retiring) and there are not enough providers to take their place. This causes a shortage. In Cecil County, the provider shortage is primarily due to geographic and economic factors. Newly graduated physicians, extenders, and non-physician providers are not always looking to move to rural areas. They are also looking for higher paid positions with incentives within larger practices and hospital systems. Union Hospital is a small, community hospital located in a rural community, and is often unable to offer competitive compensation and benefits packages when compared to health systems like Christiana Care in Newark and Wilmington, Delaware or the University of Maryland Medical System with locations in eastern and central Maryland. In fact, a majority of Union Hospital providers live in Delaware or Baltimore and commute to Elkton.

Quality of Life

Quality of life indicates an overall sense of well-being for individuals with a supportive community environment. Quality of life can be quantified using indicators related to the determinants of health and community-well being, as well as qualitative perceptions from

---

[42] County Health Rankings. Access to Primary Care Physicians, Cecil County, Maryland [data file]. Accessed at: https://www.countyhealthrankings.org/app/maryland/2019/rankings/cecil/county/outcomes/overall/snapshot

[43] County Health Rankings. Non-Physician Primary Care Provider Rate, Cecil County, Maryland [data file]. Accessed at: https://www.countyhealthrankings.org/app/maryland/2019/rankings/cecil/county/outcomes/overall/snapshot

[44] County Health Rankings. Dentists, Cecil County, Maryland [data file]. Accessed at: http://www.countyhealthrankings.org/app/maryland/2016/measure/factors/88/data

community residents about aspects of their neighborhoods that either enhance or diminish their quality of life.

The following quality perception data was observed among Cecil County adult residents between the previous CHNA and this current assessment:

- **Quality of health care received**[45] **no change**
  - Current (same as previous): In 2014, satisfaction with health care received was 96.9%

As stated before, other indicators of quality of life include perceptions about the community people live in, like public safety, the environment, access to social and other community services. Since there is not a lot of national or state data that can be drilled down to the county level, the CHNA planning team instituted an online community survey that collects local-level data on how the residents of Cecil County perceive their quality of life. It is the intention of the CHNA planning team to build upon this data with every CHNA cycle so that a more robust quality of life data is available for the community's use in order to enhance the social, economic, health, and political structures that support the growth and development of Cecil County.

Social Determinants of Health

There are many determinants that affect health, health outcomes, and access to health care services. In this section, several social determinants of health are discussed in terms of how they impact health outcomes and health behaviors in Cecil County. Healthy People 2020 defines the social determinants of health as, "conditions in the environments in which people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks." Social determinants are part of the social constructs of a society, as well as barriers that must be managed in order to enhance the health and wellbeing of a population. In general, there are five domains of social determinants of health: 1) economic stability, 2) built environment, 3) education, 4) social and community context, and 5) health care systems.[46] The following indicators are categorized by their social determinant domain.

Economic Stability

Income, employment, and transportation are indicators normally associated with this domain. For income and poverty, please refer to the data presented in the Executive Summary.

ALICE

ALICE or the Asset Limited Income Constrained Employed population holds jobs like child care workers, cashiers, waitresses, home health aides, sanitation workers, and office clerks. These are people who have jobs but also have little to no savings, cannot always pay the bills, and in

---

[45] Maryland Behavioral Risk Factor Surveillance System. Percentage of Adults who Report that they are Satisfied with the Health Care that they Received, Cecil County, Maryland [data file]. Accessed at: https://phpa.health.maryland.gov/ccdpc/Reports/Pages/brfss.aspx

[46] Healthy People 2020. Social Determinants of Health [webpage]. Accessed at: https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-of-health

many cases are forced to make tough choices between things like keeping the utilities on and purchasing medications or feeding their children and putting gas in their car for the commute to work. ALICE individuals are often one emergency away from losing a livelihood, becoming homeless, or not being able to feed the family.

Figure 25 shows the monetary difference between living as a single adult and living as a family of four with both children under 5 years old. To put this into further context, if the family is only making minimum wage and one of the adults is disabled and cannot work (and perhaps does not qualify for disability based on the total household income), this puts the family at a huge disadvantage to meet the cost of living and still function in a way that provides safety and health for the whole family.

Figure 25. Household Survival Budget, Cecil County, 2016[47]

Household Survival Budget - Cecil, Maryland, 2016		
	Single Adult	2 Adults, 1 Infant, 1 Preschooler
Housing	$830	$1,210
Child Care	$0	$1,216
Food	$182	$603
Transportation	$397	$794
Health Care	$235	$884
Technology	$55	$75
Miscellaneous	$208	$556
Taxes	$384	$780
Monthly Total	$2,291	$6,118
ANNUAL TOTAL	$27,492	$73,416
Hourly Wage	$13.75	$36.71

Discussing the ALICE population is important because their social issues make them more at-risk for higher disease burden and make managing risk factors like diet, exercise, tobacco use, and social supports difficult or even impossible. Their health literacy may also be low or non-existent. In addition, these individuals, due to their employment and asset status, do not qualify for many governmental assistance programs and/or Medicaid.   Furthermore, because of these factors, this population could be considered rising risk for higher rates of emergency room visits, admissions, and readmissions. They are the uncontrolled diabetics, the children with mismanaged asthma, and the older adults with severe, debilitating Chronic Obstructive Pulmonary Disease (COPD). Many of their health risk factors are preventable, but due to their constrained life circumstances, they suffer.

[47] United Way. Research Center – Selected State: Maryland State Level Details [data file]. Accessed at: https://www.unitedforalice.org/maryland

The next series of figures show the density of ALICE households in Cecil County in 2016 by age, race/ethnicity, income, and families with children.[48] Notice how the percentage or number of ALICE households is greater than households designated as impoverished.

Figure 26. Households by Age, Cecil County

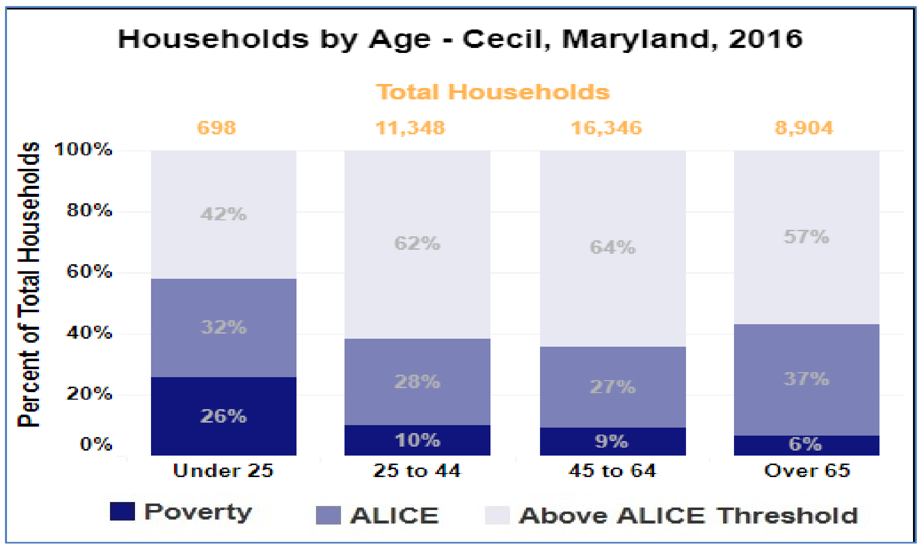
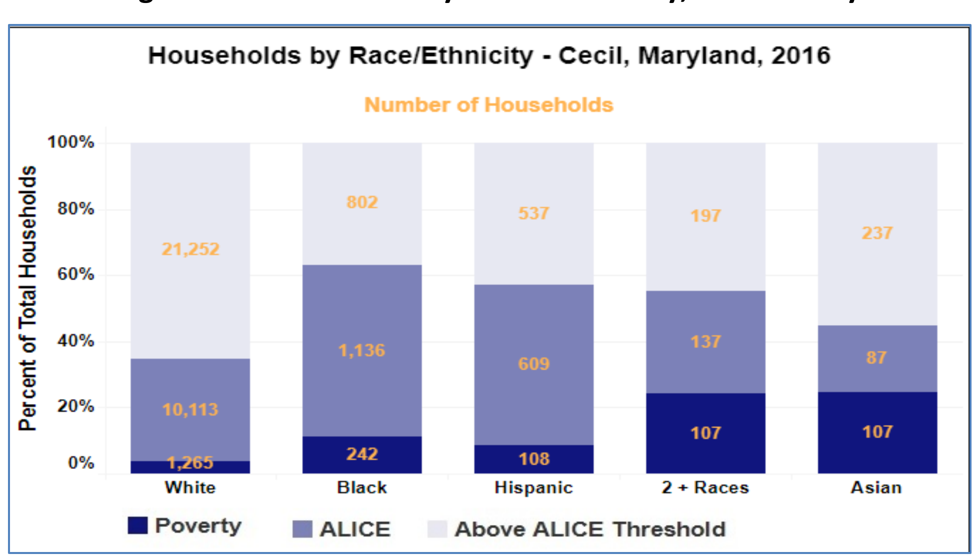


Figure 27. Households by Race & Ethnicity, Cecil County



[48] United Way. Research Center – Selected State: Maryland State Level Details [data files]. Accessed at: https://www.unitedforalice.org/maryland

Figure 28. Households by Income, Cecil County

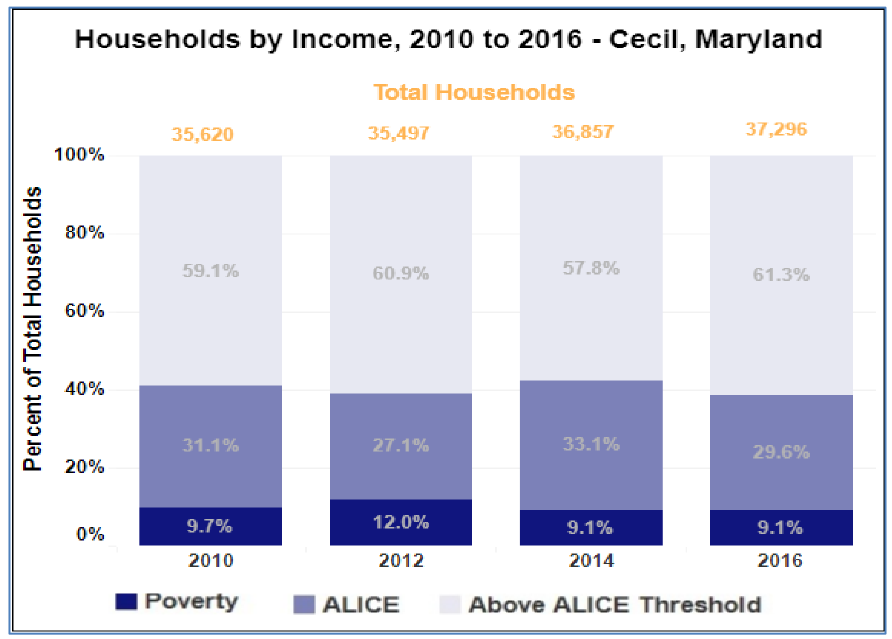
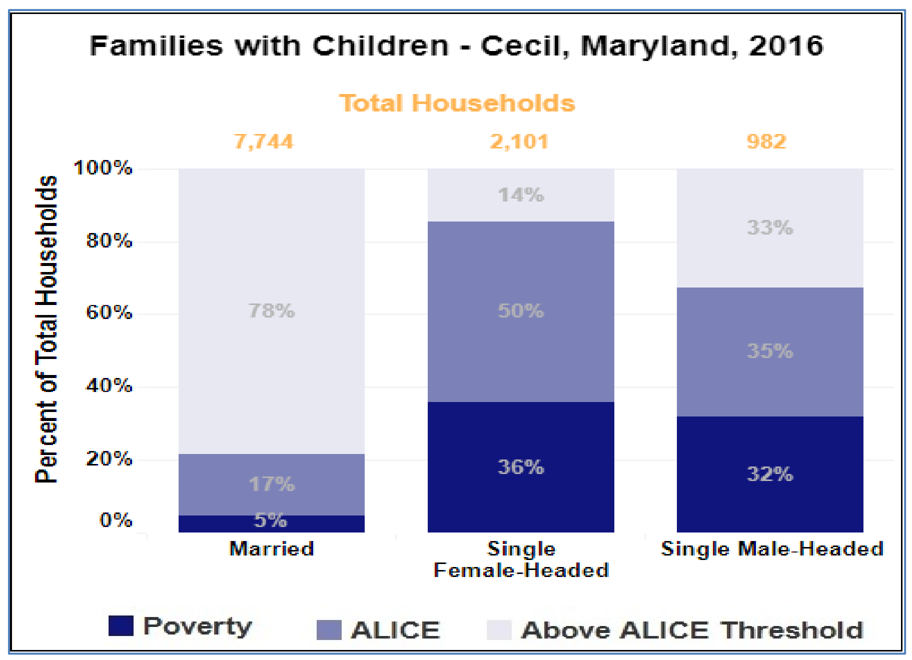


Figure 29. Families with Children, Cecil County



Transportation

Access to transportation is a major factor in determining access to health care in a community. The following transportation data was reported for Cecil County households between the previous CHNA and this current assessment:

- **Households without a vehicle**[49] **no change**
  - Current: In 2017, 5.1% of households did not own a vehicle
  - Previous: In 2014, 5% of households did not own a vehicle
- **Workers (16 years +) commuting by public transportation**[50] **no change**
  - Current: In 2017, 1.2% of workers used public transportation to get to work
  - Previous: In 2014, 0.7% of workers used public transportation to get to work

This data, which does not show a change over a three-year period, indicates vehicle ownership does not contribute to a lack of transportation in Cecil County. However, this is not general public opinion. In all community conversations conducted as part of this CHNA and through the Online Community Health Survey, transportation continues to be identified as a top area of concern in Cecil County, especially among special populations, like older adults, the homeless, and those with behavioral health issues. More specifically, lack of transportation was identified as a major barrier to health care by nearly 23% of the Online Community Health Survey respondents, as well as a major resource missing in Cecil County by nearly 30% of survey respondents.

Built Environment

Food, housing, and public safety are indicators normally associated with this domain. In addition to a discussion of the impact of these social determinants, this section includes an analysis of data between the previous and current CHNA reporting periods.

Food

Hunger is indiscriminate. It affects all populations and can be based on how much food is consumed to even the proximity to food sources available in the community. The concept of having limited or uncertain availability of and/or ability to access nutritionally adequate foods in socially acceptable ways, is known as food insecurity.

Food insecurity, like hunger, is indiscriminate, but it more frequently impacts populations that are negatively impacted by the social determinants of health, like resource-poor communities and depressed or low-income neighborhoods. The non-profit Feeding America conducted a study with families in 2014 called the *Hunger in America* study, which assessed the impact of social and economic constraints and food. **Figure 30** shows the impact of how limited resources forced hard choices among study participants between food and other staple needs, like utilities, transportation, medical care, housing, and education.[51]

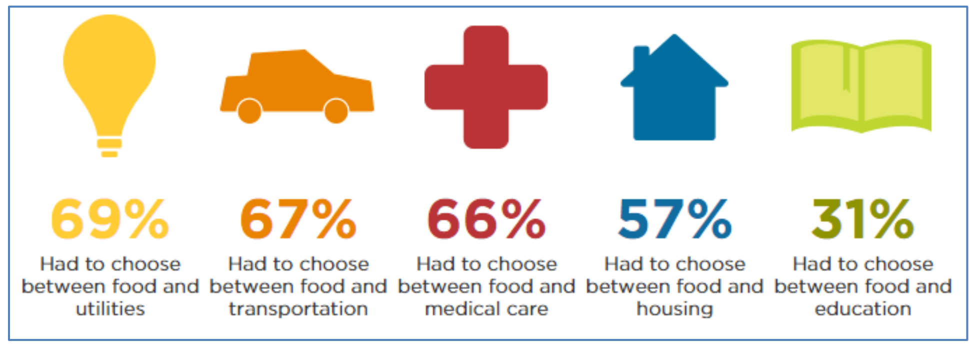
---

[49] US Census Bureau. American Community Survey, 5-year Estimates. Households without a Vehicle, Cecil County [data file]. Accessed at: https://www.uhcc.com/about-us/community-benefit/cecil-county-health-data/

[50] US Census Bureau. American Community Survey, 5-year Estimates. Workers Commuting by Public Transportation, Cecil County [data file]. Accessed at: https://www.uhcc.com/about-us/community-benefit/cecil-county-health-data/

[51] Feeding America. Compromises and Coping Strategies [webpage]. Accessed at: https://www.feedingamerica.org/hunger-in-america/impact-of-hunger

Figure 30. The Hard Choice: Food or Other Needs



Children and older adults have higher risk for the consequences of food insecurity. Poor health outcomes among adults attributable to food insecurity include obesity, high cholesterol, high blood pressure, and heart disease. Children who are food insecure are more likely to be hospitalized and are more likely to be at risk for developing asthma, obesity, and social and behavioral issues.

Rural and urban landscapes each are presented with unique challenges when mitigating the factors leading to and resulting from food insecurity. For example, some places in the US are considered food deserts because of their lack of access to healthy foods. Food deserts are often characteristic of low-income or poor areas, hindered by the social determinants of health. While Cecil County is not a food desert, food insecurity for children is a problem. During the previous CHNA it was reported that in 2013, 22% of children under 18 years old were food insecure in Cecil County. For this current CHNA updated Map the Meal Gap data (Feeding America research) for 2017 in Cecil County shows a decrease in rates – now, only 16.4% of children are food insecure.[52]

Housing

Housing quality is important to examine because poor quality housing can lead to the following:

- Asthma and other chronic lower respiratory diseases in youth and adults due to mold issues
- Lead poisoning, especially in infants and children
- Bed bugs or other parasitic outbreaks
- Poor pest control, especially from households with pets
- Violence and crime, especially in slum housing

[52] Feeding America. Child Food Insecurity Rate [data file]. Accessed at: http://www.feedingamerica.org/hunger-in-america/our-research/map-the-meal-gap/data-by-county-in-each-state.html

Housing quality can also include severe housing problems like overcrowding, high housing costs, lack of a kitchen, and lack of plumbing facilities. Housing data reported for Cecil County households between the previous CHNA and this current assessment included:

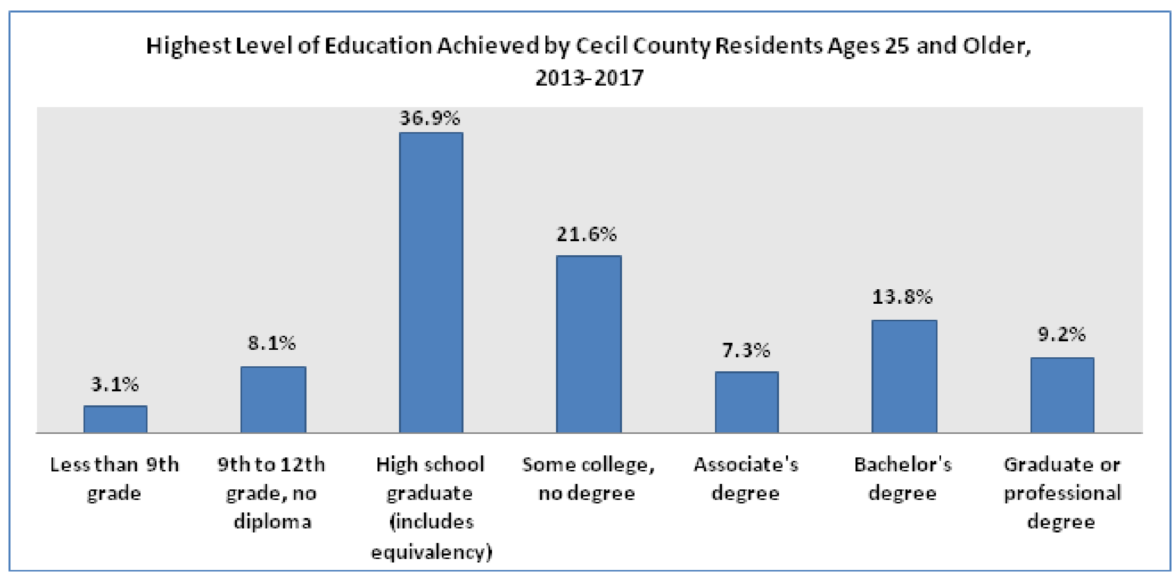
- **Severe Housing Problems**[53] no change
  - Current: In 2015, 15.2% of households encountered at least one of four of the above-mentioned severe housing problems
  - Previous: In 2012, it was 16% of households

In a three-year reporting period there was almost no change in exposure to severe housing problems in Cecil County. Consistent exposure to these unsafe and unhealthy living conditions can increase risk for health issues, like chronic disease and obesity, as well as infectious disease spread by overcrowding, poor sanitation, and the presence of vermin. Low-income families may have increased risk for exposure to these sub-standard living conditions if they are unable to afford the high price tag of more quality (and regulated) housing.[54]

Education

Among Cecil County adult residents ages 25 and older 88.8% of residents are at least a high school graduate and 23.0% possess a bachelor's degree or higher. This is lower than the overall education level of Maryland adult residents ages 25 and older, where 89.8% of residents are high school graduates or higher and 39.0% possess a bachelor's degree or higher. A breakdown of educational attainment among Cecil County adults is included in **Figure 31**.[55]

Figure 31. Educational Attainment



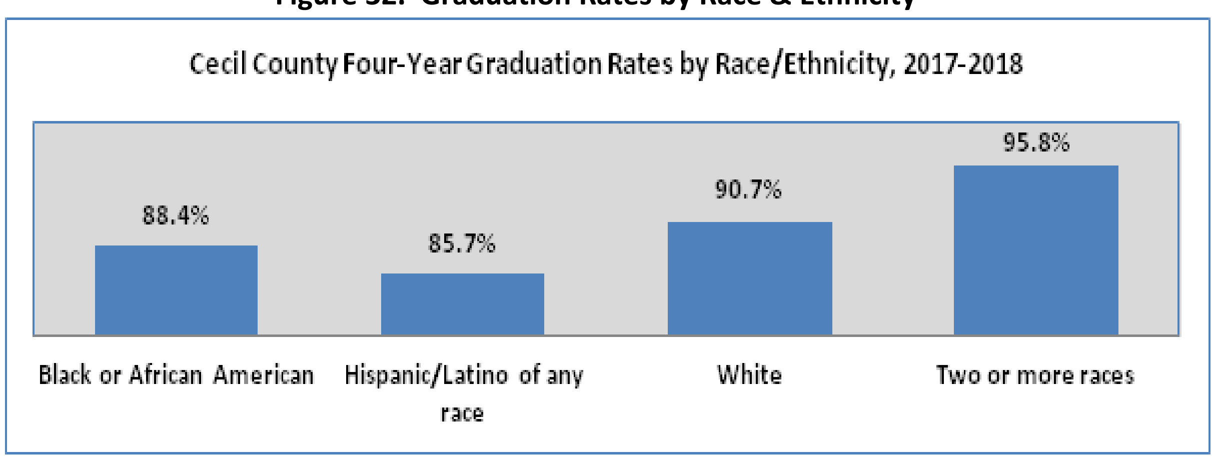
[53] US Department of Housing and Urban Development. Comprehensive Housing Affordability Strategy. Severe Housing Problems, Cecil County, Maryland [data file]. Accessed at: http://www.countyhealthrankings.org/app/maryland/2016/measure/factors/136/data

[54] Union Hospital. Cecil County Health Data. Severe Housing Problems, Cecil County: Why is this Important? [data file]. Accessed at: https://www.uhcc.com/about-us/community-benefit/cecil-county-health-data/

[55] US Census Bureau. American Community Survey, 5-Year Estimates, 2013-2017. Educational Attainment [data file] Accessed at: https://factfinder.census.gov

High school graduation rates in Cecil County have been improving and compare favorably to statewide rates. The four-year graduation rate in Cecil County improved from 80.5% for 2009-2010 to 90.5% for 2017-2018. The statewide four-year graduation rate for 2017-2018 was 87.67%. Some disparities four-year graduation rates exist in Cecil County. Females have had consistently higher graduation rates than males in Cecil County over this timeframe. Also, students who identified as Black or African American or Hispanic/Latino of any race had lower high school graduation rates than students who identified as White for 2017-2018. **Figure 32** shows four-year graduation rates by race/ethnicity for Cecil County in 2017-2018.

Figure 32. Graduation Rates by Race & Ethnicity[56]



Health Care Systems

Access to health care services (discussed in Health Resources), health insurance coverage, and health literacy are the social determinants found within this domain. These are factors that impact the way individuals engage in health behaviors that determine health outcomes. The following information explains these determinants in more detail.

Health Insurance Coverage

Since the adoption of the Affordable Care Act (ACA), the percentage of uninsured persons in the county has decreased significantly. From 2013-2017 an estimated 5.5% of Cecil County residents were uninsured. Of the estimated 94.5% of Cecil County residents with health insurance, 73.9% had private health insurance and 32.8% had public health insurance coverage.[57]

Health Literacy

Health literacy encompasses a person's ability to access, use, and interpret health information. Sometimes it is assumed that patients or clients are health literate because often when they meet with their medical provider they do not give any indication that they do not understand the information that has been given to them. However, many patients, regardless of their

[56] Maryland State Department of Education. Maryland Report Card: 2017 and 2018 [data files]. Accessed at: http://reportcard.msde.maryland.gov/

[57] US Census Bureau. American Community Survey, 5-Year Estimates, 2013-2017. Health insurance coverage by type [data file]. Accessed at: https://factfinder.census.gov

education or reading level, have difficulty understanding and using health information. Health information examples include: medication instructions, pre- or post-surgical procedures, health care forms, pamphlets/brochures, and verbal instructions.

Low health literacy can lead to a person not being able to:

- Make proper health-related decisions for themselves or others;
- Adequately follow medication regimens;
- Over-utilize health care services that are not appropriate to their care regimen, like the ER; and/or
- Properly care for children's health issues.[58]

Barriers to health literacy include: language, ability to read, comprehension, vision or hearing impairments, and even culture. Other social determinants, like poverty and education, also impact health literacy.

It is important that health care providers, outreach workers, and other health professionals pay attention to defining health literacy levels in patients and clients and diffusing barriers. Strategies for increasing and sustaining health literacy include:

- Screening for health literacy;
- Providing visual aids or cues in addition to print materials;
- Using certified medical interpreters to break down language and culture barriers;
- Incorporating a teach-back method using open-ended questions to establish content retention; and
- Promoting a buddy system where patients/clients have access to additional peer support and instructional reinforcement during doctors' visits.

Societal Health

Societal health is integral to the sustainability of a healthy community, so analyzing public safety indicators, like child abuse, domestic violence, violent crime, and suicide can develop a more comprehensive understanding of how these factors impact community health. Studying societal health can also create opportunities to intervene collaboratively with entities like public health, law enforcement, social services, emergency services, mobile crisis services, and behavioral health services.

Child Abuse

The Federal Child Abuse Prevention and Treatment Act (CAPTA) defines child abuse and neglect as "any recent act or failure to act on the part of a parent or caretaker which results in death, serious physical or emotional harm, sexual abuse or exploitation;" or "an act or failure to act which presents an imminent risk of serious harm."[59] Child abuse is non-discriminate in that it

---

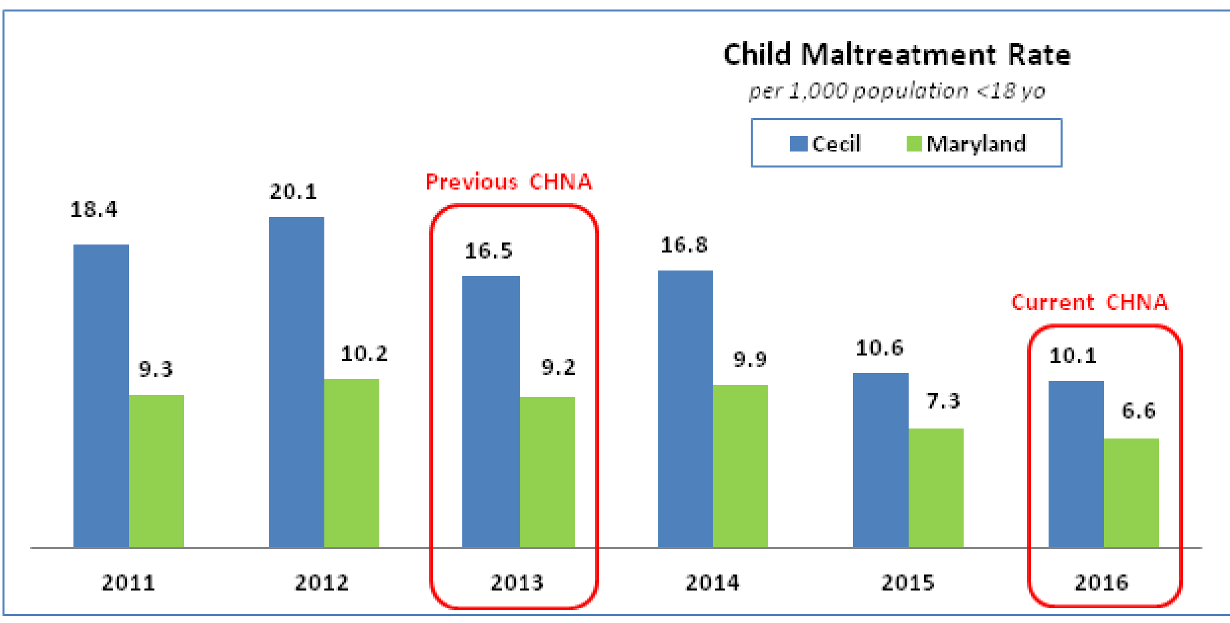
[58] Healthy People 2020. Health Literacy [webpage]. Accessed at: https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-health/interventions-resources/health-literacy

[59] Children's Bureau. Child Welfare Information Gateway, 2016. Definitions of Child Abuse and Neglect in Federal Law [webpage]. Accessed at: https://www.childwelfare.gov/topics/can/defining/federal/

can be carried out by anyone at any time and it does not occur within any specific socio-economic group.

Figure 33 shows the rate of child maltreatment cases per 1,000 population under the age of 18 years in Cecil County from 2011 – 2016. The graph also indicates data reported during the previous CHNA and this current CHNA, which shows that there has been a significant decrease in the case rate from data reported during the previous CHNA and this current CHNA.

Figure 33. Child Maltreatment Rate[60]



During the last CHNA it was reported that the case rate nearly doubled that of the state from year to year (2011-2013). However, for this current CHNA, it is evident that the case rate is becoming more level with that of the state (2015-2016). This may indicate that more emphasis has been placed on benchmarking according to state best practice. This is further supported by the fact that in Cecil County over the last five years there have been many programs and activities created to promote prevention of child abuse by collaborating on strategies to strengthen families, educate on positive parenting skills, encourage mandatory reporting, and enhance access to child and family services available in the community.

Domestic Violence

The US Department of Justice defines domestic violence as:

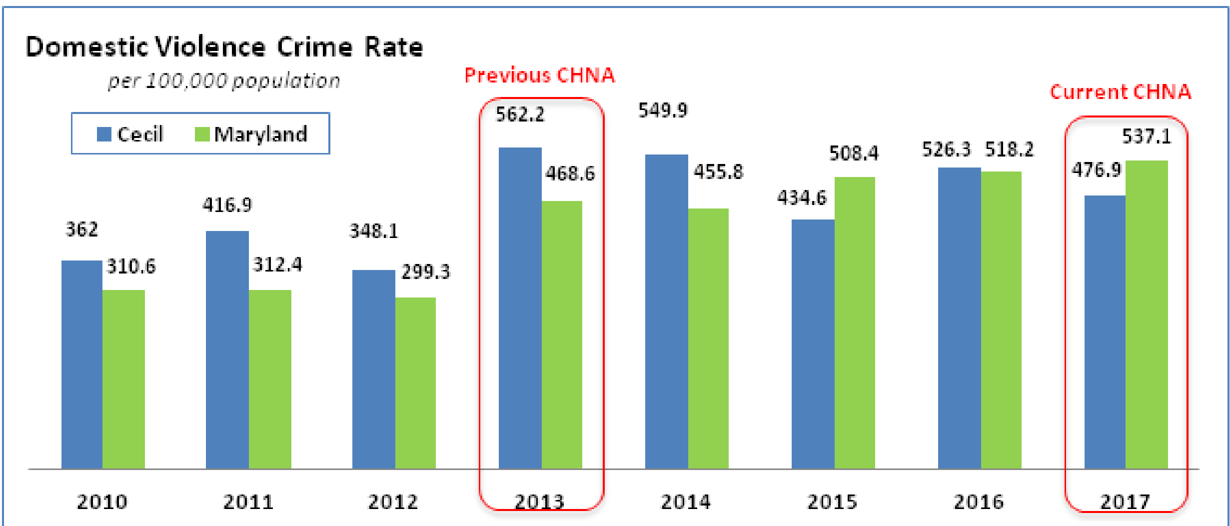
> *…A pattern of abusive behavior in any relationship that is used by one partner to gain or maintain power and control over another intimate partner. Domestic violence can be physical, sexual, emotional, economic, or psychological actions or threats of actions that influence another person. This includes any behaviors that intimidate, manipulate,*

[60] Maryland Governor's Office for Children. Results Scorecard – Cecil County [webpage]. Accessed at: https://goc.maryland.gov/cecil/

humiliate, isolate, frighten, terrorize, coerce, threaten, blame, hurt, injure, or wound someone.[61]

Figure 34 shows the rate of domestic violence crimes in Cecil County compared to the state. Data reported during the previous CHNA showed a county rate higher than that of the state. However, the rate has decreased over the last 4 years, now showing the county rate (2017) below that of the state.

Figure 34. Domestic Violence Crime Rate[62]



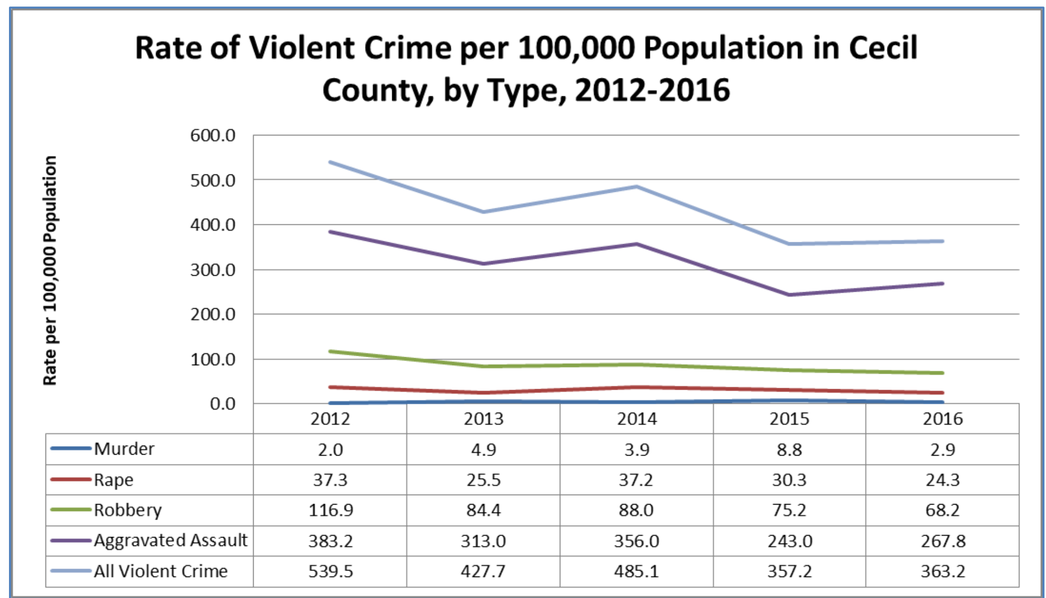
Violent Crime

Violent crimes are defined as offenses that involve face-to-face confrontation between the victim and the perpetrator, including homicide, rape, robbery, and aggravated assault. The violent crime rate is the number of violent crimes reported per 100,000 population. **Figure 35** shows violent crime rate by type in Cecil County from 2012-2016. For the previous CHNA, homicide deaths were reported instead, but there were no breakouts included so the indicator was changed for this assessment.

[61] US Department of Justice. Domestic Violence [webpage]. Accessed at: https://www.justice.gov/ovw/domestic-violence

[62] The Maryland Uniform Crime Reporting Program. Rate of domestic violence crimes per 100,000 population, Cecil County, Maryland [data file]. Accessed at: https://www.uhcc.com/about-us/community-benefit/cecil-county-health-data/

Figure 35. Violent Crime Rate[63]



	2012	2013	2014	2015	2016
Murder	2.0	4.9	3.9	8.8	2.9
Rape	37.3	25.5	37.2	30.3	24.3
Robbery	116.9	84.4	88.0	75.2	68.2
Aggravated Assault	383.2	313.0	356.0	243.0	267.8
All Violent Crime	539.5	427.7	485.1	357.2	363.2

Suicide

The Maryland Youth Risk Behavior Survey (YRBS) is a survey administered to middle and high school students across the state, asking various questions about youth risk behaviors. **Table 13** shows the two survey questions monitored for the Cecil County CHNA. The 2013 YRBS data shows what was reported in the previous CHNA report, and the 2016 YRBS data goes with this current CHNA report. There was a slight increase in feelings of sadness and hopelessness among high school students during the three-year expanse between YRBS surveys.

Table 13. Depression and Thoughts of Suicide among Cecil County High School Students[64]

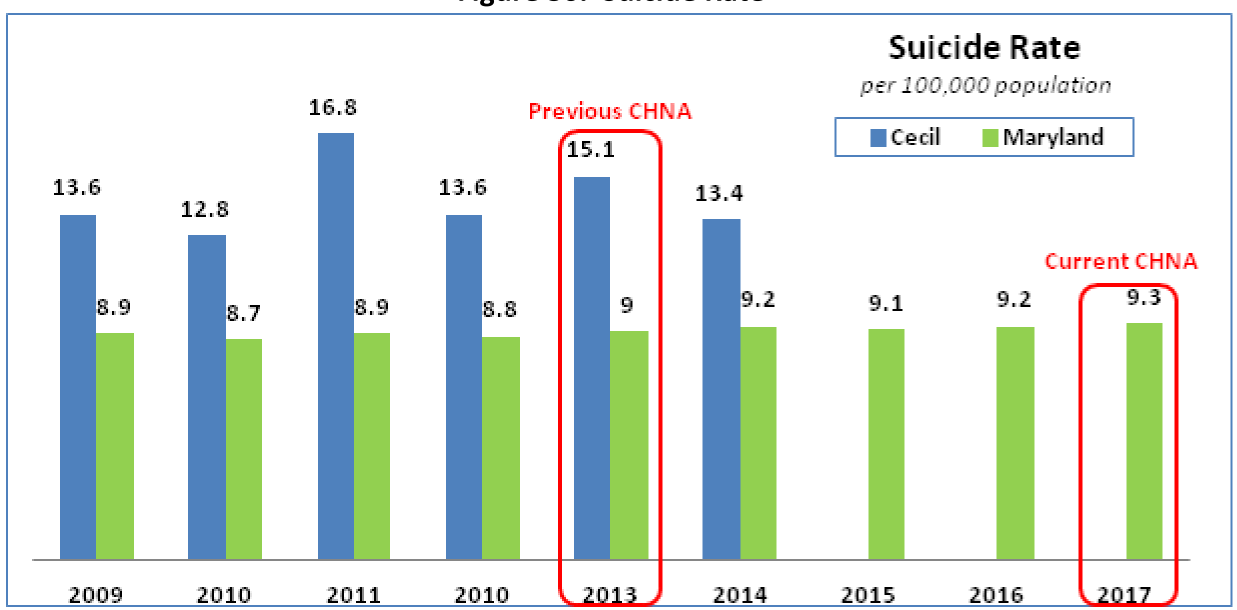
Survey Item	2013	2016
Percentage of students who felt so sad or hopeless almost every day for two weeks or more in a row that they stopped doing some usual activities during the past 12 months	27.5%	29.7%
Percentage of students who seriously considered attempting suicide during the past 12 months	15.5%	16.9%

Figure 36 shows the suicide death rate for adults in Cecil County. Cecil County rates were significantly higher than the state's rates for data analyzed during the previous CHNA; however, for data from 2015-2017 Cecil County rates dropped below the reporting threshold and were not reported in applicable Maryland data sets.

[63] Maryland State Police. Crime in Maryland: 2016 Uniform Crime Report [webpage]. Accessed at: https://www.uhcc.com/about-us/community-benefit/cecil-county-health-data/

[64] Maryland Youth Risk Behavior Survey/Youth Tobacco Survey (YRBS/YTS). 2016 and 2013 Youth Risk Behavior Survey Data [webpages]. Accessed at: https://phpa.health.maryland.gov/ccdpc/Reports/Pages/YRBS-Main.aspx

Figure 36. Suicide Rate[65]



Behavioral Risk Factors

A risk factor is a characteristic or exposure that increases the likelihood of developing a disease, condition, or altered state. Examples include tobacco use, inadequate physical activity, poor nutrition, high blood pressure, unsafe sex, substance use, and alcohol use.[66]

The following changes in behavioral risk factor data were observed in Cecil County between the reporting periods for the previous CHNA and this current assessment:

- **Tobacco use – Adults**[67] **increase**
  - Current: In 2017, an estimated 24.8% of adults reported smoking
  - Previous: In 2014, an estimated 12.4% of adults reported smoking
- **Tobacco use – Teens**[68, 69] **increase**
  - Current: In 2016, 26.6%of high school students reported using any tobacco product, including electronic nicotine delivery systems (e-cigarettes, vaping)
  - Previous: In 2010, 20.5% of high school teens reported having smoked cigarettes on at least one day during the 30 days prior to the survey

---

[65] Maryland Vital Statistics Administration. Vital Statistics and Reports [webpage]. Accessed at: https://health.maryland.gov/vsa/Pages/reports.aspx

[66] World Health Organization. Risk Factors [webpage]. Accessed at: https://www.who.int/topics/risk_factors/en/

[67] Union Hospital. Cecil County Health Data. Adults who Smoke [data file]. Accessed at: https://www.uhcc.com/about-us/community-benefit/cecil-county-health-data/

[68] Maryland Youth Risk Behavior Survey/Youth Tobacco Survey (YRBS/YTS). 2016 Youth Risk Behavior Survey Data [webpage]. Accessed at: https://phpa.health.maryland.gov/ccdpc/Reports/Pages/YRBS2016.aspx

[69] MDQuit.org. Youth Tobacco Use. Maryland Youth Tobacco Survey [data files]. Accessed at: https://mdquit.org/tobacco-use/youth-tobacco-use

- **Excessive drinking – adults**[70] no change
  - Current: In 2016, 18% of adults reported excessive drinking
  - Previous: In 2012, 18% of adults reported excessive drinking
- **Binge drinking –teens**[71, 72] decrease
  - Current: In 2016, 17.9% of high school students reported binge drinking (4+ drink for females, 5+ drinks for males, in a row, within a couple of hours, on at least one day in the 30 days prior to the survey)
  - Previous: In 2013, 23% of high school teens reported having had 5 or more drinks in a row, within a couple of hours, on one or more times during the last 30 days

The increases observed in tobacco use among adults and high school teens are significant and could be the result of the mass-marketing of electronic nicotine delivery systems (ENDS), like e-cigarettes and JUULs, which began in 2015. The decrease in teen binge drinking could be a result of the crack-down on sales of alcoholic beverages to minors in Cecil County which was sponsored by the diligent efforts of the Maryland Strategic Prevention Framework 2 coalition (reducing underage drinking) and their collaboration with youth providers, law enforcement, alcohol distributors, and the Cecil County Liquor Board.

Environmental Health

The places where people live, work, and play can have a great effect on our overall health and quality of life. People interact with the environment constantly and these interactions can negatively impact their health. The World Health Organization (WHO) defines environment, as it relates to health, as "all the physical, chemical, and biological factors external to a person, and all the related behaviors."[73] According to the National Association of County and City Health Officials (NACCHO), clean air and water, as well as safely prepared food, are essential to physical health. Exposure to environmental substances such as lead or hazardous waste increases risk for preventable disease. Unintentional home, workplace, or recreational injuries affect all age groups and may result in premature disability or mortality.[74] Maintaining a healthy environment is important to increasing the health and quality of life of Cecil County residents.

Air Quality & Chronic Lower Respiratory Diseases

The quality of the air impacts breathing and the ability to function in outdoor spaces. Poor air quality can lead to health conditions like asthma and other chronic lower respiratory diseases such as COPD and bronchitis. Cecil County has a higher prevalence of respiratory diseases than Maryland. **Figure 37** shows the age-adjusted prevalence of asthma and COPD among Cecil

[70] County Health Rankings. Excessive Drinking [data file]. Accessed at: https://www.countyhealthrankings.org/app/maryland/2018/measure/factors/49/data

[71] Maryland Youth Risk Behavior Survey/Youth Tobacco Survey (YRBS/YTS). 2016 Youth Risk Behavior Survey Data [webpage]. Accessed at: https://phpa.health.maryland.gov/ccdpc/Reports/Pages/YRBS2016.aspx#Cecil

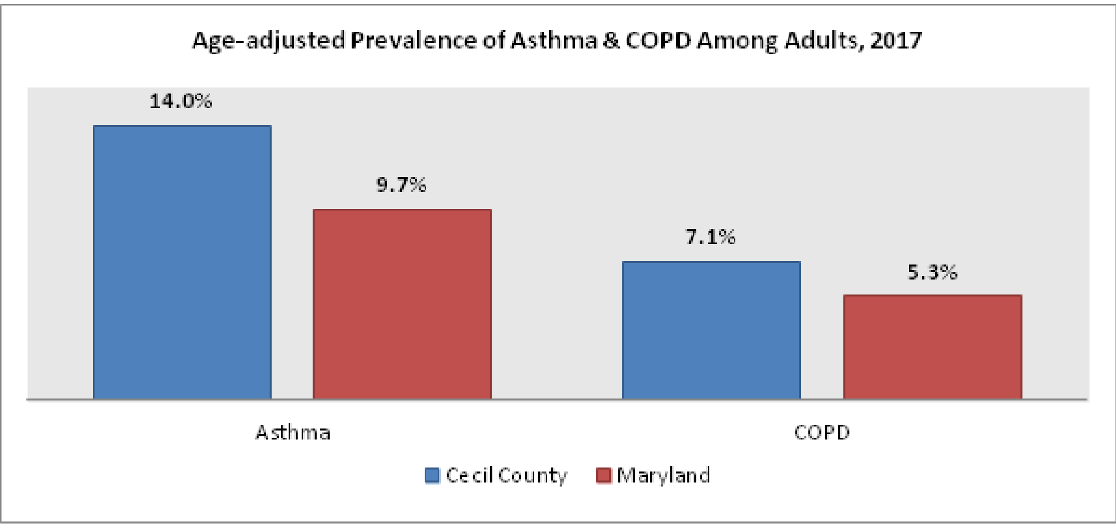
[72] Maryland Youth Risk Behavior Survey/Youth Tobacco Survey (YRBS/YTS). 2013 Youth Risk Behavior Survey Data [webpage]. Accessed at: https://phpa.health.maryland.gov/ccdpc/Reports/Pages/yrbs2013.aspx

[73] World Health Organization. *Report: Preventing disease through healthy environments, 2006.* Accessed at: https://www.who.int/quantifying_ehimpacts/publications/preventing-disease/en/

[74] National Association of County and City Health Officials. Community Health Status Assessment: Core Indicators List, 2016. Category 6: Environmental Health Indicators [webpage]. Accessed at: https://www.naccho.org/

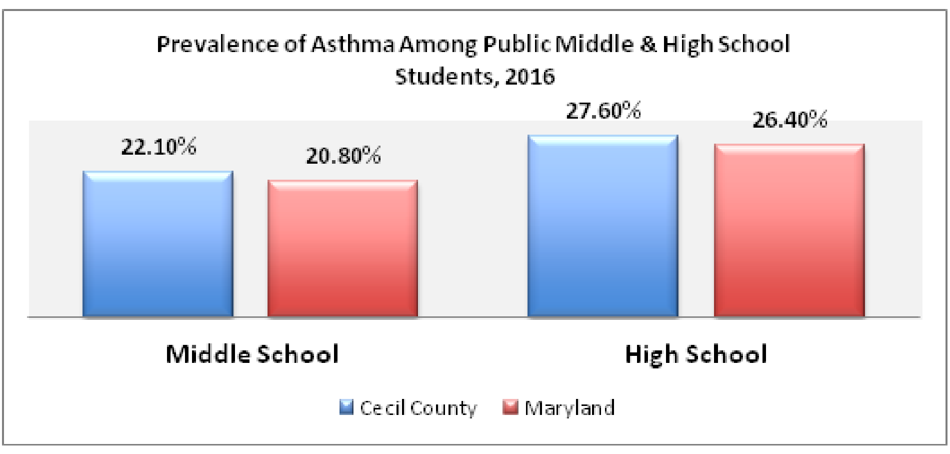
County and Maryland adult residents in 2017. Also, in 2017, 6.2% of Cecil County Medicare beneficiaries were treated for asthma and 16.4% were treated for COPD.[75, 76]

Figure 37. Prevalence of Asthma and COPD in Adults[77]



The prevalence of asthma is even higher among youth in Cecil County and Maryland. **Figure 38** shows the percentage of Cecil County and Maryland middle and high school students who reported ever being told by a doctor or nurse that they had asthma. Among Cecil County high school students, the prevalence of asthma was significantly higher for non-Hispanic Black students (37.0%) than non-Hispanic White students (25.8%).

Figure 38. Prevalence of Asthma in Youth[78]



---

[75] Centers for Medicare and Medicaid Services. Asthma: Medicare Population, Cecil County, Maryland [data file]. Accessed at: http://cecil.md.networkofcare.org/ph/

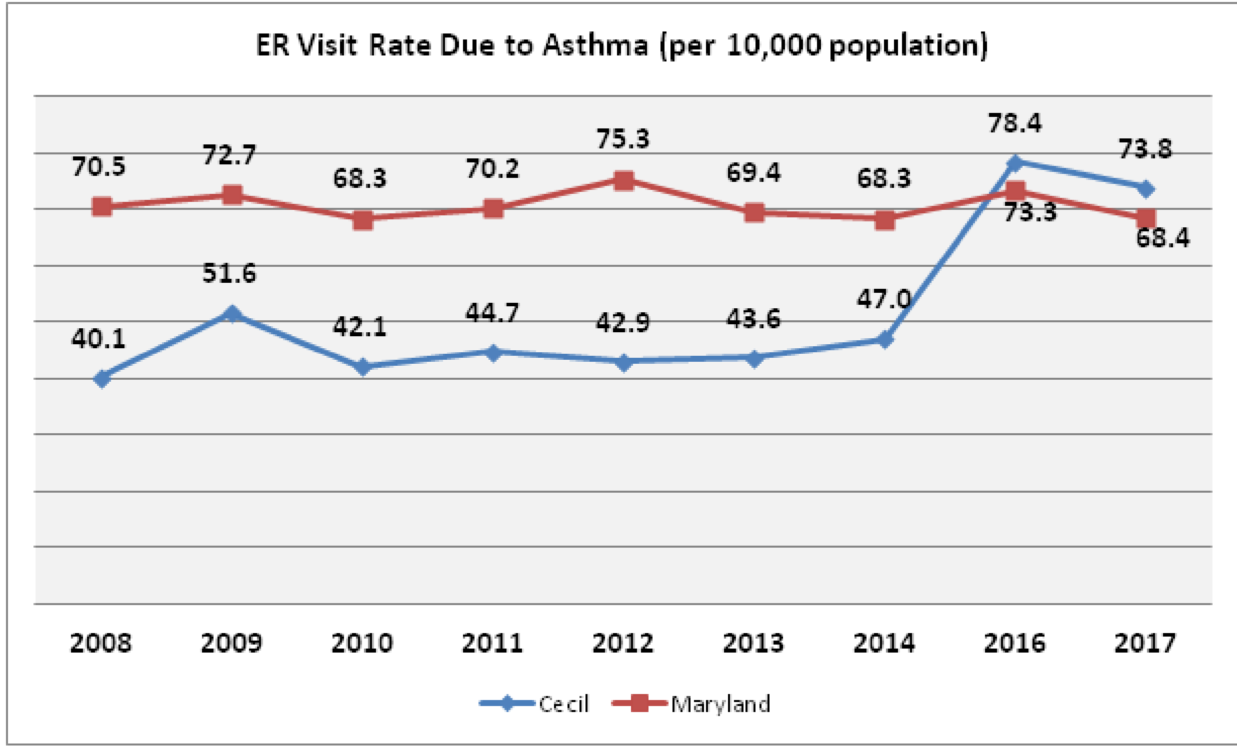
[76] Centers for Medicare and Medicaid Services. COPD: Medicare Population, Cecil County, Maryland [data file]. Accessed at: http://cecil.md.networkofcare.org/ph/

[77] Maryland Behavioral Risk Factor Surveillance System. Adults with Asthma [data file]. Accessed at: http://cecil.md.networkofcare.org/ph/

[78] Maryland Youth Risk Behavior Survey/Youth Tobacco Survey (YRBS/YTS). 2016 Youth Risk Behavior Survey Data [webpage]. Accessed at: https://phpa.health.maryland.gov/ccdpc/Reports/Pages/YRBS2016.aspx#Cecil

In Cecil County ER utilization related to asthma has risen considerably over the last several years, surpassing state averages. **Figure 39** shows the rate of emergency room (ER) visits due to asthma per 10,000 population, from 2008 to 2017 in Cecil County compared to Maryland.

Figure 39. ER Visit Rate due to Asthma[79]



Air Pollution & Poor Health Outcomes

Air pollution is a leading environmental threat to human health. According to the CDC, exposure to fine particulate matter in the air can lead to breathing problems, make asthma symptoms or some heart conditions worse, and lead to low birth weight. In 2014, Cecil County had an average daily density of fine particulate matter in micrograms per cubic meter ($PM_{2.5}$) of 10.7, compared to an average daily density of 9.6 statewide. The national standard for $PM_{2.5}$ is 12.0μg/m3. When $PM_{2.5}$ levels are above 12, air quality is more likely to affect human health.[80]

Exposure to ozone is another threat to human health. Ozone can cause the muscles in the airways to constrict, trapping air in the alveoli and leading to wheezing and shortness of breath. Long-term exposure to ozone can aggravate lung diseases such as asthma, and is likely to

[79] Health Services Cost Review Commission. Research Level Statewide Outpatient Data Files. Rate of Emergency Room Visits due to Asthma per 100,000 population, Cecil County, Maryland, 2008-2017 [data file]. Accessed at: https://www.uhcc.com/about-us/community-benefit/cecil-county-health-data/

[80] Centers for Disease Control and Prevention. National Environmental Public Health Tracking Network. Air Quality: Particulate Matter, 2014 [data file]. Accessed at: https://ephtracking.cdc.gov/

contribute to asthma development.[81] Cecil County residents were exposed to unhealthy levels of ozone for 5 Days in 2014.[82]

Water Quality

Access to safe drinking water is important to prevent illness, birth defects and death. Health-related drinking water violations of community water systems are reported to the national Safe Drinking Water Information System. Cecil County has experienced at least one health-related drinking water violation among its community water systems in both 2016 and 2017.[83]

Vector-Borne Disease

A disease vector is any organism that carries and transmits an infectious pathogen into another living organism. The most common disease vectors are parasites, like mosquitoes, fleas, and ticks. Vector-borne diseases are categorized into four branches:

1) Arboviral Diseases – viruses spread by mosquitoes and ticks (ex. West Nile, Malaria, Zika);
2) Bacterial Diseases – bacteria spread by fleas and ticks (ex. Lyme disease, plague);
3) Dengue – dengue viruses spread by mosquitoes; and
4) Rickettsial Zoonoses – bacteria spread by fleas, ticks, and lice (ex. Rocky Mountain Spotted Fever, typhus fever).[84]

If a person gets bitten by a disease vector and gets sick then they have a vector-borne disease.[85] Vector-borne diseases can pose a threat to infected individuals if the signs and symptoms are not recognized and treated in a timely manner. The most prevalent vector-borne diseases in Cecil County are Lyme disease and rabies.

Lyme Disease

Cecil County has a high incidence of Lyme disease, though the reported incidence has fallen over the past several years (Figure 40). Underreporting of Lyme disease is a problem. It is believed that the true incidence of Lyme disease in the United States is around ten times higher than what is reported.[86]

---

[81] United States Environmental Protection Agency. Health Effects of Ozone Pollution [webpage]. Accessed at: https://www.epa.gov/ground-level-ozone-pollution/health-effects-ozone-pollution

[82] Centers for Disease Control and Prevention. National Environmental Public Health Tracking Network. Ground level Ozone, 2014 [data file]. Accessed at: https://ephtracking.cdc.gov/

[83] United States Environmental Protection Agency. Safe Drinking Water Information System [data file]. Accessed at: https://www.countyhealthrankings.org/app/maryland/2019/measure/factors/124/datasource

[84] Centers for Disease Control and Prevention. Division of Vector-Borne Diseases [webpage]. Accessed at: https://www.cdc.gov/ncezid/dvbd/about.html

[85] Centers for Disease Control and Prevention. Division of Vector-Borne Diseases [webpage]. Accessed at: https://www.cdc.gov/ncezid/dvbd/index.html

[86] Centers for Disease Control and Prevention. Lyme Disease: Data and Surveillance [webpage]. Accessed at: https://www.cdc.gov/lyme/datasurveillance/index.html

Figure 40. Lyme Disease in Cecil County[87]

Lyme Disease Cases per 100,000 Population, Cecil County

Previous CHNA

2010	2011	2012	2013	2014	2015	2016	2017
111.8	89.5	84.6	57.8	65.4	60.4	66.4	61.3

Rabies

Rabies is a nearly universally fatal zoonotic disease, but is preventable in humans through the administration of post exposure prophylaxis (PEP) to exposed individuals. In Maryland, rabies is most often found in raccoons, skunks, foxes, cats, bats, and groundhogs. Other mammals including dogs, ferrets, and farm animals can get rabies if they are not vaccinated. There have been no reported rabies cases in humans in Cecil County during recent history, however from 2013-2017 there were 34 cases of rabies found in animals in the county. Some 1,466 animal bites were reported in Cecil County during this time period.[88, 89]

Lead Exposure

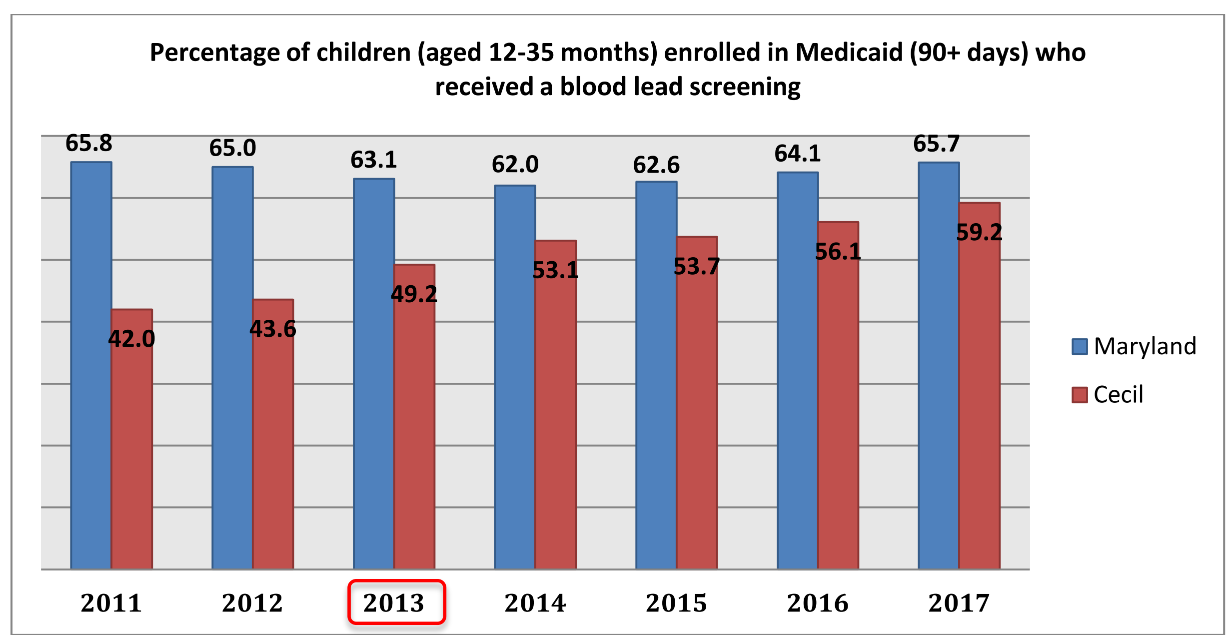
Lead exposure can contribute to a number of health issues, especially developmental issues among children. Most often lead exposure is identified from children ingesting dust and paint chips from chipping or peeling lead paint found in homes constructed before lead paint was banned in 1978. **Figure 41** shows the percentage of children (12-35 months) enrolled in Medicaid that received blood lead screenings from 2011 to 2017 in Cecil County and Maryland, while **Figure 42** shows the percentage of all children (0-72 months) tested who screened positive for elevated blood levels (>10 µg/dL) from 2009-2017 in Cecil County and Maryland.

[87] Maryland Department of Health. Prevention and Health Promotion Administration. National Electronic Disease Surveillance System Database. Case Rates of Lyme Disease, Cecil County, Maryland, 2010-2017 [data file]. Accessed at: https://phpa.health.maryland.gov/Pages/disease-conditions-count-rates.aspx

[88] Maryland Department of Health. Prevention and Health Promotion Administration. National Electronic Disease Surveillance System Database. Rabies-Animal, Cecil County, Maryland, 2013-2017 [data file]. Accessed at: https://phpa.health.maryland.gov/Pages/disease-conditions-count-rates.aspx

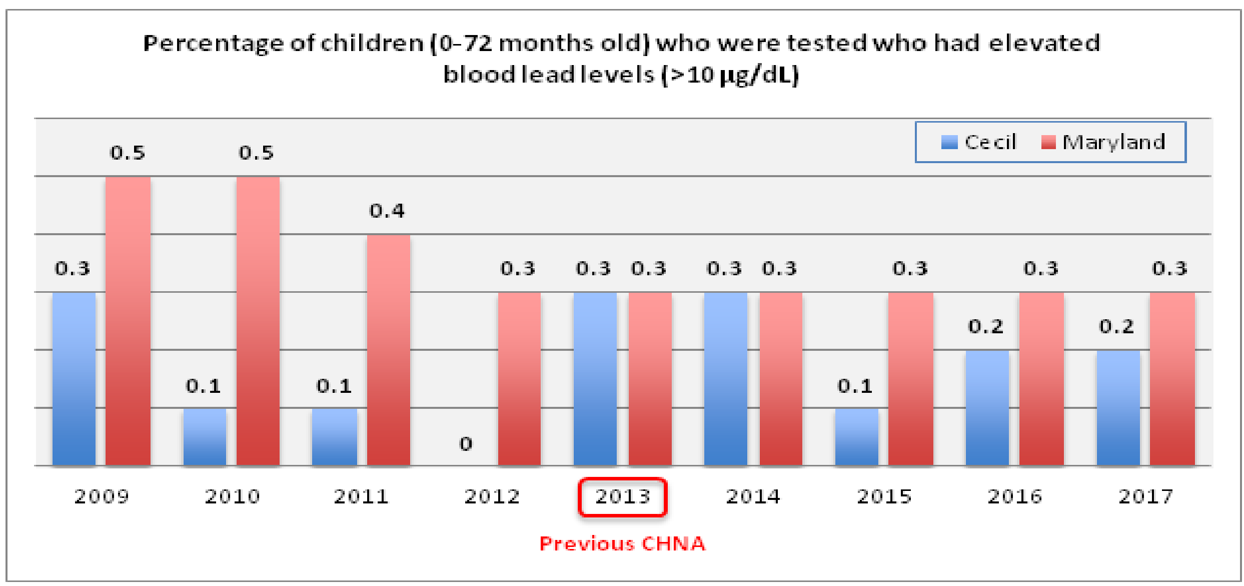
[89] Maryland Department of Health. Prevention and Health Promotion Administration. National Electronic Disease Surveillance System Database. Animal Bites, Cecil County, Maryland, 2013-2017 [data file]. Accessed at: https://phpa.health.maryland.gov/Pages/disease-conditions-count-rates.aspx

Figure 41. Percentage Medicaid Children Receiving a Blood Lead Screening[90]



Previous CHNA

Figure 42. Percentage Children with Elevated Blood Lead Levels[91]



[90] Maryland Medicaid Service Utilization. Percentage of children (aged 12-35 months) enrolled in Medicaid (90+ days) who received a blood lead screening, Cecil County, Maryland, 2011-2017 [data file]. Accessed at: http://ship.md.networkofcare.org/ph/ship-details.aspx?id=md_ship43

[91] Maryland Department of the Environment. Percentage of children (0-72 months old) who were tested and who had elevated blood lead levels (>10 µg/dL), Cecil County, Maryland, 2009-2017 [data file]. Accessed at: http://ship.md.networkofcare.org/ph/ship-details.aspx?id=md_ship13

Maternal & Child Health

Maternal and child health is an important determinant of child growth and development. From womb to world, appropriate care of baby and mother can lead to positive health outcomes and reduce child mortality.

Prenatal Care

It is important for mothers to receive prenatal care in the first trimester in order to engage the mother in caring for herself and baby. The following changes in data were observed in Cecil County between the reporting periods for the previous CHNA and this current assessment:

- **Prenatal care in the first trimester**[92] **no change**
    - Current: In 2017, 75.8% of mothers received prenatal care in the first trimester
    - Previous: In 2013, 76.5% of mothers received prenatal care in the first trimester

Prenatal care can reduce the risk for low birth weight. The steady trend for prenatal care over the last four years matches that of the rate of low birth weight during this same time frame, which may indicate a positive correlation between the two factors.

Teen Birth Rate

Babies born to teen mothers may be born pre-term or with low birth weight. In addition, teen pregnancy and delivery can be harmful to the mother's health and social development. The following changes in data were observed in Cecil County between the reporting periods for the previous CHNA and this current assessment:

- **Teen birth-rate**[93] **decrease**
    - Current: In 2017, there were 18.2 live births per 1,000 teen females
    - Previous: In 2013, there were 22.8 live births per 1,000 teen females

Since 2013, there has been a gradual decrease in the rate of teen births for this age group. This could be due to more promotions for the prevention of teen pregnancy or the risk factors that contribute. It could also be due to the fact that there are not a lot of teen pregnancy resources available in Cecil County. A majority of teens who receive pre- and post-natal care, including delivery, may not be doing so in this county.

Low Birth Weight

Babies born with low birth weight can be deficient as they grow, depending on the cause of the low birth weight. Women who smoke, drink alcohol, and use illicit substances during pregnancy have a greater risk of their babies being born with low birth weight. Developmentally, these babies can suffer from the inability to form organ systems correctly or can have deficiencies in organ and system development and function, as well as cognitive function and development.

---

[92] Maryland Vital Statistics Administration. Vital Statistics and Reports [webpage]. Accessed at: https://health.maryland.gov/vsa/Pages/home.aspx

[93] Maryland Vital Statistics Administration. Vital Statistics and Reports [webpage]. Accessed at: https://health.maryland.gov/vsa/Pages/home.aspx

The following changes in data were observed in Cecil County between the reporting periods for the previous CHNA and this current assessment:

- **Low birth weight**[94] **increase**
  - Current: In 2017, 7.4% of babies were born with low birth weight
  - Previous: In 2013, 6.9% of babies were born with low birth weight

From 2011-2014, there was a steady decline in the percentage of babies born with low birth weight, but then there was a spike from 2014 (5.8%) to 2015 (8.9%). From 2015-2017 there resumed a decline in percentages. From 2014-2015 there may have been an increase in births altogether which could account for the spike in babies with low birth weight, but the specific reasoning is unknown to this assessment.

Sudden Unexpected Infant Death

Sudden Unexpected Infant Death (SUID) occurs in babies that are less than 1 year old usually from a cause that is not obvious before investigation. Deaths primarily occur during sleep, impacted by the state of the baby's sleep area, and often include suffocation during sleep. Prevention education includes safe sleeping practices through programs like Safe to Sleep.[95]

The following changes in data were observed in Cecil County between the reporting periods for the previous CHNA and this current assessment:

- **SUID rate**[96] **increase**
  - Current: In 2016, there were 2.2 SUID deaths per 1,000 live births
  - Previous: In 2013, there was 1 SUID death per 1,000 live births

Unfortunately there is not enough data to determine why there was an increase in the death rate in Cecil County. The Centers for Disease Control and Prevention's Center for Reproductive Health only has SUID monitoring programs in 22 states, which makes more robust surveillance of this issue problematic.[97]

Substance Use during Pregnancy

When mothers use illicit drugs or other harmful substances during pregnancy, babies can be born with Neonatal Abstinence Syndrome (NAS) (baby is born addicted to substances and goes through withdrawal in the first 3-7 days), Fetal Alcohol Syndrome (FAS) (baby is born with cognitive deficits and facial malformations), and a number of other issues and disorders.

A recent assessment of Union Hospital births data for Substance-Effected Newborns (SENS), a diagnosis similar to NAS, revealed that in Calendar Year 2018, of the 577 live births, 93 babies (16%) were diagnosed with SENS. In addition, of the 93 SENS cases, there were 84 reports from

---

[94] Maryland Vital Statistics Administration. Vital Statistics and Reports [webpage]. Accessed at: https://health.maryland.gov/vsa/Pages/home.aspx

[95] Centers for Disease Control and Prevention. Sudden Unexpected Infant Death and Sudden Infant Death Syndrome [webpage]. Accessed at: https://www.cdc.gov/sids/about/index.htm

[96] Union Hospital. Cecil County Health Data. Sudden Unexpected Infant Death Rate [data file]. Accessed at: https://www.uhcc.com/about-us/community-benefit/cecil-county-health-data/

[97] Centers for Disease Control and Prevention. Sudden Unexpected Infant Death and Sudden Infant Death Syndrome [webpage]. Accessed at: https://www.cdc.gov/sids/about/index.htm

Union Hospital to Child Protective Services. This data is important to include because there is not a federal mandatory reporting law for substance use identified during birth. It is usually determined state by state and even hospital by hospital.

In addition, the data set also included NAS births data. Of the 577 live births at Union Hospital in 2018, there were 56 NAS births (about 10%) documented by the medical provider. Data for reports to CPS was not included for this cohort. Union Hospital data was pulled and analyzed to inform the trauma prevention work of the Cecil County Local Management Board's subcommittee on Childhood Trauma.

Communicable Disease

Communicable diseases are transmitted through person-to-person contact or through shared use of contaminated instruments or materials. Many communicable diseases can be prevented through a high level of vaccine coverage of vulnerable populations or through the use of protective measures, such as condoms for the prevention of sexually transmitted infections.

Vaccinations

Vaccines control and eliminate infectious and communicable disease within a population. They are also integral to protecting the growth and development process of persons as they age from infancy to adulthood. There is no population level childhood vaccination data available for Cecil County; however, the percentage of children statewide (aged 19-35 months) receiving recommended vaccines decreased from a high of 78.0% in 2011 to 75.2% in 2017.[98] Among adults, 47.5% of Cecil County residents reported receiving a flu vaccine in the past 12 months, compared to 45.3% statewide.[99]

Sexually Transmitted Infections

Sexually transmitted infections (STIs), also known as sexually transmitted diseases (STDS) are very common and easily preventable. STIs are passed from one person to another through sexual activity including vaginal, oral, and anal sex. STIs don't always cause symptoms or may only cause mild symptoms, so it is possible to have an infection and not know it. Without proper education and prevention practices, STIs can spread rapidly in a population and have a large impact on health. In recent years STI cases have increased dramatically in Cecil County, Maryland and across the nation.

Chlamydia

The rate of reported Chlamydia cases in Cecil County has increased significantly over the last five years; from 253.3 cases per 100,000 population in 2014 to 327 cases per 100,000 population in 2018.[100] Other jurisdictions in Maryland have shown similar increases as shown

---

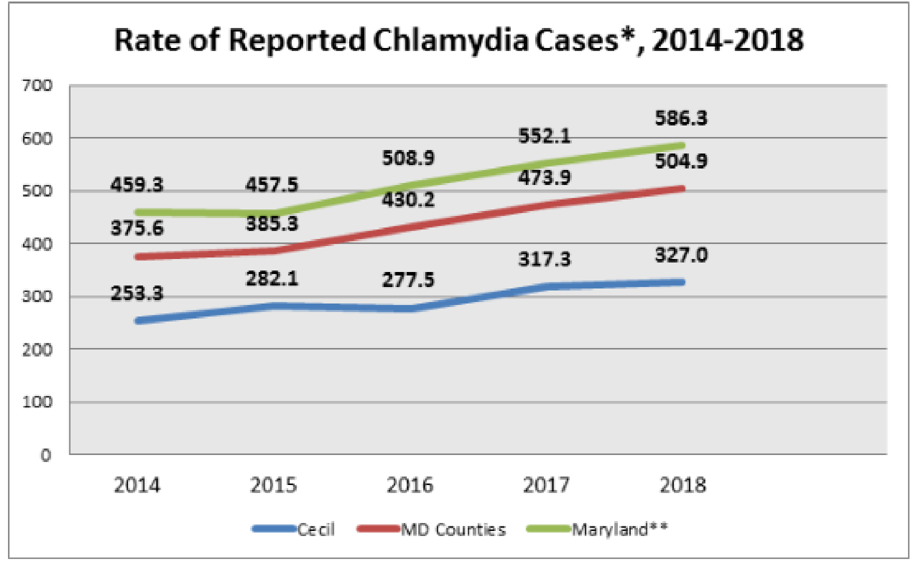
[98] Centers for Disease Control and Prevention. National Immunization Survey [data file]. Accessed at: https://www.cdc.gov/vaccines/imz-managers/nis/index.html

[99] Maryland Behavioral Risk Factor Surveillance System. Adults Receiving Flu Vaccine [data file] Accessed at: https://ibis.health.maryland.gov

[100] Maryland Department of Health. Center for Sexually Transmitted Infection Prevention. Maryland Office of Planning. Chlamydia Cases per 100,000 Population in Cecil County, 2005-2014 [data file]. Accessed at: https://phpa.health.maryland.gov/OIDPCS/CSTIP/Pages/STI-Data-Statistics.aspx

in **Figure 43.** The burden of Chlamydia is highest among youth and young adults in Cecil County. In 2017, over three quarters (76.6%) of reported Chlamydia cases were among those ages 15-24 years of age.[101] The rate of reported Chlamydia cases in Cecil County remains significantly lower than the average for Maryland.

Figure 43. Rate of Reported Chlamydia Cases[102]



*Per 100,000 population
**Includes Baltimore City

Gonorrhea

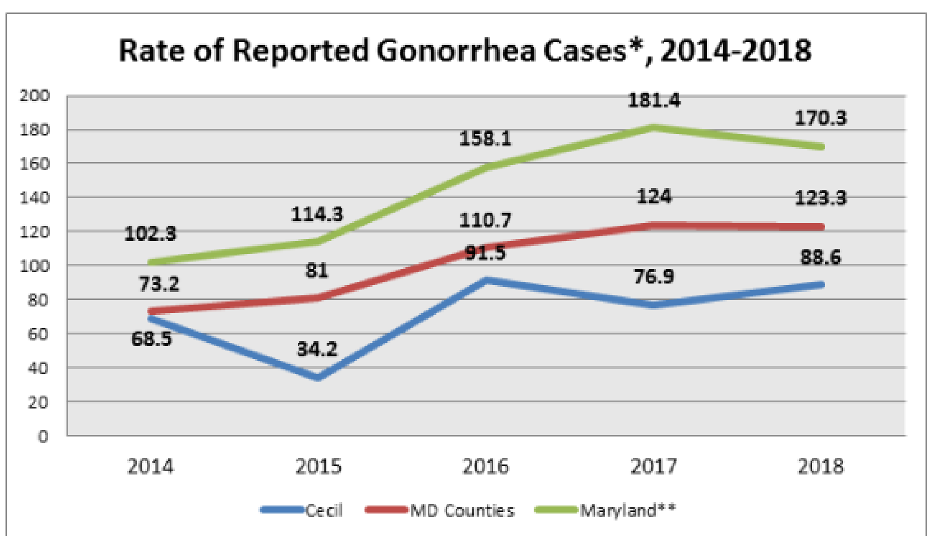
The rate of reported gonorrhea cases in Cecil County also increased significantly over the last five years; from 68.5 cases per 100,000 population in 2014, to 88.6 cases per 100,000 population in 2018. Other jurisdictions in Maryland have shown similar increases as shown in **Figure 44.** Over half of the gonorrhea cases in 2017 were among the 15-24 age group.[103] The rate of reported gonorrhea cases in Cecil County remains significantly lower than the average for Maryland.

[101] Maryland Department of Health. Center for Sexually Transmitted Infection Prevention. Chlamydia Cases per 100,000 Population by age group, Cecil County, Maryland, 2017 [data file]. Accessed at: https://phpa.health.maryland.gov/OIDPCS/CSTIP/Pages/STI-Data-Statistics.aspx

[102] Maryland Department of Health. Center for Sexually Transmitted Infection Prevention. *Sexually Transmitted Infection: 2018 Annual Report.* Accessed at: https://phpa.health.maryland.gov/OIDPCS/CSTIP/Pages/STI-Data-Statistics.aspx

[103] Maryland Department of Health. Center for Sexually Transmitted Infection Prevention. *Gonorrhea Cases per 100,000 Population, by age group, Cecil County, Maryland*, 2017. Accessed at: https://phpa.health.maryland.gov/OIDPCS/CSTIP/Pages/STI-Data-Statistics.aspx

Figure 44. Rate of Reported Gonorrhea Cases



*Per 100,000 population
**Includes Baltimore City

Syphilis

In 2018, two cases of primary and secondary syphilis (1.9 cases per 100,000 population), four cases of early latent syphilis (3.9 cases per 100,000 population), and four cases of late or unknown duration syphilis (3.9 per 100,000 population) were reported in Cecil County.[104]

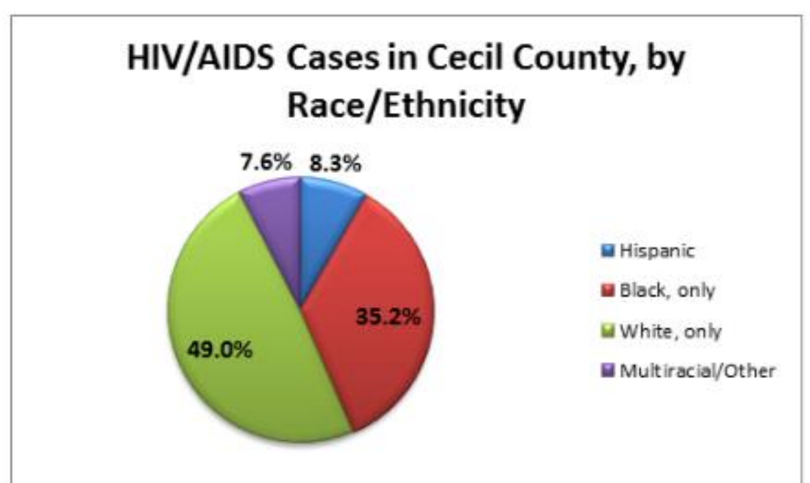
HIV/AIDS

HIV/AIDS can greatly impact population health if not treated and managed appropriately. In 2017, there were 5 new adult or adolescent (age 13+) HIV cases and 145 living HIV/AIDS cases in Cecil County. Certain populations are more likely to have HIV/AIDS in Cecil County. By sex, 62.1% of HIV/AIDS cases. By race/ethnicity, minority populations in Cecil County make up a disproportionate number of living AIDS cases as detailed in **Figure 45.** In addition, certain populations in Cecil County are more likely to have been exposed to HIV/AIDs. The most common exposure categories are men who have sex with men (MSM) (36.6%), heterosexual (32.3%), injection drug user (IDU) (23.2%) and MSM/IDU (4.5%).[105]

[104] Maryland Department of Health. Center for Sexually Transmitted Infection Prevention. *Sexually Transmitted Infection: 2018 Annual Report.* Accessed at: https://phpa.health.maryland.gov/OIDPCS/CSTIP/Pages/STI-Data-Statistics.aspx

[105] Maryland Department of Health. Center for HIV Surveillance, Epidemiology, and Evaluation. *Cecil County HIV Fact Sheet, 2017.* Accessed at: https://phpa.health.maryland.gov/OIDEOR/CHSE/Pages/statistics.aspx

Figure 45. HIV/AIDS Cases in Cecil County by Race & Ethnicity



Other Communicable Disease

Hepatitis C is a viral infection that causes liver inflammation, sometimes leading to serious liver damage. In 2016, the rate of reported chronic hepatitis C cases in Cecil County was 300.2 cases per 100,000 population. This was significantly higher than the average for Maryland of 133.2 cases per 100,000 population.[106]

Mortality

Health status in a community is measured in terms of mortality or rate of death within a population.

Infant Mortality

The following changes in data were observed in Cecil County between the reporting periods for the previous CHNA and this current assessment:

- **Infant Mortality Rate**[107] **decrease**
    - Current: in 2017, there were 5.7 deaths per 1,000 births
    - Previous: In 2013, there were 6.3 deaths per 1,000 live births

[106] Maryland Department of Health. Infectious Disease Prevention and Health Services Bureau. *Viral Hepatitis: State Update: 2018 Annual STI Update.* Accessed at: https://phpa.health.maryland.gov/Pages/infectious-disease.aspx

[107] Maryland Vital Statistics Administration. Vital Statistics and Reports [webpage]. Accessed at: https://health.maryland.gov/vsa/Pages/reports.aspx

Deaths

The Maryland Vital Statistics Administration provides mortality reports.[108] The following changes in data were observed in Cecil County between the reporting periods for the previous CHNA and this current assessment:

- **Total deaths in Cecil County** **increase**
  - Current: In 2017, there were 1,033 total deaths
  - Previous: In 2014, there were 855 total deaths

- **Deaths by race** **increase**
  - Current
    - Whites: 960
    - African Americans: 60
    - Asian/Pacific Islanders: 5
    - Hispanics: 8
  - Previous
    - Whites: 801
    - African Americans: 47
    - Asian/Pacific Islanders: 5
    - Hispanics: 7

Causes of Death

Table 14 shows causes of death for data reported during the previous CHNA (2014) and this current assessment (2017).

Table 14. Age-Adjusted Death Rate by Cause, Cecil County (per 100,000 population)

Causes of Death	2014	2017
All Causes	822.3	889.6
Heart Disease	198.7	205.3
Cancer	185.9	192.3
Stroke	47	55.9
Accidents	33.5	50.7
Chronic Lower Respiratory Disease	64.5	64.1
Diabetes Mellitus	15.8	23
Alzheimer's	22.2	36
Influenza & Pneumonia	16.4	*
Septicemia	12.1	*
Nephritis	16.8	*
Suicide	13.4	*

**Age-adjusted death rates not calculated for fewer than 20 deaths reported*

[108] Maryland Vital Statistics Administration. Vital Statistics and Reports [webpage]. Accessed at: https://health.maryland.gov/vsa/Pages/reports.aspx

COMMUNITY HEALTH IMPROVEMENT PLAN

Prioritizing Health Needs

The CHNA planning team worked with the Community Health Advisory Committee (CHAC) to prioritize the health needs identified from the CHNA. There were two steps to this process: 1) CHAC voting; and 2) CHNA planning team review of all data and prioritization of health needs based on all submitted data.

CHAC Meeting – January 2019

The prioritization process started with the January 2019 CHAC meeting. Dan Coulter (Health Planning, Cecil County Health Department) and Jean-Marie Kelly (Community Benefit, Union Hospital) facilitated the meeting. Meeting participants were asked to review the CHNA data according to the top 15 health needs identified from the Online Community Health Survey (Table 15).

Table 15. Online Community Health Survey – Top 15 Health Needs

Rank	Health Issue	% Respondents
1	Substance Abuse	75.3%
2	Mental Health	37.7%
3	Homelessness	32.9%
4	Access to Health Services	18.9%
5	Poverty	15.7%
6	Obesity	14.2%
7	Affordable Housing	13.9%
8	Child Abuse and Neglect	13.5%
9	Dental Health	10.9%
10	Cancer	10.7%
11	Violent Crime	7.9%
12	Unemployment	6.8%
13	Childhood Trauma	5.9%
14	Educational Attainment	5.6%
15	Diabetes	5.0%

Table 16. NAACHO Criteria for Priority Selection[109]

Criterion	Measurement
Size	How many people are affected by the health problem?
Seriousness	Does the health problem lead to death, disability, and/or reduced quality of life?
Trends	Has the health problem gotten better or worse over time?
Equity	Are there specific groups that are more affected by the health problem?
Intervention	Are there existing strategies available to address the health problem?
Feasibility	Can we reasonably combat the health problem?
Value	How does the community rate the importance of the health problem?
Consequences of Inaction	What is the risk to the population by not acting on the health problem?
Social Determinant/ Root Cause	Does the health problem impact other health issues? What is the root cause of the health problem?

After all data was reviewed, meeting participants (including facilitators) were asked to vote (considering the NACCHO criteria in Table 16) on their top three health needs by placing a sticker next to each selected need on large, wall-hanging flip charts. This method of voting was modeled after NACCHO's "Dotmocracy Method."[110] Participants were only allowed three votes and could not vote in duplicate. After all participants had voted, the marks were tallied and reported aloud for each of the 15 needs:

- Substance abuse – **31 votes**
- Mental health – **24 votes**
- Childhood trauma – **14 votes**
- Access to health services – **11 votes**
- Homelessness – **10 votes**
- Dental health – **10 votes**
- Cancer – **8 votes**
- Obesity – **5 votes**
- Poverty – **2 votes**
- Affordable housing – **2 votes**
- Child abuse and neglect – **1 vote**
- Diabetes – **1 vote**
- Violent crime – **0 votes**

[109] National Association of County and City Health Officials. *White paper: Community Health Assessments and Community Health Improvement Plans for Accreditation Preparation Demonstration Project, pg. 1, 2016*. Accessed at: https://www.naccho.org
[110] National Association of County and City Health Officials. *White paper: Community Health Assessments and Community Health Improvement Plans for Accreditation Preparation Demonstration Project, pg. 4, 2016.* Accessed at: https://www.naccho.org

- Unemployment – **0 votes**
- Educational attainment – **0 votes**

After the voting was completed, meeting participants were informed that the final decision on the health priorities would be decided by the CHNA planning team and communicated to CHAC as soon as possible.

CHNA Planning Team Meeting – February 2019

The prioritization process concluded during the CHNA planning team meeting where the CHAC voting data was considered. The three participants on the CHNA planning team were: Jean-Marie Kelly (Community Benefit, Union Hospital), Dan Coulter (Health Planning, Cecil County Health Department), and Laurie Humphries (acting Health Officer, Cecil County Health Department).

Hanlon Method Scoring Worksheet

Dan Coulter led the meeting and provided a Hanlon Method scoring worksheet with the health needs that had 5-31 CHAC votes (Table 17). The Hanlon Method is an objective scoring tool that ranks health problems based on magnitude, effectiveness, and seriousness.

Table 17. CHNA Hanlon Method Scoring Worksheet

	Size of Health Problem	Seriousness of the Health Problem	Effectiveness of Interventions	Priority Score
Substance Abuse				
Mental Health				
Homelessness				
Access to Health Services				
Dental Health				
Cancer				
Childhood Trauma				
Obesity				

Hanlon Method Guidelines

The guidelines for the CHNA planning team's scoring exercise included:

1) Give each health problem a numerical rating on a scale of 0-10 for each of the three criteria (columns in Table 17).
2) **Apply the PEARL test** – Once health problems have been rated for all criteria, use the PEARL test to screen out health problems based on the following feasibility factors:
    a. **P**ropriety – Is a program for the health problem suitable?
    b. **E**conomics – Does it make economic sense to address the problem?
    c. **A**cceptability – Will the community accept the problem?
    d. **R**esources – Is funding available or potentially available to address the problem?
    e. **L**egality – Do current laws allow program activities to be implemented?

3) **Calculate priority scores** – Based on the three criteria rankings assigned to each health problem in Step 1, calculate the priority scores using the following formula:

   D = [A + (2 x B)] x C

   D = priority score

   A = size of the health problem ranking

   B = Seriousness of the health problem ranking

   C = Effectiveness of intervention ranking

4) **Rank the health problems** – Based on the priority scores calculated in Step 3, assign ranks to the health problems with the highest priority score receiving a rank of 1 and so on.[111]

Results

Table 18 shows the final results of the scoring exercise (scores were averaged from the three participants). The health needs prioritized were: substance abuse, mental health, cancer, and childhood trauma. Substance use and mental health were later combined under "Behavioral Health." It should be noted that the CHNA planning team chose not to emphasize the ranking of the priorities, but rather their importance.

Table 18. Hanlon Scores

Health Issue	Hanlon Score
Substance Abuse	**160**
Mental Health	**158**
Homelessness	103
Access to Health Services	119
Dental Health	144
Cancer	**208**
Childhood Trauma	**150**
Obesity	118

[111] National Association of County and City Health Officials. *Hanlon Method.* Accessed at: https://www.naccho.org/chachipresources

Strategic Planning

The CHNA planning team met with several community groups specializing in the health priority areas identified through the needs assessment (see Table 2). These planning sessions were facilitated in order to "ask the experts" and identify ways in which CHAC members could support them with the goal being to enhance the work already being done in the community. Examples include: supporting current activities, promoting prevention and education, and providing in-kind support. The next section includes the work plans created as a result of the strategic planning sessions.

CHIP Work Plans

The CHIP work plans were created with high level detail in order to be able to accommodate potential changes in community resource allocations and community partner groups' infrastructure and planning, as well as be able to add new objectives and strategies within each priority area to best manage challenges that may arise. In addition, community groups working within the priority areas will be encouraged to use a reporting tool developed during the previous CHNA cycle by one of the CHAC task forces. This tool is not mandatory to use but recommended in order to standardize reporting.

Cancer

CHAC will support the work currently being done by the Cecil County Cancer Task Force in the community for lung cancer screening, to include education, awareness, and increasing health promotions related to getting screened. Union Hospital's Cancer Program and its Commission on Cancer Committee will offer support, as well as Cecil County Health Department's division of Health Promotion.

Key Indicators

- Lung Cancer Incidence
- Lung Cancer Mortality Rate
- Prevalence of Smoking

Goal

- **1.1:** Reduce cancer mortality in Cecil County

Cancer Work Plan

Objective	Strategies
1.1: By June 30, 2022, increase the number of individuals receiving low-dose lung cancer CT screenings by 5% in order to increase awareness for lung cancer prevention. Baseline: 556 people screened (CY16, CY17, and CY18) Measurement goal: 584 individuals screened (CY19, CY20, and CY21) *Source: Union Hospital Cancer Program*	**A**. Raise awareness for lung cancer prevention in order to reduce stigma related to risk factors contributing to lung cancer **B**. Support and engage medical providers in promoting patient awareness of lung cancer prevention efforts (primary prevention: education; secondary prevention: screening; and tertiary prevention: treatment) **C**. Educate and support medical providers on how to talk to patients about quitting smoking **D**. Support medical providers in making community presentations **E**. Promote referrals for smoking cessation among medical providers **F**. Promote the use of self-screening tools in the community for low-dose CT lung cancer screening **G**. Support and engage the community (incl. Community groups, faith-based organizations, and businesses) in promoting lung cancer prevention efforts (primary prevention: education; secondary prevention: screening; and tertiary prevention: treatment) **H**. Provide advertising and media support for health promotions related to the availability of prevention services in the community **I**. Engage the community on lung cancer prevention efforts via social media and other educational and/or advocacy outlets

Behavioral Health

CHAC will be working to enhance and support the efforts to address both Substance Abuse (SA) and Mental Health (MH) in Cecil County. CHAC has met with leadership from Cecil County Health Department's Core Service Agency (MH), as well as the Drug-Free Communities Coalition (SA), Cecil County Drug and Alcohol Abuse Council (SA), and the Opioid Misuse Prevention Program (SA). CHAC will also support the movement towards integrating behavioral health services at the local health department and community level.

Key Indicators

- Prevalence of Youth Substance Use
- Drug-induced Death Rate
- Rate of ED Visits Related to Substance Use Disorders (SUD)
- Rate of ED Visits Related to MH Conditions
- Prevalence of Depression among Youth
- Suicide Death Rate

Goals

- **1.1**: Prevent the initiation of substance use among youth and support youth in treatment and recovery
- **1.2:** Increase Recovery Support Capacity in Cecil County
- **1.3:** Provide support for individuals with behavioral health conditions re-entering the community
- **1.4:** Integrate Behavioral Health Services in Cecil County to improve outcomes for individuals with co-occurring disorders

Behavioral Health Work Plan

Objectives	Strategies
1.1.1: By June 30, 2022, increase protective factors to reduce the prevalence of substance use among Cecil County public high school students by 5%. Baselines: ● Alcohol use in past 30 days: 31.1% ● Marijuana use in past 30 days: 20.9% ● Prescription Drug Use (ever): 13.3% *Source: 2016 Maryland Youth Risk Behavior Survey*	**A**. Expand youth prevention activities for grades 3-12 **B**. Provide ongoing support for Youth Leadership Summit Activities **C**. Expand Drug Free Cecil Youth Coalition efforts **D**. Hire a youth advisor to coordinate Drug Free Cecil youth efforts **E**. Increase protective factors and community resilience **F**. Expand support mechanisms for youth in recovery **G**. Explore the development of a drop-in community recovery center **H**. Explore the development of an adolescent clubhouse **I**. Identify and engage with youth who have SUDs
1.2.1: By June 30, 2022, increase total peer recovery support contacts by _%. Baseline: _ contacts made in 2018 *Source: Cecil County Health Department Alcohol & Drug Recovery Center* **1.2.2:** By June 30, 2022,Increase the number of individuals trained in overdose response by 25%. Baseline: _ individuals were trained (through June 30, 2019) *Source: Cecil County Health*	**A.** Expand Peer Recovery Support capacity **B.** Increase community access to Narcan **C.** Increase recovery support for individuals transitioning from prison or jail back into the community **D.** Research anti-stigma initiatives **E.** Implement an anti-stigma awareness campaign

Department Alcohol & Drug Recovery Center **1.2.3:** By June 30, 2021, implement an anti-stigma educational awareness campaign in Cecil County. Baseline: N/A	
1.3.1: By June 30, 2020, develop a plan to support re-entry for individuals transitioning from jail with mental health disorders. Baseline: N/A **1.3.2:** By June 30, 2022 increase the percentage of individuals with substance use disorders re-entering the community who enter treatment or after-care programs. Baseline: N/A	**A**. Form a workgroup to pursue re-entry planning **B**. Research evidence-based re-entry programs **C**. Seek funding to support re-entry initiatives **D**. Expand treatment and re-entry aftercare programs **E**. Partner with the CCHD Division of Addictions Services for individuals with co-occurring disorders
1.4.1: By June 30, 2020, form a committee to pursue the expansion of behavioral health integration in Cecil County. Baseline: N/A **1.4.2:** By June 30, 2021, develop a joint Behavioral Health Plan for Cecil County. Baseline: N/A	**A**. Form a behavioral health committee made up of stakeholders from the mental health and substance use disorder fields **B**. Hold joint Council meetings to align efforts **C**. Develop and submit a joint Behavioral Health Plan for Cecil County **D**. Engage and educate stakeholders and the community on co-occurring disorders and Behavioral Health Integration

Childhood Trauma

CHAC will serve as support for the Local Management Board's Childhood Trauma Subcommittee as they work through addressing planned recommendations. CHIP planning meetings solidified CHAC responsibilities to support the increase of community and provider education and awareness of childhood trauma. In addition, the Cecil County Health Department will explore evidence-based home visiting programs to implement in Cecil County.

Key Indicators

- Prevalence of ACES
- Child maltreatment incidence rate
- Domestic violence incidence rate

Goals

- **1.1:** Increase education opportunities for the community on childhood trauma
- **1.2:** Educate and empower health care providers to recognize and treat the effects of childhood trauma
- **1.3:** Enhance parenting skills to promote healthy child development

Childhood Trauma Work Plan

Objectives	Strategies
1.1.1: By June 30, 2022, hold at least 6 events to educate the community about childhood trauma. Baseline: N/A	**A.** Hold screenings of the documentary "Resilience: The Biology of Stress & Science of Hope" **B.** Hold community forums related to childhood trauma **C.** Hold trainings related to childhood trauma **D.** Change social norms to support parents and positive parenting **E.** Partner with youth serving organizations on child abuse prevention awareness and education **F.** Participate in the National Child Abuse awareness "Pinwheels for Prevention" campaign **G.** Train community leaders to act as advocates and spread information on childhood trauma in their communities

1.2.1: By June 30, 2020, create and distribute a survey to assess current knowledge of childhood trauma and training needs of health care providers in Cecil County. Baseline: N/A	**A.** Research and develop survey tool **B.** Obtain list of physicians and distribute survey **C.** Analyze results to determine needs
1.2.2: By June 30, 2022, identify and hold at least 2 childhood trauma related trainings for medical professionals. Baseline: N/A	**A.** Identify training resources for physicians and other health care providers **B.** Utilize evidence-based materials to educate physicians on trauma-informed care
1.3.1: By June 30 2021, research evidence-based home visiting programs and determine the feasibility of implementing a program in Cecil County. Baseline: N/A	**A.** Support the creation of evidence-based home visiting programs, such as Healthy Families America program in Cecil County

Community Health Needs Assessment

Cecil County

Fiscal Year 2019

This report was prepared by:

Jean-Marie Kelly, MPH
Community Benefit
Union Hospital of Cecil County

&

Daniel Coulter, MPH
Health Planning
Cecil County Health Department

TABLE OF CONTENTS

EXECUTIVE SUMMARY 5

Collaboration 5
Key Partners 5
Community Characteristics 6
Location & Population 6
Age & Sex 7
Race & Ethnicity 8
Origins & Languages Spoken 8
Income & Poverty 8
Veterans 10
Assessing Community Health Needs 10
Methodology 10

CECIL COUNTY HEALTH PRIORITIES 14

Health Priorities 14
Cancer 14
Behavioral Health 19
Childhood Trauma 25
Health Needs Not Prioritized 27

PRIMARY DATA COLLECTION & ANALYSIS 31

Online Community Survey 31
Demographics 31
Community Health 33
Quality of Life 36
Access to Care 37
Additional Information 41
Focus Groups 43
Sessions 43
Responses 43
Interviews 45
Sessions 45
Responses 45

SECONDARY DATA ANALYSIS 47

Secondary Data 47
Health Resources 47
Quality of Life 48
Social Determinants of Health 49
Societal Health 57
Behavioral Risk Factors 61
Environmental Health 62
Maternal & Child Health 68
Communicable Disease 70
Mortality 73

COMMUNITY HEALTH IMPROVEMENT PLAN **75**

Prioritizing Health Needs 75

CHAC Meeting – January 2019 75

CHNA Planning Team Meeting – February 2019 77

Strategic Planning 79

CHIP Work Plans 79

EXECUTIVE SUMMARY

Collaboration

Union Hospital collaborated with the Cecil County Health Department and the Cecil County Community Health Advisory Committee (CHAC) to conduct the Community Health Needs Assessment (CHNA). The CHNA planning team included Union Hospital's Community Benefit and Cecil County Health Department's Health Planning and Health Officer and Deputy Health Officer. The CHNA planning team was responsible to facilitate all component parts of the CHNA process, including writing and submitting the reports to the Internal Revenue Service (IRS) and updating CHAC. In addition, the CHNA planning team partnered with several community and governmental organizations to plan and prime for the implementation of the Community Health Improvement Plan (CHIP).

Key Partners

Union Hospital of Cecil County

Union Hospital is an award-winning, full-service, community hospital located in Elkton, Maryland. Nationally recognized for clinical excellence in the treatment and prevention of disease, this 84-bed, not-for-profit hospital is dedicated to providing superior, personalized, and quality health care to neighbors, families and friends. Union Hospital's values include: caring and compassion, leadership, integrity, and shared learning. Union Hospital is also in the community offering doctors, imaging, physical therapy, and other services to help people stay well.

Cecil County Health Department

Cecil County Health Department's mission is to improve the health of Cecil County and its residents in partnership with the community, by providing leadership to find solutions to the community's health problems through assessment, policy development, and assurance of quality health services and education. The health department offers services to all county residents through six divisions: 1) Administrative Services; 2) Addiction Services (Alcohol and Drug Recovery Center); 3) Community Health Services; 4) Environmental Health Services; 5) Health Promotion; and 6) Special Populations Services. The health department's goals include: preventing epidemics and the spread of disease, protecting against environmental hazards, preventing injury, promoting and encouraging healthy behavior and mental health, responding to disasters and assisting communities in recovery, and assuring the quality and accessibility of health services.

Community Health Advisory Committee

The Cecil County Community Health Advisory Committee (CHAC) is a partnership of community organizations, government, groups, and individuals committed to improve the overall quality of health in Cecil County. CHAC serves as Cecil County's Local Health Improvement Coalition and is comprised of the five health task forces: 1) Cancer Task Force; 2) Tobacco Task Force; 3) Drug and Alcohol Abuse Council; 4) Core Services Agency Mental Health Advisory Board; and 5)

Healthy Lifestyles Task Force. Annual CHAC meetings are held to report progress on the Community Health Improvement Plan (CHIP) strategies from the five task forces. CHAC membership includes the following active organizations (attending since July 2017):

- Ashley Treatment Center
- Cecil College
- Cecil County Dept of Community Services
- Cecil County Dept of Emergency Services
- Cecil County Dept of Social Services
- Cecil County Government
- Cecil County Health Department
- Cecil County Public Schools
- Health Care Professionals
- Healthy Harford/Healthy Cecil WATCH Program
- Maryland State Representatives
- On Our Own of Cecil County
- Private Citizens
- The Paris Foundation
- Union Hospital of Cecil County
- United HealthCare
- Upper Bay Counseling & Support Services
- Voices of Hope
- West Cecil Health Center
- WIN Family Health
- Meadow Wood Behavioral Health System
- Youth Empowerment Source

Community Characteristics

Union Hospital and Cecil County Health Department are responsible to meet the needs of a county with broad health and socio-economic factors. These factors can impact many health issues, so it is important to address them according to community need and in partnership with community organizations. According to NACCHO, when assessing the health and wellbeing of a community, it is important to analyze the population's demographics, health resources, quality of life, social determinants of health, societal health, behavioral risk factors, environmental health, maternal and child health, communicable disease, and mortality.

Location & Population

Cecil County is located in the upper northeastern corner of the Chesapeake Bay in Maryland and borders Pennsylvania and Delaware. The county seat is located in Elkton, Maryland, and there are eight towns and seven unincorporated communities in the county.

Union Hospital and Cecil County Health Department serve all of Cecil County, providing services and care for residents in the zip codes listed in **Table 1**. These zip codes also make-up Union Hospital's primary and secondary service areas, as denoted in Table 10, and collectively are known as the Community Benefit Service Area (CBSA) for Union Hospital.

Table 1. Cecil County Zip Codes

Primary Service Area	Secondary Service Area
21921 – Elkton	21902 – Perrypoint
21922 – Elkton	21903 – Perryville
21901 – North East	21904 – Port Deposit
21916 – Childs	21917 – Colora
21920 – Elk Mills	21918 – Conowingo
21915 – Chesapeake City	
21914 – Charlestown	
21911 – Rising Sun	
21912 – Warwick	
21913 – Cecilton	
21919 – Earleville	

In 2017, the total population of Cecil County was estimated to be 102,416. This is an increase of 2.3% from the estimated population in 2010 (100,139). By zip code the largest population centers in Cecil County are 21921 (44,397), 21901 (17,538) and 21911 (11,385).[1]

Age & Sex

Approximately 23.3% of Cecil County residents were under 18 years of age from 2013-2017, while 14.4% were 65 years of age or older. During this time period, the median age in Cecil County was 40.3 years, with females having a slightly higher median age than males (40.7 years vs. 39.9 years). The largest age groups for both males and females in Cecil County were 50 to 54 years. **Figure 1** shows a population pyramid for Cecil County residents by age and sex.[2]

Figure 1. Cecil County Population by Age and Sex

Cecil County Population by Age and Sex, 2013- 2017

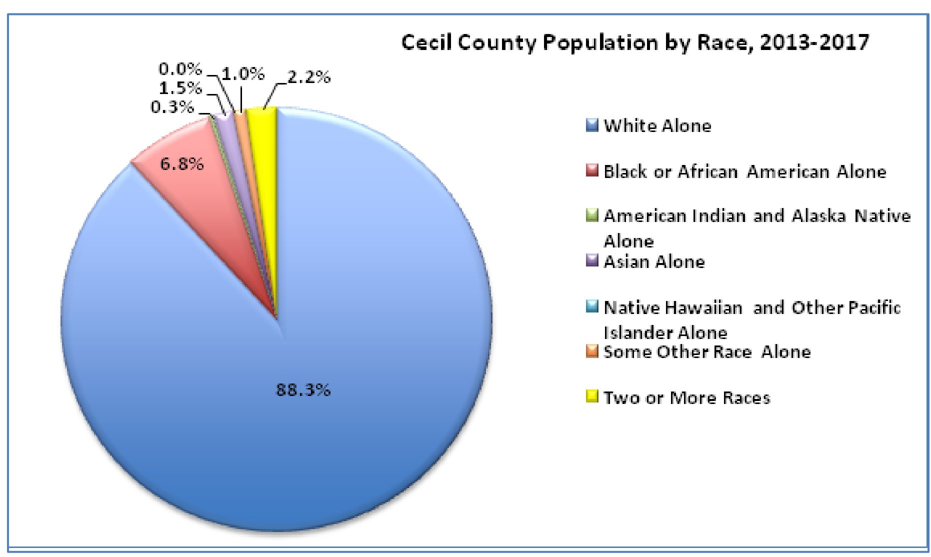
[1] US Census Bureau. American Community Survey, 5-Year Estimates, 2013-2017. Population by zip code [data file]. Accessed at: https://factfinder.census.gov

[2] US Census Bureau. American Community Survey, 5-Year Estimates, 2013-2017. Population by age and sex [data file]. Accessed at: https://factfinder.census.gov

Race & Ethnicity

Cecil County is less racially diverse than the State of Maryland, with 88.3% of Cecil County residents identifying as White alone from 2013-2017, compared to 56.6% in Maryland. Likewise, only 4.1% of Cecil County residents identify as Hispanic/Latino compared to 9.6% statewide. A majority of Cecil County residents (95.1%) speak only English at home. The town of Elkton has a greater proportion of minority populations than the rest of the county. **Figure 2** shows a breakdown of Cecil County residents by race.[3]

Figure 2. Cecil County Population by Race



Origins & Languages Spoken

From 2013-2017 an estimated 3,460 foreign born individuals resided in Cecil County. A majority of Cecil County residents (95.1%) speak only English at home. Among Cecil County residents who speak a language other than English at home, an estimated 30.8% (1,460 individuals) speak English less than very well. The most common language spoken is Spanish (2.5%).[4]

Income & Poverty

From 2013-2017, the median household income in Cecil County was $70,516 and the median family income was $85,539. This was significantly lower than the median household income of $78,916 and median family income of $95,597 for Maryland during this time period. In Cecil County, an estimated 9.4% of individuals live below the Federal Poverty Level (FPL) from 2013-2017, compared to 9.7% in Maryland. Certain populations in Cecil County are more likely to live below the FPL. **Figure 3** show the percentage of individuals below the poverty level by race/ethnicity.[5]

---

[3] US Census Bureau. American Community Survey, 5-Year Estimates, 2013-2017. Population by Race [data file]. Accessed at: https://factfinder.census.gov

[4] US Census Bureau. American Community Survey, 5-Year Estimates, 2013-2017. Population by Language Spoken [data file]. Accessed at: https://factfinder.census.gov

[5] US Census Bureau. American Community Survey, 5-Year Estimates, 2013-2017. Poverty by Race and Ethnicity [data file]. Accessed at: https://factfinder.census.gov

Figure 3. Poverty by Race & Ethnicity

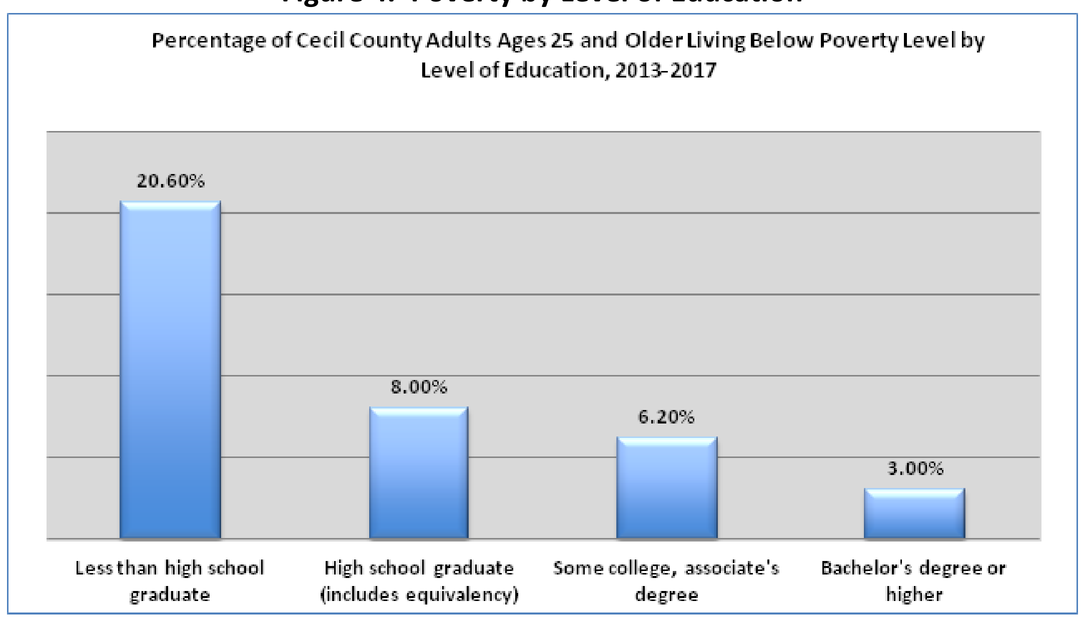
Percentage of Cecil County Population Living Below Poverty Level by Race & Ethnicity, 2013- 2017

7.90%
18.90%
2.10%
18.30%
0.00%
13.40%
36.60%
21.60%

White alone
Black or African American alone
American Indian and Alaska Native alone
Asian alone
Native Hawaiian and Other Pacific Islander alone
Some other race alone
Two or more races
Hispanic or Latino origin (of any race)

Adults with less than a high school education in Cecil County are significantly more likely to be below the poverty level than those with at least a high school education. **Figure 4** shows the percentage of individuals ages 25 and older that are below the poverty level by educational attainment.[6]

Figure 4. Poverty by Level of Education



[6] US Census Bureau. American Community Survey, 5-Year Estimates, 2013-2017. Poverty by Level of Education [data file]. Accessed at: https://factfinder.census.gov

Cecil County families with a female householder and no husband present are also significantly more likely to live in poverty (18.0%) than married couple families (2.7%). Among female householder families with children this percentage is even higher (27.4%).

Employment status is also a major influencing factor in the burden of poverty in an area, especially for families where there is only one parent present. From 2013-2017, the unemployment rate in Cecil County was at 5.8%.[7]

Estimates of poverty do not tell the whole picture when it comes to population struggling to afford basic needs. The United Way's ALICE (Asset Limited, Income Constrained, Employed) captures households that earn more than the FPL, but less than the basic cost of living for the county. In 2016 an estimated 30% of Cecil County households met these criteria in addition to 9% of households that were below the FPL. Certain areas of the county are more likely to be struggling. Households in the towns of Cecilton (66%), Elkton (56%), Port Deposit (56%), Chesapeake City (54%) and North East (52%) were most likely to be below the threshold for ALICE or the FPL in 2016.[8]

Veterans

From 2013-2017 an estimated 7,314 veterans resided in Cecil County. This is roughly 9.3% of the civilian population 18 years of age and older. The veteran population is largely male (92.5%) and has a higher burden of disability (24.8%) than the general population (14.8%).[9]

Assessing Community Health Needs

The CHNA, conducted during Fiscal Year (FY) 2019, reflects the current status of the medical and social determinants of health for Cecil County and provides a quantitative and qualitative data analysis for key health issues. The health issues that were prioritized as a result of these data analyses were:

1) Cancer;
2) Behavioral Health (comprised of Substance Use and Mental Health); and
3) Childhood Trauma.

Methodology

The CHNA, an IRB-exempt process, consisted of collecting and analyzing primary and secondary data, as well as facilitating strategic planning sessions to create the Community Health Improvement Plan (CHIP).

---

[7] US Census Bureau. American Community Survey, 5-Year Estimates, 2013-2017. Unemployment [data file]. Accessed at: https://factfinder.census.gov

[8] United Way. *ALICE Report: A Study of Financial Hardship in Maryland. County Data, 2018*. Accessed at: https://www.uwcm.org/main/alice/

[9] US Census Bureau. American Community Survey, 5-Year Estimates, 2013-2017. Veterans [data file]. Accessed at: https://factfinder.census.gov

Data Collection

Primary data collection consisted of:

- **Facilitating an online community survey.** The online community survey developed during the FY 2016 CHNA was used again with the FY 2019 CHNA (see Appendix A). The intention of this is to build previous data with each CHNA conducted. The survey was available from July 2018 to September 2018 through an online link and by paper (available at several community-based locations, like Cecil County Public Libraries and Union Hospital Multi-Specialty Practices). The survey consisted of twenty questions – multiple choice, Likert Scale selections, and free text entry – and covered four topics: 1) demographics; 2) community health; 3) quality of life; and 4) access to health care. The survey took 15-20 minutes to complete and 1,403 people completed the survey (more than double the number of respondents that completed the FY 2016 online community survey). Paper surveys received were manually entered as submissions into the online community survey. All data collected was managed by Cecil County Health Department using Survey Monkey's analytical tools.
- **Hosting focus groups with vulnerable populations.** Focus groups were hosted with five vulnerable populations in Cecil County: low-income housing, homeless, older adults, veterans, and a minority group. Sessions were held in the community at a location that was convenient to the participants. Food was provided. Sessions lasted 1.5-2 hours and included one Facilitator and one Scribe. Sessions were well attended (averaged 10 people per group). Feedback from participants was handwritten on large Post-it™ notes by the Scribe and information was reviewed in session with participants to ensure all feedback was accurately captured.
- **Conducting interviews with community leaders**. Interviews were conducted to garner a community leadership perspective about the health and quality of life in Cecil County. Interviews, made by appointment, were conducted by Union Hospital and took 1-2 hours to complete. Interviews were conducted in a location convenient for the interviewees and all answers were confidential, accessible only by the CHNA planning team. Feedback was audio recorded (with permission), transcribed, and the audio files, notes, and transcriptions have been stored in a secure Google drive managed by Cecil County Health Department to maintain respondents' confidentiality.

Secondary data collection consisted of consulting and analyzing a variety of local, state, and national resources in order to create a comprehensive demographic, socio-economic, and health profile for Cecil County. Data sources consulted for this assessment included:

ARCGIS: Business Analyst, Delorme map data, ESRI, & US Census Tigerline Files	Maryland Department of Human Resources	National Provider Identification File
Area Health Resource File	Maryland Department of the Environment	Prevention and Health Promotion Administration, DHMH
Centers for Medicare and Medicaid Services	Maryland Health Services Cost Review Commission	Substance Abuse and Mental Health Services Administration

Center for Sexually Transmitted Infection Prevention, DHMH	Maryland Medicaid Service Utilization	The Maryland Uniform Crime Reporting Program
Children's Bureau	Maryland Vital Statistics Administration	US Census Bureau
Claritas, Inc.	Maryland Youth Risk Behavioral Survey	US Department of Agriculture: Economic Research Services
County Health Rankings	Maryland Youth Tobacco Survey	US Department of Education
Fatality Analysis Reporting System	Meditech 6.1	US Department of Health and Human Services
Feeding America	National Center for Education Statistics	US Department of Housing and Urban Development
Healthy Communities Institute	National Association for city and County Health Officials	US Department of Justice
Maryland Behavioral Risk Factor Surveillance System	National Vital Statistics System – Mortality	United Way

CHIP Planning

The strategic planning portion of the CHNA involved the CHNA planning team meeting with Community Health Advisory Committee (CHAC) membership to create the Community Health Improvement Plan (CHIP). This usually requires several CHAC meetings held in the spring of a CHNA year to formulate objectives and strategies to address the prioritized health needs. The product of this process is a strategic plan created from scratch based on the expertise that is in the room during the meetings.

For this third cycle of CHNA, the CHNA planning team decided to try a different approach. The planning team met with several community groups who are currently connected with the prioritized health needs in order to determine what strategies currently exist to reduce the burden in the community regarding the priority health needs. The table below shows which groups were consulted per health priority.

Table 2. Community Groups Consulted by Health Priority

Cancer	Cecil County Cancer Task Force
Behavioral Health	Substance Use • Cecil County Drug and Alcohol Abuse Council • Cecil County Drug-Free Communities Coalition • Opioid Misuse Prevention Project Mental Health • Core Service Agency Mental Health Advisory Board
Childhood Trauma	Cecil County Local Management Board: Childhood Trauma Subcommittee

Work plans per group were consulted to identify strategies where CHAC membership could help support current activities, promote prevention and education, and/or provide additional

in-kind support – the goal being to enhance the work already being done in the community around these issues.

Input from the Community

The Community Health Needs Assessment must include input from people that represent the community. Required groups include: residents, local government, public health, community leadership, minorities, vulnerable populations (medically underserved, low-income, the poor, and working poor), and organizations representing these populations.

Union Hospital and Cecil County Health Department decided to work through the Cecil County Community Health Advisory Committee (CHAC), a major health coalition with sector representation from all the required groups as well as additional groups, to gather input for the CHNA. Information gathering included an online community survey (with a written comments section), focus groups, and interviews. The CHNA also conducted strategic planning sessions that engaged organizations and advocacy groups that represented vulnerable populations. These groups were identified according to their alignment with the health priorities selected in January 2019 by CHAC and the CHNA planning team.

Reporting

The CHNA process reflects the collaboration of community partners working together to achieve the same health improvement goals for Cecil County. The information presented in this CHNA report examines the processes involved in conducting the CHNA, the health needs prioritization process resulting in selected health priorities, and implementation planning resulting in the creation of the CHIP that will measure progress for community health improvement activities from FY 2020 – FY 2022.

Cecil County Health Priorities

Health Priorities

The health needs prioritized by the Cecil County CHNA collaborative during the FY 2019 CHNA are as follows:

1) Cancer
2) Behavioral Health (comprised of Substance Use and Mental Health)
3) Childhood Trauma

The following sections explain each of these priority areas in greater detail. Each synopsis includes Cecil County data. Where applicable/available, there may also be comparisons between data reported in the previous CHNA (FY 2016) and this current assessment.

Cancer

In 2016 the following cancer death rates were measured for Cecil County:[10]

- All cancers: 201.6 deaths/100,000 population
- Lung cancer: 61.5 deaths/100,000 population
- Prostate cancer: 27.2 deaths/100,000 population
- Breast cancer: 23.5 deaths/100,000 population
- Colorectal cancer: 17.2 deaths/100,000 population

The information presented in the following sections explains each of these cancers. For more information on the impact of cancer in Cecil County, please refer to the Union Hospital Cancer Needs Assessment (https://www.uhcc.com/services-2/cancer-program/). The Cancer Needs Assessment was compiled to meet the accreditation requirements for the Commission on Cancer in association with the Union Hospital Cancer Program, the Union Hospital Breast Center, and the Union Hospital Cancer Committee. The assessment also includes a Community Outreach Plan which describes the cancer supports in place to reduce barriers to cancer care created by the social determinants of health.

Lung Cancer

The risk for lung cancer increases for people who use tobacco products, especially those who smoke tobacco products. In 2017, an estimated 24.8% of adults reported smoking cigarettes in Cecil County. This is an increase from the last CHNA where data from 2014 showed that an estimated 12.4% of adults reported smoking cigarettes. The 2017 data is significantly more important when considering the age of the adults who smoked. Nearly 27% of adult smokers in 2017 were between the ages of 45 and 64 years old – the prime age group eligible for the low-

[10] National Cancer Institute. Age-Adjusted Death Rate due to All Cancers, Lung Cancer, Prostate Cancer, Breast Cancer, and Colorectal Cancer, Cecil County, Maryland [data files]. Accessed at: https://statecancerprofiles.cancer.gov

dose lung CT screening. Again, this showed an increase from the last CHNA which reported an estimated 24% of adult smokers in this age group.[11]

Low-Dose Lung CT Screenings

A screening protocol has been established to detect malignant tumors early, before symptoms appear, so that disease can be more successfully treated. This protocol uses a Low Dose Computed Topography (LDCT) scan with special X-ray equipment to detect malignant growths. The LDCT screening protocol is non-invasive and requires only stillness while the machine scans the chest and back areas (about 15 minutes). The earlier that lung cancer can be diagnosed and staged, the better the chances are of survival. With the LDCT scans available in Cecil County, there have been more lung cancers diagnosed in the Localized stage, which could correlate to a higher percentage of relative survival. A study by the National Cancer Institute and the National Lung Screening Trial found that LDCT scans can decrease lung cancer deaths by 15-20% (or 3 fewer deaths per 1,000 patients screened).[12]

Union Hospital's Lung Health Program includes the LDCT scan as a screening protocol for lung cancer. Annual lung cancer screenings with LDCT scans are recommended for patients that meet the following criteria:

- Aged between 55 and 74 years
- Current smoking status or have quit smoking within the past 15 years
- Have no symptoms of lung cancer
- Have a 30-pack year smoking history *(pack year = number of packs of cigarettes smoked per day multiplied by number of years as a smoker)*

Prostate Cancer

Prostate cancer is the leading cause of cancer death in men in the United States (US). The American Cancer Society states that 1 in 7 men will be diagnosed with prostate cancer and 1 in 36 men will die from it. In the US, Men over the age of 65 years and African American men have the highest risk for prostate cancer.[13] In Cecil County, the incidence rate for prostate cancer has been on the decline over the last several years (Figure 5), especially among African American males (Figure 6).

[11] Maryland Behavioral Risk Factor Surveillance System. Adults who Smoke [data file]. Accessed at: https://www.uhcc.com/about-us/community-benefit/cecil-county-health-data/

[12] National Cancer Institute. National Lung Screening Trial: Questions and Answers [webpage]. Accessed at: https://www.cancer.gov/types/lung/research/nlst-qa

[13] American Cancer Society. Key statistics for prostate cancer [webpage]. Accessed at: http://www.cancer.org/cancer/prostatecancer/detailedguide/prostate-cancer-key-statistics

Figure 5. Prostate Cancer Incidence Rate, Cecil County[14]

Figure 6. Prostate Cancer Incidence Rate, by Race, Cecil County[15]

Prostate Screenings

Each September, Union Hospital provides free prostate cancer screenings for men in Cecil County through Prostate Specific Antigen (PSA) testing. **Table 3** shows the number of clients served by the Union Hospital free prostate screening program each September.

[14] National Cancer Institute. State Cancer Profiles: Incidence Rate Report for Maryland by County, Prostate, All Races (includes Hispanic), Both Sexes, All Ages, Cecil County, Maryland [data file]. Accessed at: https://statecancerprofiles.cancer.gov/incidencerates/

[15] National Cancer Institute. State Cancer Profiles: Incidence Rate Report for Maryland by County, Prostate, Black (includes Hispanic), Males, All Ages, Cecil County, Maryland [data file]. Accessed at: https://statecancerprofiles.cancer.gov/incidencerates/

Table 3. Clients Screened at Union Hospital

Year	# Clients Screened
2011	72
2012	70
2013	47
2014	60
2015	48
2016	60
2017	No data reported
2018	25

Breast Cancer

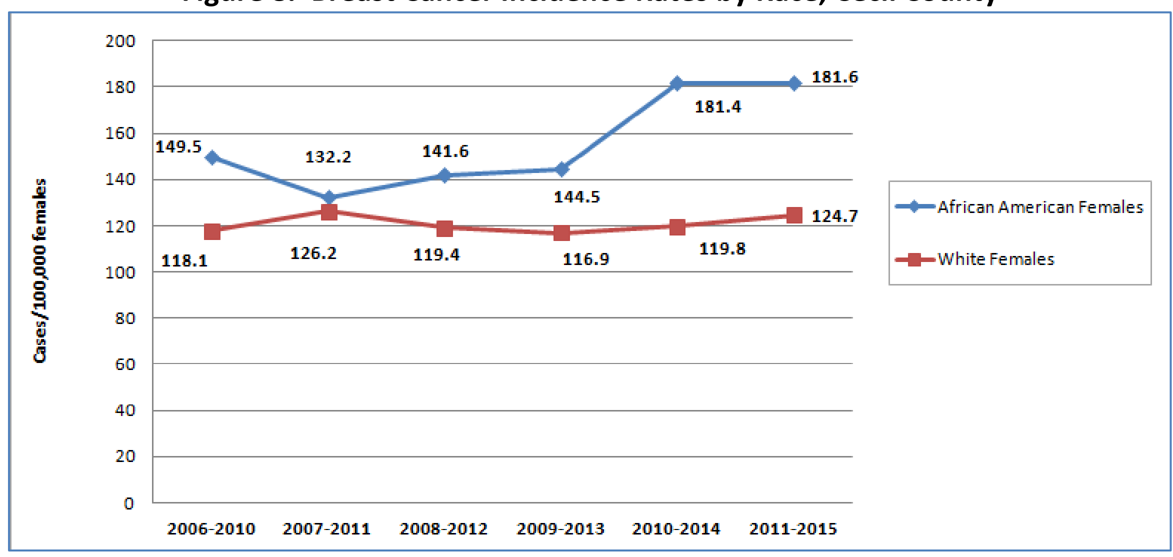
Breast cancer is the second leading cause of cancer death for women in the US (second to lung cancer). The American Cancer Society states that 1 in 8 women will develop breast cancer and 1 in 38 women will die from it. However, death rates have dropped 40% since 1989, showing steady decline since 2007 in older women. Currently, there are more than 3.1 million breast cancer survivors in the US.[16] In comparison, Cecil County has shown a steady decrease in breast cancer incidence rates among women over the last ten years (Figure 7). Cecil County data also shows a racial disparity for African American women whose breast cancer incidence has steadily increased when compared to white women (Figure 8). In the US, higher incidence is historically uncharacteristic among African American women. However, according to a report called *Breast Cancer Facts & Figures 2015-2016*, published by the American Cancer Society, the breast cancer death rate for African American women by 2012 was 42% higher than that of white women. The report further explained that "Black women are more likely than other racial/ethnic groups to be diagnosed at later stages and have the lowest survival at each stage of diagnosis. They are also more likely to be diagnosed with triple negative breast cancer, an aggressive subtype that is linked to poorer survival."[17]

Figure 7. Breast Cancer Incidence Rate, Cecil County

[16] American Cancer Society. *How Common is Breast Cancer?* [webpage]. Accessed at: https://www.cancer.org/cancer/breast-cancer/about/how-common-is-breast-cancer.html

[17] American Cancer Society. *Report: Breast Cancer Rates Rising Among African-American Women.* Accessed at: https://www.cancer.org/latest-news/report-breast-cancer-rates-rising-among-african-american-women.html#citations

Figure 8. Breast Cancer Incidence Rates by Race, Cecil County



Screening Mammograms

While the number of new breast cancer cases for women are declining in Cecil County, the Union Hospital Breast Health Center has noted that there are still pockets in the female population in Cecil County that are not regularly receiving screening mammograms, if at all, despite the 6,000 screening mammograms provided by the Center each year.

Historically, screening mammograms have been provided every year for women 50 years or older. However, the US Preventive Services Task Force (USPSTF) now recommends that women 50-74 years old should receive screening mammograms <u>every other</u> year (on a biennial cycle).[18] This directly conflicts with the recommendation that the American Cancer Society, the American College of Radiology, and the National Comprehensive Cancer Network, which states that women should receive a screening mammogram <u>every</u> year starting at the age of 40 or 45 years. This mixed messaging can be confusing to women, especially if they are not already seeking screening mammograms.

Furthermore, health insurance carriers are mandated by the Affordable Care Act and the US Department of Health and Human Services to follow the USPSTF recommendation for receipt of biennial screening mammograms. This means that insurance benefits would not provide the beneficiary's "cost sharing" benefit for a screening mammogram performed in the off year of a biennial screening cycle.[19] Therefore, the beneficiary would be responsible to pay for "non-covered" services rendered. Cost reporting in 2014 at Union Hospital showed that the out-of-pocket expense for a screening mammogram was $206. This amount does not include radiology fees of $144 and any additional costs related to follow-up care.

---

[18] US Preventive Services Task Force. Breast Cancer: Screening [webpage]. Accessed at: https://www.uspreventivservicestaskforce.org/Page/Document/UpdateSummaryFinal/breast-cancer-screening1

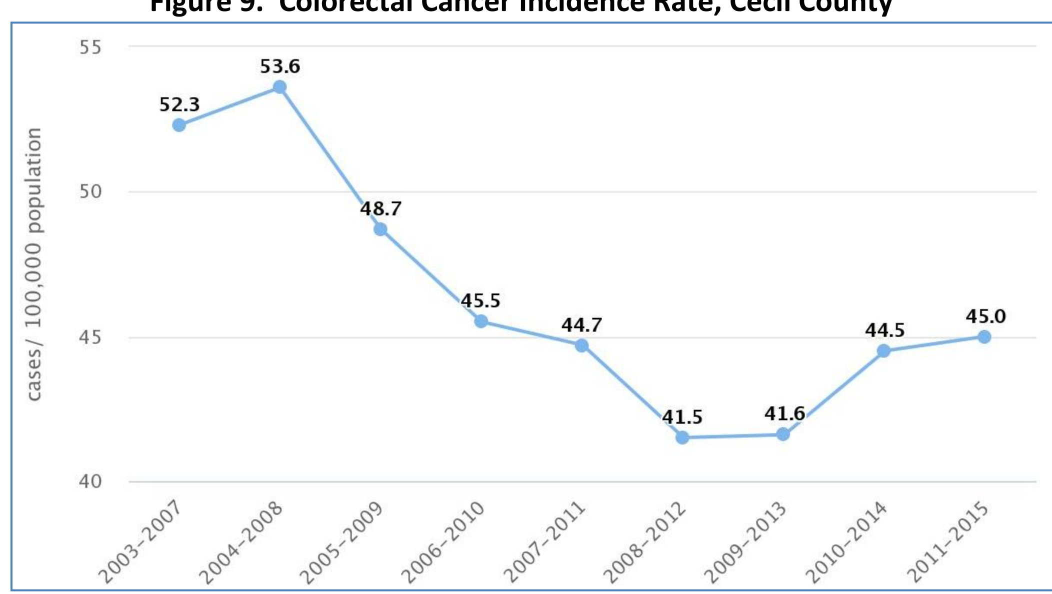
[19] Kaiser Family Foundation. Preventive Services Covered by Private Health Plans under the Affordable Care Act [webpage]. Accessed at: http://kff.org/health-reform/fact-sheet/preventive-services-covered-by-private-health-plans/

The Union Hospital Breast Health Center encourages women to receive their screening mammogram every year, but if health insurance benefits do not cover the screening, the Center's staff encourages patients to contact the Cecil County Health Department for breast cancer screening assistance.

Colorectal Cancer

Colorectal cancer is the third most diagnosed cancer in the US for both men and women. The lifetime risk for developing colorectal cancer is 1 in 21 for men and 1 in 23 for women.[20] Recent data for incidence of colorectal cancer in the US shows that there were 41 colorectal cancer cases/100,000 population and 15.1 deaths/100,000 population.[21] In Cecil County incidence for colorectal cancer has been steadily declining over the last nine years (Figure 9).

Figure 9. Colorectal Cancer Incidence Rate, Cecil County[22]



Colon Screenings

Colorectal cancer screenings can help detect polyps in the colon and rectum to be removed for prevention and/or biopsy if considered to be pre-cancerous based on size and shape. Early detection of colorectal cancer can increase chances of survival, especially if the cancer is diagnosed in an earlier stage. Over the last thirty years new diagnoses of colorectal cancer in the US have decreased by 30% which is believed to be directly linked to increased awareness and screening.[23] Union Hospital provides colorectal cancer screenings through the Union Gastroenterology outpatient practice for patients with insurance that will cover the procedures.

---

[20] American Cancer Society. Key Statistics for Colorectal Cancer [webpage]. Accessed at: http://www.cancer.org/cancer/colon-rectal-cancer/about/key-statistics.html

[21] National Cancer Institute: Surveillance, Epidemiology, and End Results Program. Cancer Stat Facts: Colon and Rectum Cancer [webpage]. Accessed at: https://seer.cancer.gov/statfacts/html/colorect.html

[22] National Cancer Institute. Incidence Rate Report for Maryland by County, Colon & Rectum, All Races (includes Hispanic), Both Sexes, All Ages [data file]. Accessed at: https://statecancerprofiles.cancer.gov/incidencerates/

[23] National Cancer Institute: Surveillance, Epidemiology, and End Results Program. Cancer Stat Facts: Colon and Rectum Cancer [webpage]. Accessed at: https://seer.cancer.gov/statfacts/html/colorect.html

Cecil County Health Department provides assistance with colorectal screenings through its small media grant.

Behavioral Health

Substance use (related deaths, overdoses, prevention, treatment, recovery, and public safety) and mental health (services, access, treatment, and special population health) have been top priorities in Cecil County for at least the last ten years. In fact, the first and second CHNAs (conducted FY 2013 and FY 2016 respectively) revealed substance abuse as the number one health priority, followed by mental health as number two. As a result several resources have been advocated for and created over the last several years to address substance abuse prevention and treatment, as well as access to mental health services.

Substance Use

Illicit drug use has steadily increased in Cecil County over the last several years, starting with prescription drug abuse and now more prominent with opioid abuse. Due to the county's geographic position along the I-95 corridor, which provides a more fluid movement of drugs throughout Maryland and to nearby states, stemming opioid trafficking continues to be a large priority for local and state law enforcement. In addition, the county's opioid crisis continues to have a major negative impact on co-occurring mental health issues.

Youth Substance Use

Table 4 shows Maryland Youth Risk Behavior Survey (YRBS) data for the percentage of high school student substance use in 2014 (reported in the previous CHNA report) and 2016. There are significant percentage decreases from 2014 to 2016 which could be attributed to the great work being done in youth prevention in Cecil County, spearheaded by the Cecil County Drug-Free Communities Coalition, a part of the larger super coalition – Drug Free Cecil. In the last three years there has been an increase in the amount of prevention activities geared toward youth and today there is even a youth coalition, led by youth, which focuses on prevention, advocacy, and health promotions in the community and at the state and national levels.

Table 4. Substance Use among Cecil County High School Students[24]

Survey Item	2014	2016
Percentage of students who used marijuana one or more times during their life	38%	↓ 34.8%
Percentage of students who used marijuana one or more times in the last 30 days	23.8%	↓ 20.9%
Percentage of students who have taken a prescription drug, (ex. OxyContin, Percocet, Vicodin, codeine, Adderall, Ritalin, or Xanax), without a doctor's prescription one or more times during their life	15.5%	↓ 13.3%

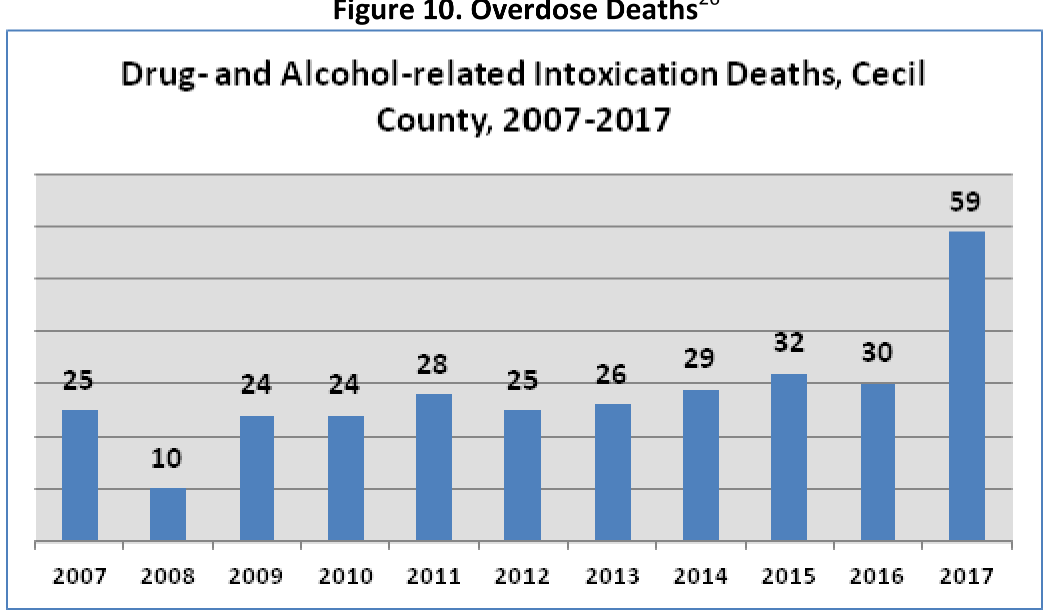
[24] Maryland Youth Risk Behavior Survey/Youth Tobacco Survey (YRBS/YTS). 2016 and 2014 Youth Risk Behavior Survey Data [webpage]. Accessed at: https://phpa.health.maryland.gov/ccdpc/Reports/Pages/YRBS-Main.aspx

Percentage of students who have injected any illegal drug (ex. used a needle to inject any illegal drug into their body) one or more times during their life	3.4%	= 3.5%
Percentage of students who used heroin one or more times during their life	4.2%	↓ 2.7%
Percentage of students who used any form of cocaine, (ex. powder, crack, or freebase), one or more times during their life	5.6%	↓ 4.6%
Percentage of students who were offered, sold, or given an illegal drug by someone on school property during the past 12 months	25.7%	↓ 16.1%

Overdose Deaths

Overall in the US: "Opioids contribute largely to drug overdose deaths; since 2000, there has been a 200 percent increase in deaths involving opioids."[25] **Figure 10** shows a steady increase in overdose deaths for Cecil County from 2012-2016, but then there is a huge spike in 2017. As you can see from the graph, 57 of the deaths involved opioids, further solidifying the breadth and depth of the opioid crisis in Cecil County.

Figure 10. Overdose Deaths[26]



In 2014, right before the second cycle of CHNA was conducted, county health, government, and law enforcement leadership created an action plan to address prevention of drug overdose deaths in Cecil County. This plan was called for and supported by the Governor's office. In the second cycle of CHNA in 2016, substance use was again identified as the number one health

[25] Centers for Disease Control and Prevention. Increases in Drug and Opioid Overdose Deaths — United States, 2000–2014. *MMWR Morb Mortal Wkly Rep.* 2016; 64(50);1378-82.

[26] Maryland Vital Statistics Administration. Vital Statistics and Reports [webpage]. Accessed at: https://health.maryland.gov/vsa/Pages/reports.aspx

issue in Cecil County. The sustained increase in overdose deaths was one of many reasons that prompted instituting an office of the Heroin Coordinator.

In 2016, the Cecil County Executive hired a Heroin Coordinator to help address the opioid problem in the county. The Heroin Coordinator developed a digital tracking system that is used by first responders and law enforcement in the county to input data related to all substance-related arrests, overdoses, deaths, and other related infractions. This system was identified as a best practice by the White House and the digital platform was shared on a national scale to assist other communities in addressing the opioid crisis with real-time data.

Today, the Heroin Coordinator tracks opioid-related data and provides support to a number of community organizations and agencies on what the data means and what to expect with trending information. The Heroin Coordinator also participates in ride-alongs with law enforcement to educate officers on how to use the digital tracking system and witness first-hand what goes into the arrests and/or calls and how law enforcement is tracking applicable data.

Emergency Room Visits

The substance use emergency room (ER) visit rate has decreased between 2014 and 2017. This is the result of many factors, one of which could include more emergencies being handled at home or in the community due to the unrestrained access to and use of Naloxone which reverses the effects of an overdose.

Table 5. ER Rate – Alcohol & Substance Abuse[27]

	Age-Adjusted ER Rate due to Alcohol/Substance Abuse (per 100,000 population)						
	2010	2011	2012	2013	2014	2016	2017
Cecil	1,538.6	2,121.9	2,234.8	2,057.6	2,165.7	2,133.2	2,084.1
Maryland	1,122.4	1,237.5	1,398.2	1,474.6	1,591.3	1,940.5	2,017
					Previous CHNA		Current CHNA

Cecil County Health Department provides free NARCAN certification classes for the community to educate on the use and administration of NARCAN to reverse the effects of an overdose. To give a frame of reference for the availability and use of NARCAN, Cecil County Health Department's Alcohol and Drug Recovery Center reported that from April 2014 to May 2019, there were 3,583 community members trained and 258 lives were reported as saved.
For the same time frame there were 345 law enforcement officers trained and 253 lives reported as saved.

Opioid-Related Deaths

Heroin, prescription opioids, and fentanyl were the three substances that caused a majority of opioid-related deaths in Cecil County in 2017 (Figure 11).

[27] Maryland Health Services Cost Review Commission. Research Level Statewide Outpatient Data Files. Emergency Department Visits for Addictions-Related Conditions [data file]. Accessed at: http://cecil.md.networkofcare.org/ph/ship-detail.aspx?id=md_ship45

Figure 11. Opioid-Related Deaths[28]

Heroin, prescription opioids, and fentanyl are highly addictive and each is classified by a Schedule by the Drug Enforcement Administration. Heroin is a Schedule I drug and prescription opioids and fentanyl are Schedule II drugs. Schedule I drugs have no currently accepted medical use and have a high potential for abuse. Schedule II drugs have a high potential for abuse and their use may lead to severe psychological or physical dependence, making them extremely dangerous.[29] In addition, Heroin is often cut with other substances, like fentanyl and carfentanyl, to make its effect stronger but which also results in the greater likelihood of overdose and even death. In fact, recent data from the office of the Heroin coordinator showed that 85% of overdose deaths in Cecil County were attributed to fentanyl.

Mental Health

The Maryland Behavioral Risk Factor Surveillance System (BRFSS) surveyed Cecil County adults in 2010, and while adults reported that they felt supported mentally and socially (81%),[30] there were adults that reported experiencing four poor mental health days per month.[31] In addition to the impact on adults, youth experienced mental health issues too. **Table 6** shows comparative Maryland Youth Risk Behavior Survey (YRBS) data for youth mental health from 2014 (reported in the previous CHNA) and 2016.

[28] Maryland Vital Statistics Administration. Drug-Induced Death Rate [data file]. Accessed at: http://cecil.md.networkofcare.org/ph/ship-detail.aspx?id=md_ship29

[29] United States Drug Enforcement Administration. Drug Scheduling [webpage]. Accessed at: https://www.dea.gov/drug-scheduling

[30] Maryland Behavioral Risk Factor Surveillance System. Adequate Social and Emotional Support [data file]. Accessed at: https://www.uhcc.com/about-us/community-benefit/cecil-county-health-data/

[31] County Health Rankings. Poor Mental Health Days [data file]. Accessed at: http://www.countyhealthrankings.org/app/maryland/2019/measure/outcomes/42/data

Table 6. Depression and Thoughts of Suicide among Cecil County High School Students[32]

Survey Item	2014	2016
Percentage of students who felt so sad or hopeless almost every day for two weeks or more in a row that they stopped doing some usual activities during the past 12 months	29.4%	29.7%
Percentage of students who seriously considered attempting suicide during the past 12 months	18.5%	16.9%

Emergency Room Visits

Cecil County has experienced a steady decrease in the number of ER visits related to behavioral health disorders, which include: adjustment disorders, anxiety disorders, attention deficit disorders, disruptive behavior disorders, mood disorders, personality disorders, schizophrenia and other psychotic disorders, suicide and intentional self-inflicted injury, and miscellaneous mental disorders. **Figure 12** shows a year-to-year comparison between Cecil County and Maryland.

Figure 12. Emergency Room Visits for Mental Health Disorders[33]

Emergency Department Visit Rate for Mental Health Disorders

Rate (per 100,000 population)

	2010	2011	2012	2013	2014	2016
Cecil	7085.5	9974.8	10570.8	8901.6	5501.6	8684
Maryland	2780.8	3211.2	3500.6	3318.5	3442.6	3796.7

The 2017 Maryland State Health Improvement Process (SHIP) goal for rate of ER visits due to behavioral health disorders was 3,152.6 visits per 100,000 population. During the period from

[32] Maryland Youth Risk Behavior Survey/Youth Tobacco Survey (YRBS/YTS). 2016 and 2014 Youth Risk Behavior Survey Data [webpage]. Accessed at: https://phpa.health.maryland.gov/ccdpc/Reports/Pages/YRBS-Main.aspx

[33] Health Services Cost Review Commission. Research Level Statewide Outpatient Data Files. Rate of emergency room visits related to mental health disorders [data file]. Accessed at: https://www.uhcc.com/about-us/community-benefit/cecil-county-health-data/

2010-2013, Cecil County more than doubled the state's ER visit rate, primarily because of the increase of substance abuse and decrease of available health care providers to treat both substance abuse and behavioral health disorders. Improvements in 2014 may reflect the impact of programming established during the 2013-2016 Local Health Improvement Plan process where strategies focused on increasing access to behavioral health services and intervening with peer recovery advocates in the ER for patients with diagnoses of mental health disorders, as well as co-occurring diagnoses of mental health disorders and substance abuse.

Childhood Trauma

According to the Substance abuse and Mental Health Services Administration (SAMHSA), trauma results from "an event, series of events, or set of circumstances experienced by an individual as physically or emotionally harmful or life-threatening with lasting adverse effects on the individual's functioning and mental, physical, social, emotional, or spiritual well-being."[34] Traumatic events can take many forms, including: psychological, physical, or sexual abuse; neglect; serious accidents or life-threatening illness; community or school violence; witnessing or experiencing domestic violence; national disasters or terrorism; sexual exploitation; sudden or violent loss of a loved one; refugee or war experiences; military family-related stressors; and physical or sexual assault.[35]

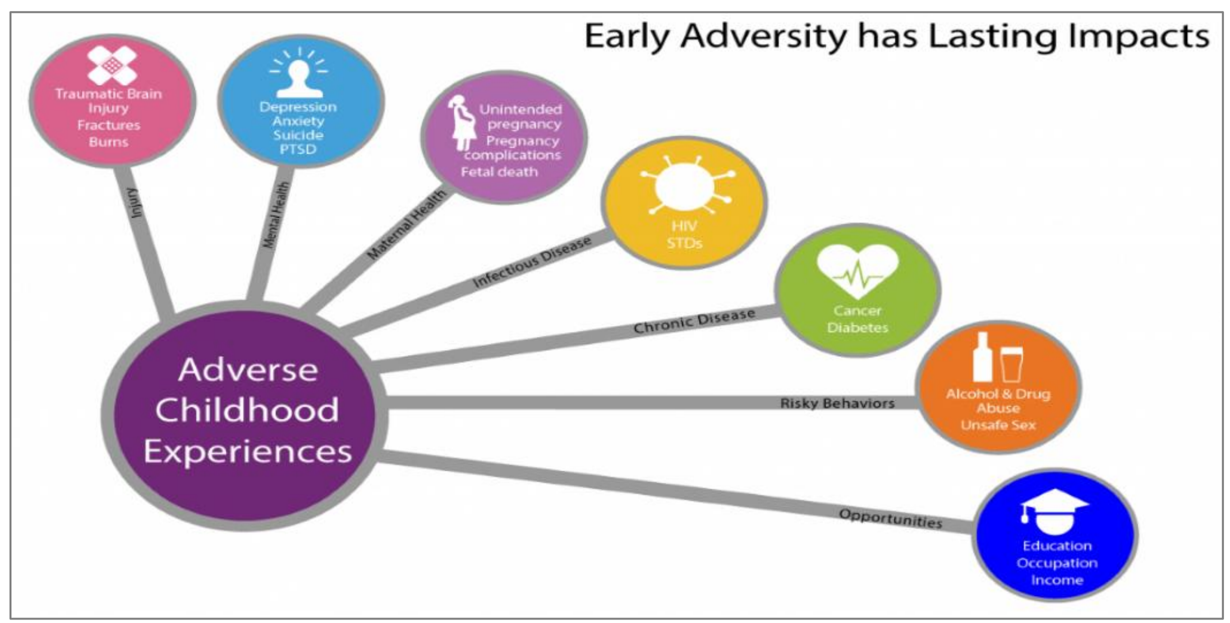
Adverse Childhood Experiences (ACEs) is the term commonly used to describe all types of abuse, neglect, and other potentially traumatic experiences that occur to people under the age of 18. ACEs have been linked to an increase in risky behaviors, chronic health conditions, low life potential and premature death. As the number of ACEs an individual has experienced increases, so does the risk for negative outcomes across an individual's life course. **Figure 13** details the many different negative consequences linked to ACEs.[36]

[34] Substance abuse and Mental Health Services Administration. Trauma [webpage]. Accessed at: https://www.integration.samhsa.gov/clinical-practice/trauma

[35] Substance abuse and Mental Health Services Administration. Understanding Childhood Trauma [webpage]. Accessed at: https://www.integration.samhsa.gov/child-trauma/understanding-child-trauma

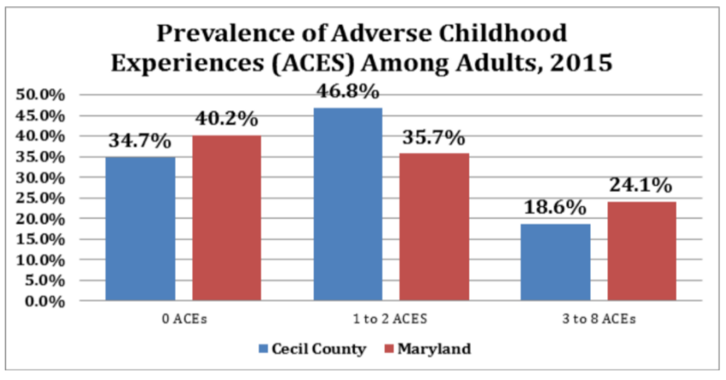
[36] Centers for Disease Control and Prevention. About Adverse Childhood Experiences [webpage]. Assessed at: https://www.cdc.gov/violenceprevention/childabuseandneglect/acestudy/aboutace.html

Figure 13. Impacts of Early Adversity[37]



The BRFSS Adverse Childhood Experiences module measures eight types of childhood trauma. Three types deal with abuse (physical abuse, emotional abuse, sexual abuse) and five types are related to household challenges (intimate partner violence, substance abuse in the household, mental illness in the household, parental separation or divorce, incarcerated household member). **Figure 14** shows the estimated prevalence of ACEs among Cecil County and Maryland adults in 2015. In Cecil County, nearly two-thirds (65.3%) of adults reported having experienced at least one of these ACEs during their childhood. This was higher than the estimated prevalence of ACEs among Maryland adults (59.8%) during this time period. Among Cecil County Adults at least one ACE, 18.6% reported experiencing at least three of the ACEs included in the BRFSS questionnaire. It is important to note that the ACE score does not capture the frequency or severity of any given ACE and is not comprehensive of all types of childhood trauma.

Figure 14. Prevalence of ACEs among Adults[38]



[37] Centers for Disease Control and Prevention. About Adverse Childhood Experiences [webpage]. Assessed at: https://www.cdc.gov/violenceprevention/childabuseandneglect/acestudy/aboutace.html

[38] Maryland Behavioral Risk Factor Surveillance System. 2015 Maryland BRFSS ACEs Data Tables 9 [data file]. Accessed at: https://phpa.health.maryland.gov/ccdpc/Reports/Documents/MD-BRFSS/2015_MD_BRFSS_ACEs_Data_Tables.pdf

Figure 15 details the prevalence of different types of ACEs included in Maryland's BRFSS questionnaire during 2015. The most commonly reported ACEs among Cecil County adults were Emotional Abuse (38.3%), Household Substance Use (25.4%), Parental Separation or Divorce (19.9%) and Household Mental Illness (15.8%).

Figure 15. Prevalence of ACES among Adults by Type[39]

Prevalence of Adverse Childhood Experiences (ACEs) among Adults, 2015		
	Cecil County	Maryland
Household Mental Illness	15.8%	15.0%
Household Substance Abuse	25.4%	24.9%
Incarcerated Household Member	*	7.6%
Parental Separation or Divorce	19.9%	27.5%
Intimate Partner Violence	*	17.4%
Emotional Abuse	38.3%	31.2%
Physical Abuse	*	16.9%
Sexual Abuse	*	11.1%

*Data suppressed due to denominator < 50

Health Needs Not Prioritized

There were health needs and barriers to care that were not feasible to address due to factors, like resource availability and community resources already in play (Table 7). For additional information on community resources available, please refer to **Appendix B** which provides an **Asset Inventory** of Cecil County community resources.

Table 7. Health Needs & Barriers to Care Identified but not Prioritized

Health Need	Rationale
Access to care	Ongoing efforts through health services to bring more providers into the community covering a range of specialties, including primary care and geriatric services.
Homelessness	CHAC does not have enough resources to manage this problem. Homeless providers in the area meet through the Cecil County Interagency Council on Homelessness to work through issues and find additional supports.
Chronic disease	Chronic diseases identified: arthritis, Asthma, COPD, heart disease, hypertension, obesity, stroke, and diabetes. There are simply not enough resources or time to address every single

[39] Maryland Behavioral Risk Factor Surveillance System. 2015 Maryland BRFSS ACEs Data Tables [data file]. Accessed at: https://phpa.health.maryland.gov/ccdpc/Reports/Documents/MD-BRFSS/2015_MD_BRFSS_ACEs_Data_Tables.pdf

	chronic disease. However, there are many programs in the community that manage these conditions and provide support.
Dental health	With the dental clinic closure starting a new effort to manage dental health needs in vulnerable communities was not feasible. The Dental Advisory Committee is currently working on strategies to increase awareness around dental health in vulnerable and underserved neighborhoods, primarily working through neighborhood community centers and local libraries.
Tobacco use	Tobacco use is a risk factor that is addressed through programs at the Cecil County Health Department and through the Maryland QuitLine.
Infectious & Communicable Diseases	There are programs in place through the Cecil County Health Department to address infectious and communicable disease.
Vaccination	Addressed by the schools, Cecil County Health Department, Union Hospital, and physician practices
Environmental health	Addressed by Dept of Natural Resources and Cecil County Heath Dept. Lack of available resources; too broad.
Injuries – Motor vehicle & pedestrian	Addressed by law enforcement and the Dept of Transportation
Child abuse and neglect	Handled through reports to CPS and medical exams from the Cecil County Child Advocacy Center
Domestic violence	Addressed by the domestic violence shelter, a part of the Department of Social Services, and local law enforcement
Violent Crime	Addressed by local and state law enforcement in Cecil County. Agencies and health care services also partner with law enforcement to support their efforts.
Suicide	Addressed through inpatient and outpatient programs in the community, mediation services like Eastern Shore Mobile Crisis, Upper Bay Counseling Services, and hot- and warm-lines providing real-time interventions to those at-risk for suicide
Barrier to Care	**Rationale**
Income & Poverty	May be addressed as part of each of the health priority areas. Requires stronger political will and funding to support overcoming these barriers. CHAC does not have either.
Employment	May be addressed as part of the Behavioral health priority. Otherwise addressed by Susquehanna Workforce Network, Cecil College, and other local non-profits, like those that assist veterans.
Health insurance availability & coverage	Addressed through the Maryland Health Connection and Seedco
Transportation	Addressed through voucher programs at Dept of Community Services and through local partnerships

Health care costs	Addressed through programs like: Union Hospital Community Assisted Medication Program (CAMP), the Union Hospital Cancer Program community outreach support, many outreach programs at the Cecil County Health Department, local pharmacy assistance programs, and the Department of Community Services assistance programs through MAPP, options counseling, and Community First Choice
Home Health eligibility	Addressed through programs that assist persons with the application process (ex. the county Department of Community Services)
Lack of knowledge (incl. low health literacy, lack of access to health information)	Opportunities to address health literacy are being explored for all priority areas
Public assistance qualifications	Addressed through Cecil County Health Department, the Department of Community Services, the Department of Social Services, and the certified health insurance navigators through Seedco and the Maryland Health Connection
Need for more medical and social supports	Addressed by Dept of Social Services, Dept of Community Services, Cecil County Health Department, and other social services
Educational Attainment	Addressed by local non-profits work with special and vulnerable populations who experience barriers to getting a GED; local federal credit unions provide education on how to affordably finance education; Cecil College offers scholarships to eligible individuals; and workplaces provide tuition reimbursement for applicable educational attainment (ex. workplace certifications or degrees)
Affordable housing	Affordable housing is a large barrier in Cecil County, especially among the poor and low-income. While wait lists are long for most housing programs, there are agencies in the community that manage this issue. Also, there are limited resources available to purchase existing or new properties to rehab in order to assist with programs like transitional housing. Land for new development is expensive. Some community work has been done to strike compromises with landlords to house homeless and other tenants who can demonstrate the ability to sustain housing.
Language barriers	Language barriers can be addressed through the use of interpreters. Most programs in the county have access to medical and social interpreters or contracted interpreter services. If access is a problem then there is opportunity to partner with organizations that have these resources. For patients or clients

	having trouble with language barriers there is opportunity for organizations to provide materials in other languages and/or hire or borrow professionals that can speak other languages.
Time limitations	In all the focus groups it was voiced that there are not enough doctors' offices open in the evening hours. Union Hospital and many other providers in the community have added evening and weekend hours for frequently used services, like primary care and urgent care.

PRIMARY DATA COLLECTION & ANALYSIS

Online Community Survey

The online community survey was developed by the Director of Health Planning (Cecil County Health Department) and Community Benefits Coordinator (Union Hospital) with input from the Community Health Advisory Committee (CHAC). The survey was created using Survey Monkey and consisted of twenty questions – a variety of multiple choice, Likert Scale selections, and free text entry (Appendix A). The survey was divided into four sections and asked questions about demographics, community health, quality of life, and access to health care. The survey took approximately 15 to 20 minutes to complete and 1,403 people completed the survey. The following sections provide an overview of the results from the online community survey.

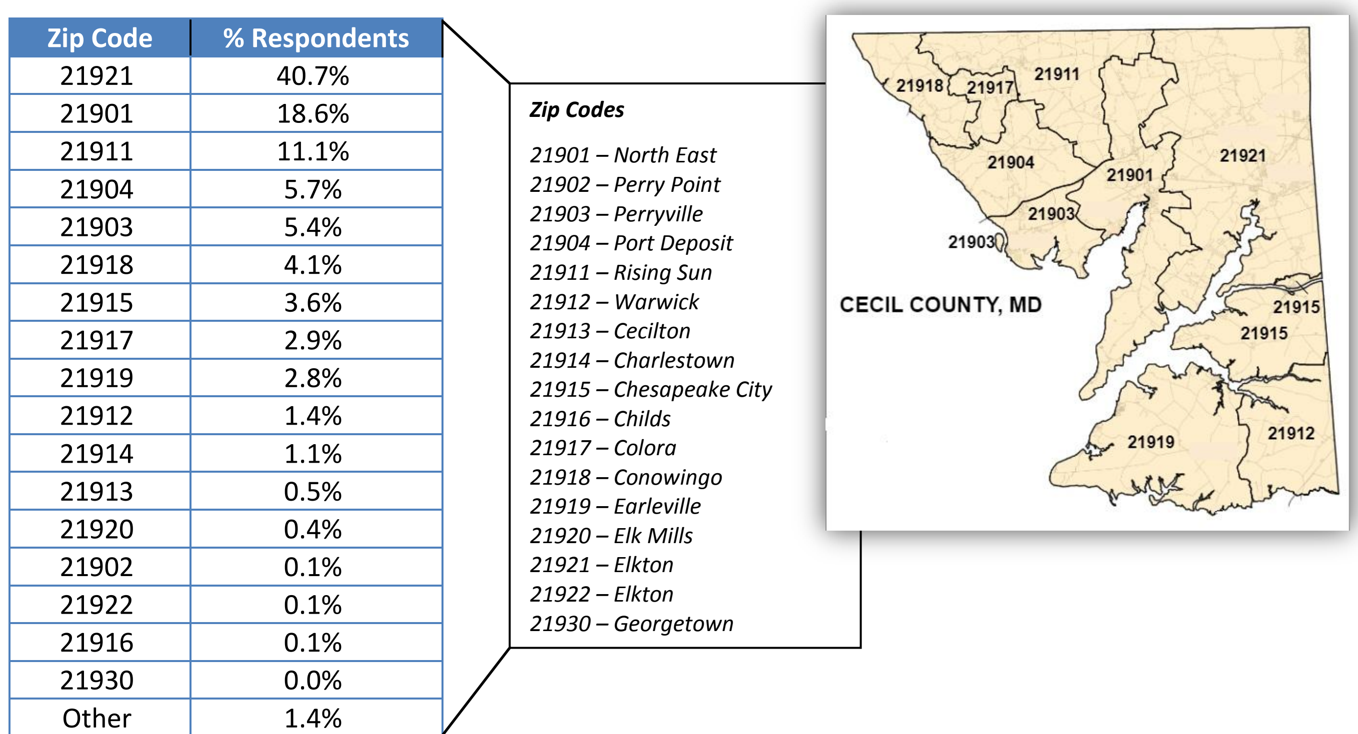
Demographics

In this section of the survey respondents were asked to answer questions related to their demographics.

Zip Codes

Survey respondents were asked to provide their zip code. Respondents to the survey were distributed across Cecil County zip codes. The highest proportion of survey respondents (40.7%) were from the 21921 zip code area. Another 18.6% and 11.1% of survey respondents reside in the 21901 and 21911 zip code areas respectively. **Table 8** contains a listing of respondents' zip codes.

Table 8. Zip Codes in Cecil County



Zip Code	% Respondents
21921	40.7%
21901	18.6%
21911	11.1%
21904	5.7%
21903	5.4%
21918	4.1%
21915	3.6%
21917	2.9%
21919	2.8%
21912	1.4%
21914	1.1%
21913	0.5%
21920	0.4%
21902	0.1%
21922	0.1%
21916	0.1%
21930	0.0%
Other	1.4%

Demographic Profile

A demographic profile of respondents who completed the online community survey is included in **Table 9.** Females made up 81.2% of survey respondents, while males made up 18.6%. An additional 0.1% of survey respondents identified as gender fluid. By age, the largest proportion of respondents (35.9%) was between 40 and 54 years of age. An additional 24.8% of respondents were between 55 and 64 years of age, 19.1% were between 35 and 44 years of age, 13.2% were between 25 and 34 years of age, 12.7% were 65 years of age or older, and 4.4% were between 18 and 24 years of age. Residents identifying as White comprised 95.3% of survey respondents, with Black or African Americans representing 2.9% of respondents, Some Other Race representing 2.1% of respondents, American Indians or Alaskan Natives representing 1.2% of respondents, and Asians representing 0.6% of respondents. An additional 2.4% of respondents identified their ethnicity as being Hispanic, Latino or of Spanish origin.

The survey also asked respondents about their marital status, level of educational attainment and household income. Among respondents, nearly two thirds (64.6%) identified as being married. The largest proportion of respondents (29.9%) answered that they have Some College, No Degree, followed by High School Graduate or GED (19.0%), Graduate or Professional Degree (18.2%), Bachelor's Degree (17.4%), and Associate's Degree (11.9%). Nearly two percent of respondents had not completed high school. Among those answering "Other," most had completed a technical or trade school. In addition, 30.9% of respondents have a household income of over $100,000, while 5.2% have a household income of less than $15,000.

Table 9. Demographics of Survey Respondents

Gender	
Male	18.6%
Female	81.2%
Gender-fluid	0.1%
Age	
18-25	7.9%
26-39	23.0%
40-54	37.1%
55-64	23.2%
65 or Older	8.7%
Race (All that Apply)	
White	95.3%
Black or African American	2.9%
Asian	0.6%
American Indian or Alaskan Native	1.2%
Native Hawaiian or Other Pacific Islander	0.0%
Some Other Race	2.1%

Ethnicity	
Hispanic, Latino, or Spanish Origin	2.4%
Marital Status	
Married	64.6%
Divorced	15.6%
Widowed	4.7%
Separated	2.1%
Never Married	13.0%
Educational Attainment	
No High School	0.4%
Some High School, No Diploma	1.4%
High School Graduate or GED	19.0%
Some College, No Degree	29.9%
Associate's Degree	11.9%
Bachelor's Degree	17.4%
Graduate or Professional Degree	18.2%
Other	1.7%
Household Income	
Less than $15,000	5.2%
$15,000 - $24,999	
$25,000 - $ 34,999	13.5%
$35,000 - $49,999	18.3%
$50,000 - $74,999	18.1%
$75,999 - $99,999	43.0%
$100,000 or More	30.9%

Community Health

In this section of the survey respondents were asked to answer questions related to the health of the Cecil County community.

Important Health Issues

Survey respondents were asked to select the three most important health issues in Cecil County from a list of 26 health issues. Substance Abuse was by far the most concerning health issue, with three out of every four (75.3%) of survey respondents choosing it as one of the three most important health issues in the county. Additionally, Mental Health (37.7%) and Homelessness (32.9%) were both selected as one of the three most important health issues by approximately one third of survey respondents. A complete listing of responses is included in the table below.

Table 10. Important Health Issues

Rank	Health Issue	% Respondents
1	Substance Abuse	75.3%
2	Mental Health	37.7%
3	Homelessness	32.9%
4	Access to Health Services	18.9%
5	Poverty	15.7%
6	Obesity	14.2%
7	Affordable Housing	13.9%
8	Child Abuse and Neglect	13.5%
9	Dental Health	10.9%
10	Cancer	10.7%
11	Violent Crime	7.9%
12	Unemployment	6.8%
13	Childhood Trauma	5.9%
14	Educational Attainment	5.6%
15	Diabetes	5.0%
16	Heart Disease and Stroke	4.5%
17	Domestic Violence	4.4%
18	Tobacco Use	4.4%
19	Environmental Health	4.3%
20	Maternal, Infant and Child Health	3.8%
21	Motor Vehicle/ Pedestrian Injuries	3.3%
22	High Blood Pressure	2.9%
23	Suicide	2.9%
24	Respiratory/ Lung Disease	1.7%
25	Sexually Transmitted Diseases (STDs)	1.2%
26	Immunization and Infectious Disease	1.1%

Respondents were also given the opportunity to write in other important health issues in the county that were not among those listed. Of the 74 responses, the majority of comments were related to substance abuse (24) and the accessibility and quality of health services in the county (15). Responses included:

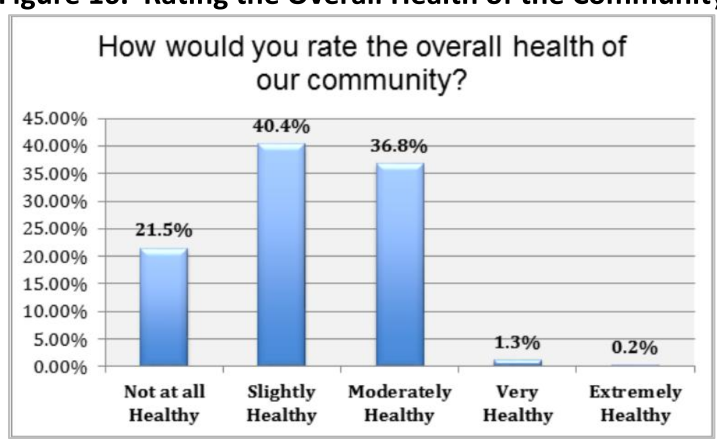
- *"Affordability of health services"*
- *"Senior healthcare. Seniors have no dental or eye care and medication costs are very high"*
- *"Senior care (dementia, alzheimer's, etc)"*
- *"Drug addiction"*
- *" Lack of public transportation and walkways"*
- *"Young people dying of overdoses. We can do better"*
- *"The out of control Oxy-pill epidemic"*

- *"Doctors are overwhelmed with patients . Getting appointments is almost impossible for a new patient"*
- *"Affordable insurance"*
- *"Helping someone with a disability"*
- *"Finding doctors to listen to your concerns"*
- *"Doctors available for people with state insurance"*
- *"Medical Specialists"*
- *"Heroin! Our community is losing the battle"*
- *"Healthy diets and lifestyle choices"*
- *"Care for adults with certain disabilities from childhood"*
- "Smoking"
- "*Drinkable water"*
- *"The mental health issue is first all other are interlinked."*
- *"Behavior in school. Need therapy for these kids."*
- "*Lack of public transportation and walkways."*
- *"Child mental health"*
- *"Mental health services for children and adults with disabilities"*
- *"Sexual assault"*
- *"Radon; well water safety"*
- *"Quality Professional Medical Providers + Sub-specialty"*
- "*Help with transporting elderly to appointments"*
- *"Nonviolent crime"*
- *"Tick and mosquito illnesses"*
- *"Unemployable due to substance abuse"*

Health of the Community

Survey respondents were asked to rate the overall health of the community (Figure 16). A majority of respondents (61.9%) rated the overall health of the community as being not at all healthy or slightly healthy while only 1.5% rated the overall health of the community as being very healthy or extremely healthy. In general, respondents feel that the overall health of the community in Cecil County is poor.

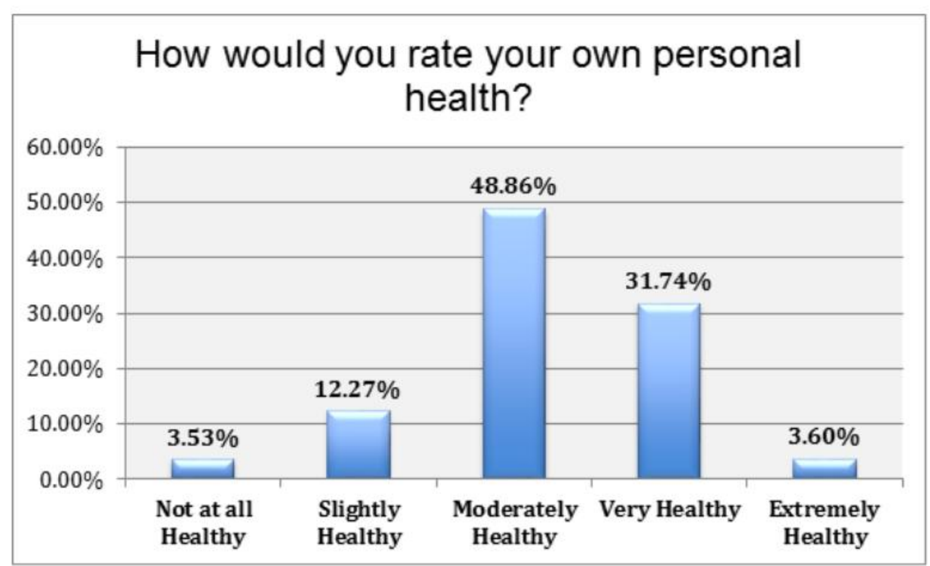
Figure 16. Rating the Overall Health of the Community



Personal Health

Survey respondents were also asked to rate their own personal health (Figure 17). Nearly half (48.9%) of respondents rated their personal health as moderately healthy, while approximately one third (35.3%) rated their personal health as being very healthy or extremely healthy and less than a quarter (21.6%) rated their personal health as being slightly healthy or not at all healthy. In general, respondents feel more positive about their personal health than the overall health of the community.

Figure 17. Rating Personal Health



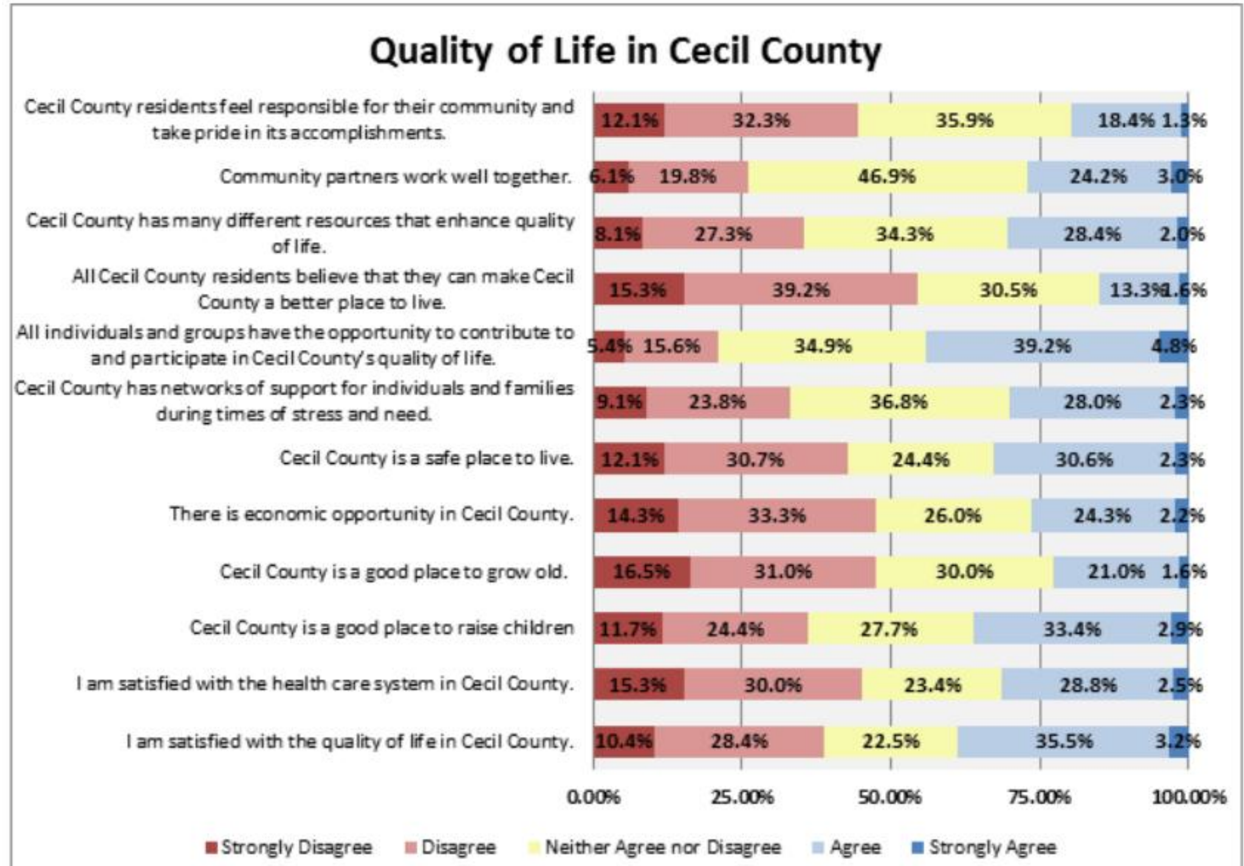
Quality of Life

In this section of the survey respondents were asked about the quality of life in Cecil County.

Quality of Life in Cecil County

Survey respondents were asked to rate twelve statements about the quality of life in Cecil County on a scale from 1 (strongly disagree) through 5 (strongly agree) (Figure 18). There were a higher proportion of negative responses (disagree or strongly disagree) than positive responses (agree or strongly agree) for 9 out of 12 statements. Respondents felt most negatively about the statements “All Cecil County residents believe that they can make Cecil County a better place to live,” “There is economic opportunity in Cecil County,” and “Cecil County is a good place to grow old. For each of these statements, approximately half of respondents answered “strongly disagree” or “disagree.” Respondents felt most positively about the statement “All individuals and groups have the opportunity to contribute to and participate in Cecil County’s quality of life”. This statement received nearly double the amount of positive responses than negative responses. There is an interesting juxtaposition between belief data (top negative response) and opportunity data (top positive response).

Figure 18. Quality of Life Perceptions



Access to Health Care

In this section of the survey respondents were asked questions related to health care access in Cecil County.

Health Literacy

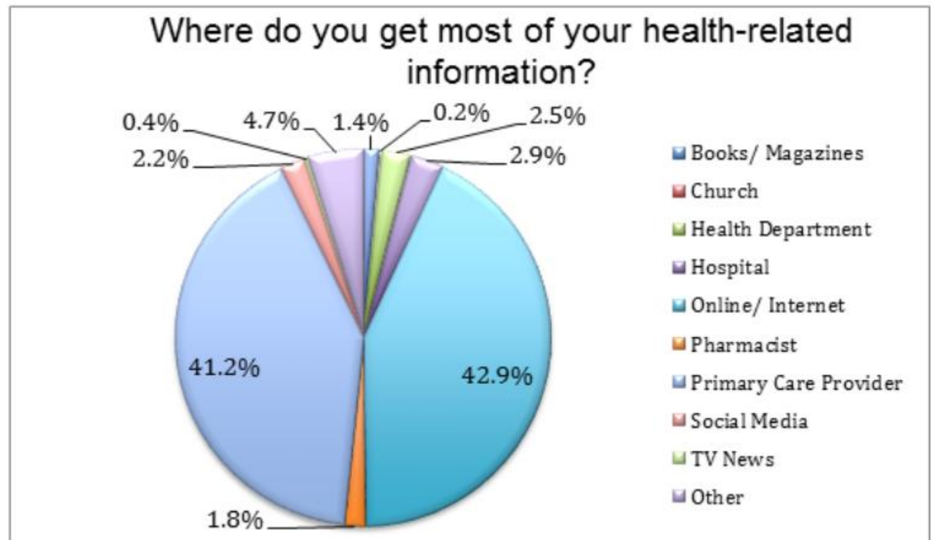
Respondents were asked to rate their ability to get health information, understand it and use it (Figure 19). Health literacy can play a large role in a person's ability to understand health information and act upon the information they receive. Over half of respondents (58.6%) answered that they are either very able or extremely able to get health information, understand it, and use it.

Figure 19. Personal Use of Health Information

Source of Health Information

Respondents were asked where they get most of their health-related information from (Figure 20). A majority of respondents reported getting most of their health related information from either the internet (42.9%) or from their primary care provider (41.2%). Among those respondents selecting other, the most common responses were professional journals and through their employment in the health care field.

Figure 20. Sources of Health Information

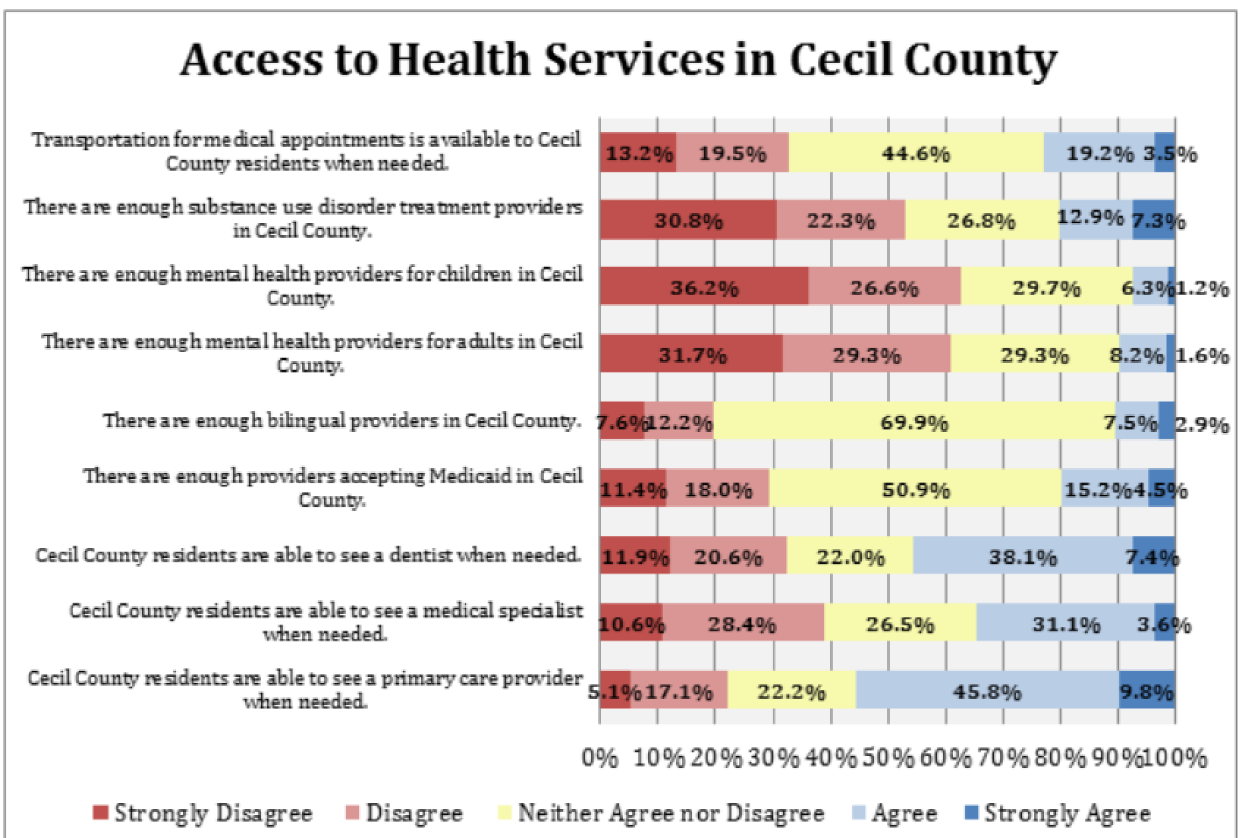


Health Care Access

Respondents were asked to rate nine statements about access to health care services in Cecil County on a scale from 1 (strongly disagree) through 5 (strongly agree) (Figure 21). There were a higher proportion of negative responses (disagree or strongly disagree) than positive responses (agree or strongly agree) for 7 out of 9 statements. Respondents felt most negatively about the statements “There are enough mental health providers for children

in Cecil County," "There are enough mental health providers for adults in Cecil County," and "There are enough substance use disorder treatment providers for adults in Cecil County," with over half of respondents answering negatively. Respondents felt most positively about the statement "Cecil County residents are able to see a primary care provider when needed," with over half of respondents answering positively and "Cecil County residents are able to see a dentist when needed," with 45.5% of respondents answering positively.

Figure 21. Health Services Access



Barriers to Care

Respondents were asked to select the three most significant barriers to accessing health services in Cecil County (Figure 22). The most commonly reported barrier was the inability to pay out of pocket expenses (57.2%). Health care coverage not covering needed services (33.8%), the availability of doctors or other providers/ appointments (30.4%), time limitations (25.9%), and basic needs not being met (25.6%) were also reported as significant barriers by many respondents. Many of the written responses focused on insufficient health insurance coverage, the availability of providers and specialists in Cecil County, and an individual's personal choices in seeking services.

Figure 22. Indentifying Barriers to Care

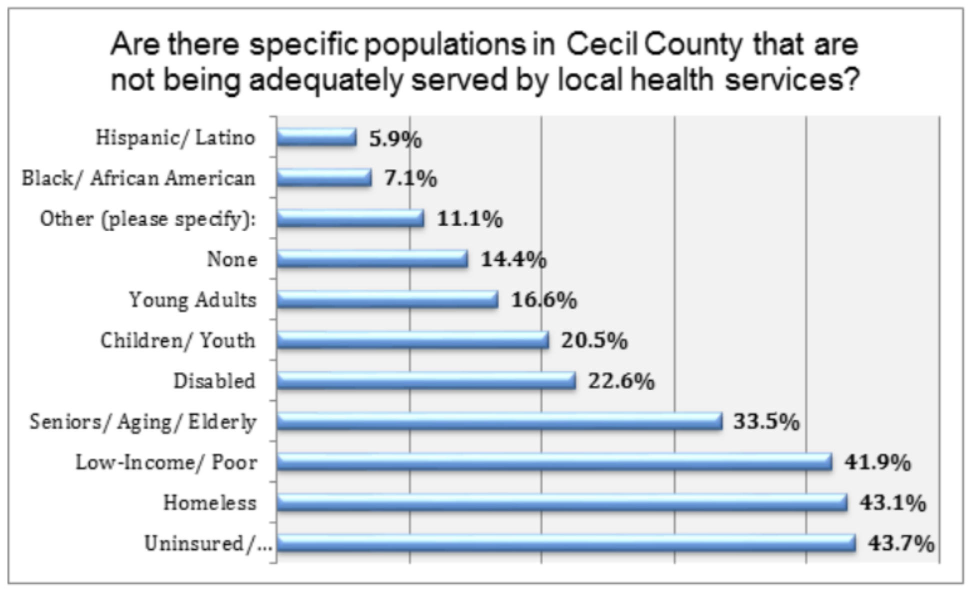
What are the most significant barriers to accessing health services in Cecil County?

Barrier	Percent
Language/ Cultural Barriers	2.6%
No Barriers	5.1%
Other	6.0%
Lack of Child Care	6.5%
Lack of Trust in Medical Services	12.8%
Difficult to Understand/ Navigate Health...	18.7%
Lack of Health Insurance	21.5%
Lack of Dental Insurance	22.2%
Lack of Transportation	22.9%
Basic Needs Not Met	25.6%
Time Limitations	25.9%
Availability of Doctors or Other Providers/...	30.4%
Health Care Coverage Does Not Cover...	33.8%
Inability to Pay Out of Pocket Expenses	57.2%

Under-Served Populations

Respondents were asked if there were specific populations in Cecil County that are not being adequately served by local health services (Figure 23). The most commonly reported populations were the uninsured/underinsured (43.7%), homeless (43.1%), low-income and poor (41.9%), and Seniors/Aging/Elderly (33.5%). In addition to the populations identified below, the middle class, veterans, those living outside of Elkton, LGBTQ, and individuals with behavioral health disorders were mentioned as populations that are not being adequately served.

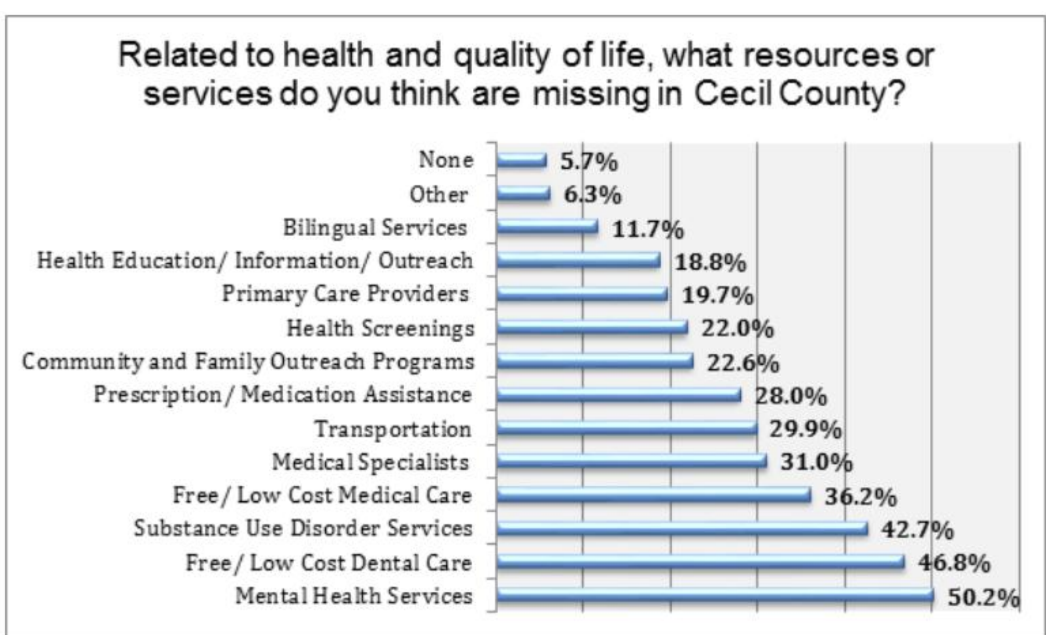
Figure 23. Identifying Under-Served Populations



Missing Resources and Services

Respondents were asked to identify resources or services related to health and quality of life that are missing in Cecil County (Figure 24). The most commonly reported resources or services that are missing in the county are mental health services (50.2%), free or low cost dental care (46.8%), substance use disorder services (42.7%), and free or low cost medical care (36.2%). Other resources or services that are missing in Cecil County mentioned by survey respondents include transportation, job training, parks and recreation, assistance for elderly individuals, mental and behavioral health services for children and adults, trauma therapy, quality health care, homeless services, and a one stop shop for services.

Figure 24. Identifying Missing Resources



Additional Information

Health and Quality of Life

Survey respondents were asked to share additional information about the health and quality of life of Cecil County residents. Many of the responses were related to the availability of medical specialists and high rates of substance abuse in Cecil County. Lack of mental health providers, homelessness, the cost of health services, and the need for transportation services were also frequently mentioned as concerns. Respondents also indicated the need for more health education in the community and the need for people to take personal responsibility for their health. A selection of responses is provided below:

- *"We need to increase funding for education and prevention as it relates to substance abuse and the drug epidemic!"*
- *"People have a hard time justifying preventative health and dental care because they can't afford the cost. They wait until they NEED to go. That's not good for their overall health. Most people in Cecil County barely make a living wage to pay the rent. Medical needs aren't a priority until it's an emergency or the self-medicate."*

- *“The community needs to be motivated to get healthy. Not everyone will take the opportunity but start with providing the children somewhere to go and play safely like a community center in each town that offers programs free to more than just one age group. If the children stay active and positive the chances of drug abuse are reduced dramatically.”*
- *“There basically are no psychiatrists or psychologists in the county that anyone can see quickly or regularly unless on assistance or court ordered.”*
- *“I really think two of the big issues that need to be addressed in Cecil County is substance abuse and homelessness (especially homelessness in Elkton, it worries me that there aren't enough services being provided to help these people). Also the topic of substance abuse is concerning to me because it makes me wary of raising my kids in Cecil County (or at least in Elkton) in the future.”*
- *“Not enough specialists in the area. To see a Hepatologist, Oncologist, Orthopedic, Rheumatoid etc...you're required to travel to Delaware or Baltimore. Cecil County needs to start recruiting for specialists in all fields for its residents.”*
- “*Many people have health insurance but they can’t afford their deductible or copays or medications.”*
- *“The drug use is out of control and the children growing up in these homes are exposed to trauma and abuse. When they come to school, they are often have difficulty in the areas of academics or behaviors. When you are living in trauma you aren’t going to be able to learn-your brain is not ready to learn. Often times these children bring unwanted behaviors to school. They are not “bad” children-they just don’t have the upbringing and support to succeed. This in turn exposes the other children in the classroom to 2nd hand trauma. And there are not enough mental health providers to support the children and their families. So...the cycle of trauma and poverty continues.”*
- *“We need to find adequate ways of helping our substance abuse population. Most of the negative issues in the county stem from addiction. We need to start substance abuse education at the elementary school level and have more free after school opportunities for children. Hopefully that would allow them to not be home alone and getting into trouble.”*

How Respondents Heard about the Survey

The last question of the survey asked respondents how they heard about the online community survey. Over half of respondents reported hearing about the survey through Facebook or other social media postings. The Health Department, Union Hospital, Cecil Whig, Cecil County Public Library, Cecil County Fair, West Cecil Health Center and word of mouth were also common responses.

Focus Groups

The CHNA planning team held focus groups with four vulnerable populations to get input on the health and quality of life issues in Cecil County. Populations included: homeless, veterans, older adults, and low-income or ALICE. There was also a fifth focus group held with African Americans who discussed health disparities in Cecil County.

Sessions

Each session included a description of the CHNA, the purpose of the focus group, an introduction of the facilitators, the rules of engagement, and a reference worksheet with session questions. Participation was anonymous; no sign-in information was collected. A head count provided number of participants. The average was 10 participants. Focus group sessions lasted 1-1.5 hours based on group size, when the meal or food was accessed, and how many participants chose to participate.

Facilitation

There was a facilitator and a scribe. The scribe recorded session information up on large wall-hanging sheets visible to the whole group. Participants were asked to respond to the following questions:

1) What are the greatest strengths of our community?
2) What do you think are the most important health issues in Cecil County?
3) What would most improve the quality of life in Cecil County?
4) What are the most significant barriers to accessing health care in Cecil County?
5) Related to health and quality of life, what resources or services do you think are missing in Cecil County?

Responses

Because of the richness of the data, responses were analyzed based on the number of times a health or quality of life theme was referenced. Information listed in the table below collates responses from all focus groups. Additional information about responses specific to each focus group is available upon request. Major health themes included: diabetes, mental health, nutrition, and substance use. Major quality of life themes included: access to health services, transportation, aging, and health insurance.

Table 11. Focus Group Responses

Health Theme	# Mentions
Diabetes	3
Mental health	3
Nutrition	3
Substance use	3
Cancer	2
Tobacco use	2
Allergies	1
Arthritis	1

COPD	1
Dental health	1
Hygiene	1
Hypertension	1
Lung disease	1
Obesity	1
Stroke	1

Quality of Life Theme	# Mentions
Access to health services	4
Transportation	4
Aging	3
Health insurance	3
Poverty	2
Resource availability	2
Community trust	1
Cost of care	1
Education	1
Homelessness	1
Law enforcement	1
Trash	1

Interviews

The CHNA planning team added interviews to this year's CHNA in order to add another layer of depth to the primary data collection process. Interviews also provided key insights into health care and access to care from the perspectives of community leaders engaged in supporting the community. Each interview was conducted with between 2 and 5 community leaders, depending on the organization or group consulted. Altogether there were 12 interviews.

Sessions

Each session included a description of the CHNA, the purpose of the interview, and a reference worksheet with session questions. All interviews are anonymous and all were recorded with permission of the interviewees obtained prior to the start of the interviews. All recorded material is confidential and is stored in the cloud. Data is only accessible by Jean-Marie Kelly (hospital) and Dan Coulter (health department).

Facilitation

One interviewer facilitated the sessions which lasted 30 minutes-1.5 hours, depending on the number of interviewees and the amount of time spent on each question. The average time was one hour. Interviewees were asked to answer the following questions:

1) What work do you/your organization do in the community?
2) How would you rate the health and quality of life in Cecil County?
3) Has the health and quality of life in Cecil County improved, stayed the same, or declined over the past few years?
4) Are there groups of people in Cecil County whose health or quality of life is not as good as others?
5) What barriers, if any, exist to improving the health and quality of life of Cecil County residents?
6) Do you feel a person's ability to access and use health information is important? Why?
7) What are the most important health and quality of life issues in Cecil County?
8) What needs to be done to address these issues?
9) If you had unlimited funds, what is the one thing you would do to improve the health and quality of life of Cecil County residents?
10) Is there anything else you would like to add?

Responses

Because of the richness of the data, responses were analyzed based on the number of times a health or quality of life theme was referenced. Information listed in the table below collates responses from all focus groups. Additional information about responses specific to each focus group is available upon request. Major health themes included: substance use, mental health, and cancer. Major quality of life themes included: access to health services, transportation, homelessness, and poverty.

Table 12. Interview Responses by Theme

Health Theme	# Mentions
Substance use	8
Mental health	7
Cancer	5
COPD	2
Dental health	2
Diabetes	2
Heart disease	2
Nutrition	2
Obesity	2
Tobacco use	2
Arthritis	1
Asthma	1
Child & Family health	1
Childhood trauma	1
Chronic disease (all)	1
Lung disease	1
Stroke	1

Quality of Life Theme	# Mentions
Access to health services	7
Transportation	7
Homelessness	6
Poverty	5
Economic issues	4
Health insurance	4
Resource availability	3
Care coordination	2
Funding	2
Health literacy	2
Public perception	2
Utilization	2
Cultural competency	1
Aging	1
Disabilities	1
Education	1
Emergency preparedness	1
Health disparities	1
Housing	1
Language	1
Partnerships	1
Provider support	1
Reimbursement	1
Social determinants (all)	1

SECONDARY DATA ANALYSIS

Secondary Data

Secondary data for the CHNA was obtained from local, state, and national sources and the data analysis was formatted according to data categories from the "Community Health Status Assessment Core Indicators List" from the National Association for County and City Health Officials (NACCHO).[40] The data categories include:

- Health Resources
- Quality of Life
- Social Determinants
- Societal Health
- Behavioral Risk Factors
- Environmental Health
- Maternal and Child Health
- Communicable Disease
- Mortality

The categories are described in greater detail below and include Cecil County health and socio-economic data per category.

Health Resources

Health care provider availability can influence whether the population is able to regularly seek care. The health care landscape is defined by the following factors in Cecil County:

- Union Hospital has 16 physician practices, including two primary care practices;
- Many private practice providers have offices around the county;
- Local and chain pharmacies provide minute-clinics with quick access to primary care services; and
- There are around five urgent care centers with extended hours.

The following changes in health care provider data for Cecil County have been observed between the previous CHNA and this current assessment:

- **Personal health care provider**[41] **decrease**
    - Current: In 2016, 85.9% of people reported that they had a personal doctor or health care provider
    - Previous: In 2014, 90.5% of people reported that they had a regular source of primary care

[40] NACCHO. *White Paper: Community Health Status Assessment Core Health Indicators List.* Accessed at: https://www.naccho.org/
[41] Maryland Behavioral Risk Factor Surveillance System. Personal Doctor or Health Care Provider [data file]. Accessed at: https://phpa.health.maryland.gov/ccdpc/Reports/Pages/brfss.aspx

- **Primary care provider rate**[42] **increase**
  - Current: In 2016, there were 38 primary care providers per 100,000 population
  - Previous: In 2012, there were 35 primary care providers per 100,000 population
- **Non-physician primary care providers**[43] **increase**
  - Current: In 2018, there were 52 providers per 100,000 population
  - Previous: In 2014, there were 29 providers per 100,000 population
- **Dental providers**[44] **no change**
  - Current: In 2016, the ratio of population to dentists was 2,503 people to 1 dentist
  - Previous: In 2014, the ratio of population to dentists was 2,560 people to 1 dentist

Despite the increasing rate of providers, two factors remain constant. First, in Cecil County there are significant wait times for gap services like endocrinology and OB/GYN. These services are not widely available in the county and therefore many patients rely on the medical care provided. Also, there are services that have left the county altogether, like cardio-pulmonary rehabilitation, a primary resource for patients with heart and lung conditions. Without available appointments, patients are forced to seek care either down-state in the Baltimore area or out-of-state, which both require longer drive times and the possibility care being out-of-network. Furthermore, if patients with access issues have Medicaid, out-of-state options are not open to them because their insurance will not cover the care.

Second, the health care provider workforce is changing. More and more providers are aging out of the field (retiring) and there are not enough providers to take their place. This causes a shortage. In Cecil County, the provider shortage is primarily due to geographic and economic factors. Newly graduated physicians, extenders, and non-physician providers are not always looking to move to rural areas. They are also looking for higher paid positions with incentives within larger practices and hospital systems. Union Hospital is a small, community hospital located in a rural community, and is often unable to offer competitive compensation and benefits packages when compared to health systems like Christiana Care in Newark and Wilmington, Delaware or the University of Maryland Medical System with locations in eastern and central Maryland. In fact, a majority of Union Hospital providers live in Delaware or Baltimore and commute to Elkton.

Quality of Life

Quality of life indicates an overall sense of well-being for individuals with a supportive community environment. Quality of life can be quantified using indicators related to the determinants of health and community-well being, as well as qualitative perceptions from

---

[42] County Health Rankings. Access to Primary Care Physicians, Cecil County, Maryland [data file]. Accessed at: https://www.countyhealthrankings.org/app/maryland/2019/rankings/cecil/county/outcomes/overall/snapshot

[43] County Health Rankings. Non-Physician Primary Care Provider Rate, Cecil County, Maryland [data file]. Accessed at: https://www.countyhealthrankings.org/app/maryland/2019/rankings/cecil/county/outcomes/overall/snapshot

[44] County Health Rankings. Dentists, Cecil County, Maryland [data file]. Accessed at: http://www.countyhealthrankings.org/app/maryland/2016/measure/factors/88/data

community residents about aspects of their neighborhoods that either enhance or diminish their quality of life.

The following quality perception data was observed among Cecil County adult residents between the previous CHNA and this current assessment:

- **Quality of health care received**[45] **no change**
  - Current (same as previous): In 2014, satisfaction with health care received was 96.9%

As stated before, other indicators of quality of life include perceptions about the community people live in, like public safety, the environment, access to social and other community services. Since there is not a lot of national or state data that can be drilled down to the county level, the CHNA planning team instituted an online community survey that collects local-level data on how the residents of Cecil County perceive their quality of life. It is the intention of the CHNA planning team to build upon this data with every CHNA cycle so that a more robust quality of life data is available for the community's use in order to enhance the social, economic, health, and political structures that support the growth and development of Cecil County.

Social Determinants of Health

There are many determinants that affect health, health outcomes, and access to health care services. In this section, several social determinants of health are discussed in terms of how they impact health outcomes and health behaviors in Cecil County. Healthy People 2020 defines the social determinants of health as, "conditions in the environments in which people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks." Social determinants are part of the social constructs of a society, as well as barriers that must be managed in order to enhance the health and wellbeing of a population. In general, there are five domains of social determinants of health: 1) economic stability, 2) built environment, 3) education, 4) social and community context, and 5) health care systems.[46] The following indicators are categorized by their social determinant domain.

Economic Stability

Income, employment, and transportation are indicators normally associated with this domain. For income and poverty, please refer to the data presented in the Executive Summary.

ALICE

ALICE or the Asset Limited Income Constrained Employed population holds jobs like child care workers, cashiers, waitresses, home health aides, sanitation workers, and office clerks. These are people who have jobs but also have little to no savings, cannot always pay the bills, and in

[45] Maryland Behavioral Risk Factor Surveillance System. Percentage of Adults who Report that they are Satisfied with the Health Care that they Received, Cecil County, Maryland [data file]. Accessed at: https://phpa.health.maryland.gov/ccdpc/Reports/Pages/brfss.aspx

[46] Healthy People 2020. Social Determinants of Health [webpage]. Accessed at: https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-of-health

many cases are forced to make tough choices between things like keeping the utilities on and purchasing medications or feeding their children and putting gas in their car for the commute to work. ALICE individuals are often one emergency away from losing a livelihood, becoming homeless, or not being able to feed the family.

Figure 25 shows the monetary difference between living as a single adult and living as a family of four with both children under 5 years old. To put this into further context, if the family is only making minimum wage and one of the adults is disabled and cannot work (and perhaps does not qualify for disability based on the total household income), this puts the family at a huge disadvantage to meet the cost of living and still function in a way that provides safety and health for the whole family.

Figure 25. Household Survival Budget, Cecil County, 2016[47]

Household Survival Budget - Cecil, Maryland, 2016

	Single Adult	2 Adults, 1 Infant, 1 Preschooler
Housing	$830	$1,210
Child Care	$0	$1,216
Food	$182	$603
Transportation	$397	$794
Health Care	$235	$884
Technology	$55	$75
Miscellaneous	$208	$556
Taxes	$384	$780
Monthly Total	$2,291	$6,118
ANNUAL TOTAL	$27,492	$73,416
Hourly Wage	$13.75	$36.71

Discussing the ALICE population is important because their social issues make them more at-risk for higher disease burden and make managing risk factors like diet, exercise, tobacco use, and social supports difficult or even impossible. Their health literacy may also be low or non-existent. In addition, these individuals, due to their employment and asset status, do not qualify for many governmental assistance programs and/or Medicaid. Furthermore, because of these factors, this population could be considered rising risk for higher rates of emergency room visits, admissions, and readmissions. They are the uncontrolled diabetics, the children with mismanaged asthma, and the older adults with severe, debilitating Chronic Obstructive Pulmonary Disease (COPD). Many of their health risk factors are preventable, but due to their constrained life circumstances, they suffer.

[47] United Way. Research Center – Selected State: Maryland State Level Details [data file]. Accessed at: https://www.unitedforalice.org/maryland

The next series of figures show the density of ALICE households in Cecil County in 2016 by age, race/ethnicity, income, and families with children.[48] Notice how the percentage or number of ALICE households is greater than households designated as impoverished.

Figure 26. Households by Age, Cecil County

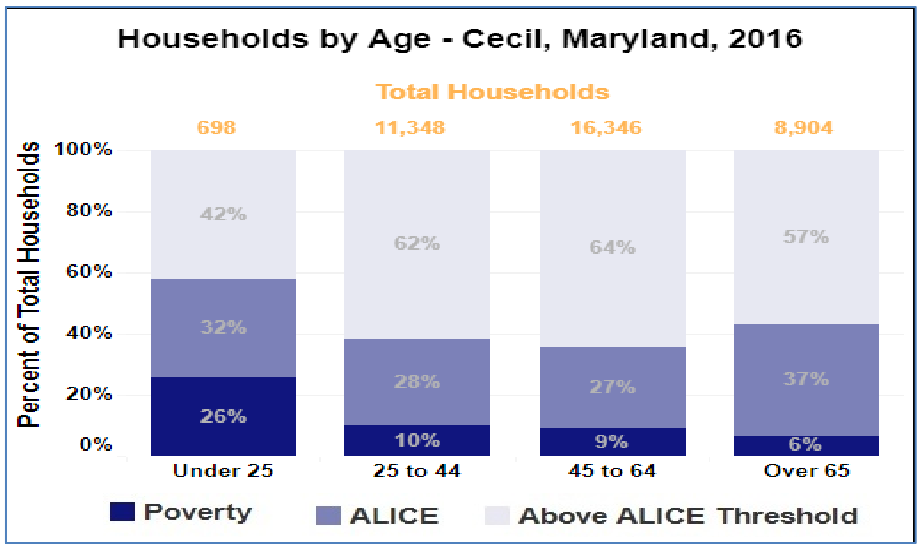
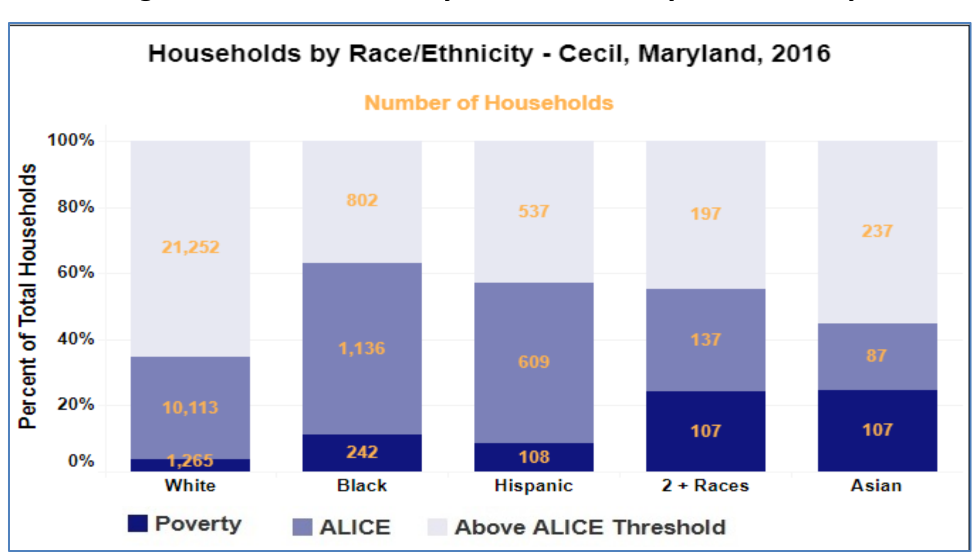


Figure 27. Households by Race & Ethnicity, Cecil County



[48] United Way. Research Center – Selected State: Maryland State Level Details [data files]. Accessed at: https://www.unitedforalice.org/maryland

Figure 28. Households by Income, Cecil County

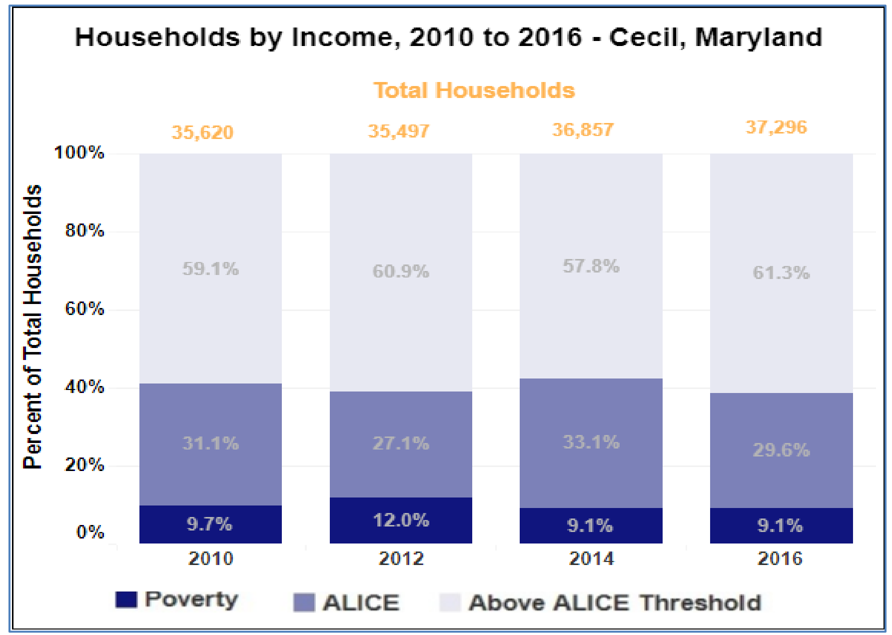
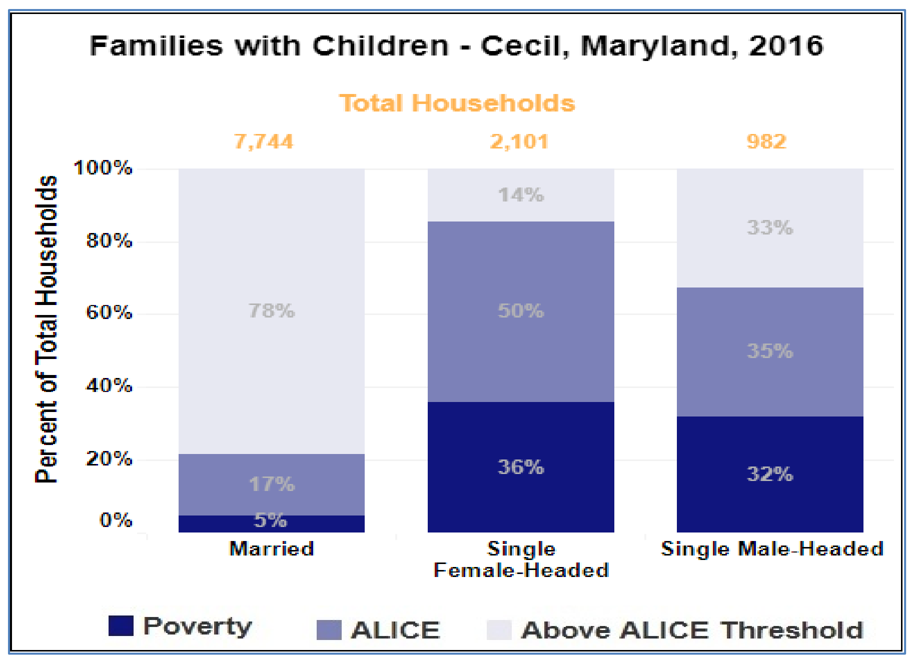


Figure 29. Families with Children, Cecil County



Transportation

Access to transportation is a major factor in determining access to health care in a community. The following transportation data was reported for Cecil County households between the previous CHNA and this current assessment:

- **Households without a vehicle**[49] **no change**
  - Current: In 2017, 5.1% of households did not own a vehicle
  - Previous: In 2014, 5% of households did not own a vehicle
- **Workers (16 years +) commuting by public transportation**[50] **no change**
  - Current: In 2017, 1.2% of workers used public transportation to get to work
  - Previous: In 2014, 0.7% of workers used public transportation to get to work

This data, which does not show a change over a three-year period, indicates vehicle ownership does not contribute to a lack of transportation in Cecil County. However, this is not general public opinion. In all community conversations conducted as part of this CHNA and through the Online Community Health Survey, transportation continues to be identified as a top area of concern in Cecil County, especially among special populations, like older adults, the homeless, and those with behavioral health issues. More specifically, lack of transportation was identified as a major barrier to health care by nearly 23% of the Online Community Health Survey respondents, as well as a major resource missing in Cecil County by nearly 30% of survey respondents.

Built Environment

Food, housing, and public safety are indicators normally associated with this domain. In addition to a discussion of the impact of these social determinants, this section includes an analysis of data between the previous and current CHNA reporting periods.

Food

Hunger is indiscriminate. It affects all populations and can be based on how much food is consumed to even the proximity to food sources available in the community. The concept of having limited or uncertain availability of and/or ability to access nutritionally adequate foods in socially acceptable ways, is known as food insecurity.

Food insecurity, like hunger, is indiscriminate, but it more frequently impacts populations that are negatively impacted by the social determinants of health, like resource-poor communities and depressed or low-income neighborhoods. The non-profit Feeding America conducted a study with families in 2014 called the *Hunger in America* study, which assessed the impact of social and economic constraints and food. **Figure 30** shows the impact of how limited resources forced hard choices among study participants between food and other staple needs, like utilities, transportation, medical care, housing, and education.[51]

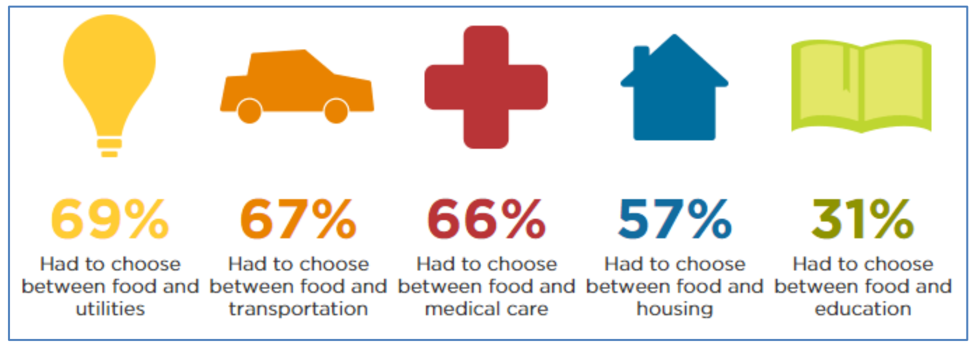
---

[49] US Census Bureau. American Community Survey, 5-year Estimates. Households without a Vehicle, Cecil County [data file]. Accessed at: https://www.uhcc.com/about-us/community-benefit/cecil-county-health-data/

[50] US Census Bureau. American Community Survey, 5-year Estimates. Workers Commuting by Public Transportation, Cecil County [data file]. Accessed at: https://www.uhcc.com/about-us/community-benefit/cecil-county-health-data/

[51] Feeding America. Compromises and Coping Strategies [webpage]. Accessed at: https://www.feedingamerica.org/hunger-in-america/impact-of-hunger

Figure 30. The Hard Choice: Food or Other Needs



Children and older adults have higher risk for the consequences of food insecurity. Poor health outcomes among adults attributable to food insecurity include obesity, high cholesterol, high blood pressure, and heart disease. Children who are food insecure are more likely to be hospitalized and are more likely to be at risk for developing asthma, obesity, and social and behavioral issues.

Rural and urban landscapes each are presented with unique challenges when mitigating the factors leading to and resulting from food insecurity. For example, some places in the US are considered food deserts because of their lack of access to healthy foods. Food deserts are often characteristic of low-income or poor areas, hindered by the social determinants of health. While Cecil County is not a food desert, food insecurity for children is a problem. During the previous CHNA it was reported that in 2013, 22% of children under 18 years old were food insecure in Cecil County. For this current CHNA updated Map the Meal Gap data (Feeding America research) for 2017 in Cecil County shows a decrease in rates – now, only 16.4% of children are food insecure.[52]

Housing

Housing quality is important to examine because poor quality housing can lead to the following:

- Asthma and other chronic lower respiratory diseases in youth and adults due to mold issues
- Lead poisoning, especially in infants and children
- Bed bugs or other parasitic outbreaks
- Poor pest control, especially from households with pets
- Violence and crime, especially in slum housing

[52] Feeding America. Child Food Insecurity Rate [data file]. Accessed at: http://www.feedingamerica.org/hunger-in-america/our-research/map-the-meal-gap/data-by-county-in-each-state.html

Housing quality can also include severe housing problems like overcrowding, high housing costs, lack of a kitchen, and lack of plumbing facilities. Housing data reported for Cecil County households between the previous CHNA and this current assessment included:

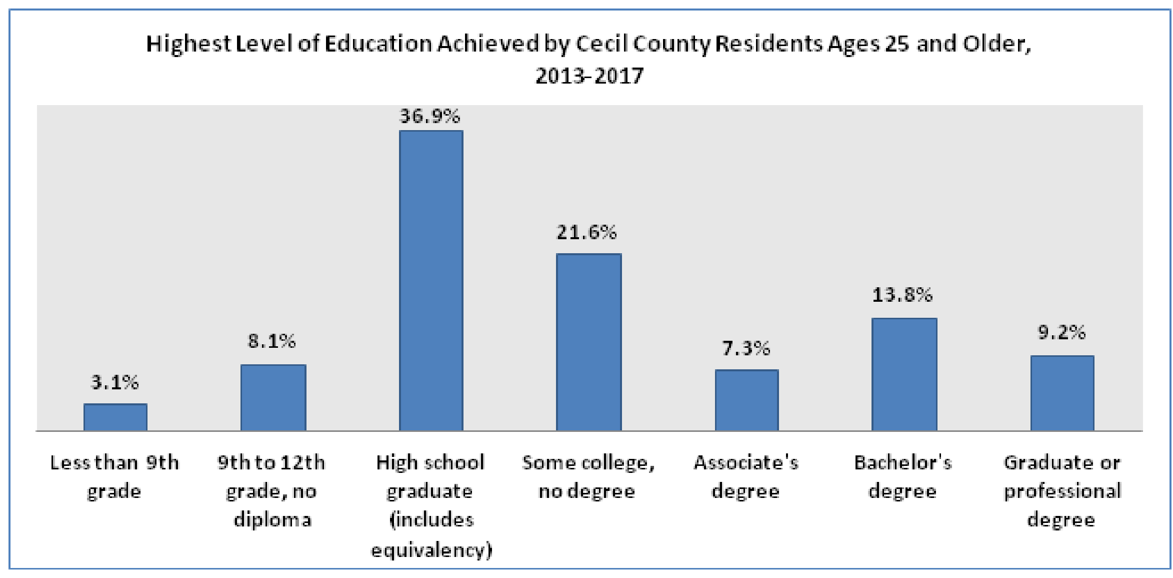
- **Severe Housing Problems**[53] no change
  - Current: In 2015, 15.2% of households encountered at least one of four of the above-mentioned severe housing problems
  - Previous: In 2012, it was 16% of households

In a three-year reporting period there was almost no change in exposure to severe housing problems in Cecil County. Consistent exposure to these unsafe and unhealthy living conditions can increase risk for health issues, like chronic disease and obesity, as well as infectious disease spread by overcrowding, poor sanitation, and the presence of vermin. Low-income families may have increased risk for exposure to these sub-standard living conditions if they are unable to afford the high price tag of more quality (and regulated) housing.[54]

Education

Among Cecil County adult residents ages 25 and older 88.8% of residents are at least a high school graduate and 23.0% possess a bachelor's degree or higher. This is lower than the overall education level of Maryland adult residents ages 25 and older, where 89.8% of residents are high school graduates or higher and 39.0% possess a bachelor's degree or higher. A breakdown of educational attainment among Cecil County adults is included in **Figure 31**.[55]

Figure 31. Educational Attainment



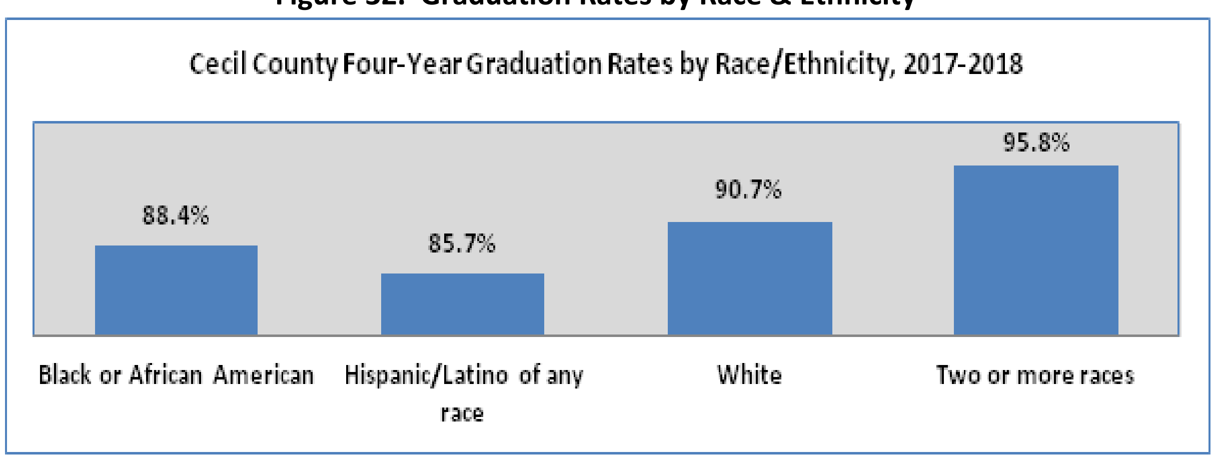
[53] US Department of Housing and Urban Development. Comprehensive Housing Affordability Strategy. Severe Housing Problems, Cecil County, Maryland [data file]. Accessed at: http://www.countyhealthrankings.org/app/maryland/2016/measure/factors/136/data

[54] Union Hospital. Cecil County Health Data. Severe Housing Problems, Cecil County: Why is this Important? [data file]. Accessed at: https://www.uhcc.com/about-us/community-benefit/cecil-county-health-data/

[55] US Census Bureau. American Community Survey, 5-Year Estimates, 2013-2017. Educational Attainment [data file] Accessed at: https://factfinder.census.gov

High school graduation rates in Cecil County have been improving and compare favorably to statewide rates. The four-year graduation rate in Cecil County improved from 80.5% for 2009-2010 to 90.5% for 2017-2018. The statewide four-year graduation rate for 2017-2018 was 87.67%. Some disparities four-year graduation rates exist in Cecil County. Females have had consistently higher graduation rates than males in Cecil County over this timeframe. Also, students who identified as Black or African American or Hispanic/Latino of any race had lower high school graduation rates than students who identified as White for 2017-2018. **Figure 32** shows four-year graduation rates by race/ethnicity for Cecil County in 2017-2018.

Figure 32. Graduation Rates by Race & Ethnicity[56]



Health Care Systems

Access to health care services (discussed in Health Resources), health insurance coverage, and health literacy are the social determinants found within this domain. These are factors that impact the way individuals engage in health behaviors that determine health outcomes. The following information explains these determinants in more detail.

Health Insurance Coverage

Since the adoption of the Affordable Care Act (ACA), the percentage of uninsured persons in the county has decreased significantly. From 2013-2017 an estimated 5.5% of Cecil County residents were uninsured. Of the estimated 94.5% of Cecil County residents with health insurance, 73.9% had private health insurance and 32.8% had public health insurance coverage.[57]

Health Literacy

Health literacy encompasses a person's ability to access, use, and interpret health information. Sometimes it is assumed that patients or clients are health literate because often when they meet with their medical provider they do not give any indication that they do not understand the information that has been given to them. However, many patients, regardless of their

[56] Maryland State Department of Education. Maryland Report Card: 2017 and 2018 [data files]. Accessed at: http://reportcard.msde.maryland.gov/

[57] US Census Bureau. American Community Survey, 5-Year Estimates, 2013-2017. Health insurance coverage by type [data file]. Accessed at: https://factfinder.census.gov

education or reading level, have difficulty understanding and using health information. Health information examples include: medication instructions, pre- or post-surgical procedures, health care forms, pamphlets/brochures, and verbal instructions.

Low health literacy can lead to a person not being able to:
- Make proper health-related decisions for themselves or others;
- Adequately follow medication regimens;
- Over-utilize health care services that are not appropriate to their care regimen, like the ER; and/or
- Properly care for children's health issues.[58]

Barriers to health literacy include: language, ability to read, comprehension, vision or hearing impairments, and even culture. Other social determinants, like poverty and education, also impact health literacy.

It is important that health care providers, outreach workers, and other health professionals pay attention to defining health literacy levels in patients and clients and diffusing barriers. Strategies for increasing and sustaining health literacy include:
- Screening for health literacy;
- Providing visual aids or cues in addition to print materials;
- Using certified medical interpreters to break down language and culture barriers;
- Incorporating a teach-back method using open-ended questions to establish content retention; and
- Promoting a buddy system where patients/clients have access to additional peer support and instructional reinforcement during doctors' visits.

Societal Health

Societal health is integral to the sustainability of a healthy community, so analyzing public safety indicators, like child abuse, domestic violence, violent crime, and suicide can develop a more comprehensive understanding of how these factors impact community health. Studying societal health can also create opportunities to intervene collaboratively with entities like public health, law enforcement, social services, emergency services, mobile crisis services, and behavioral health services.

Child Abuse

The Federal Child Abuse Prevention and Treatment Act (CAPTA) defines child abuse and neglect as "any recent act or failure to act on the part of a parent or caretaker which results in death, serious physical or emotional harm, sexual abuse or exploitation;" or "an act or failure to act which presents an imminent risk of serious harm."[59] Child abuse is non-discriminate in that it

---

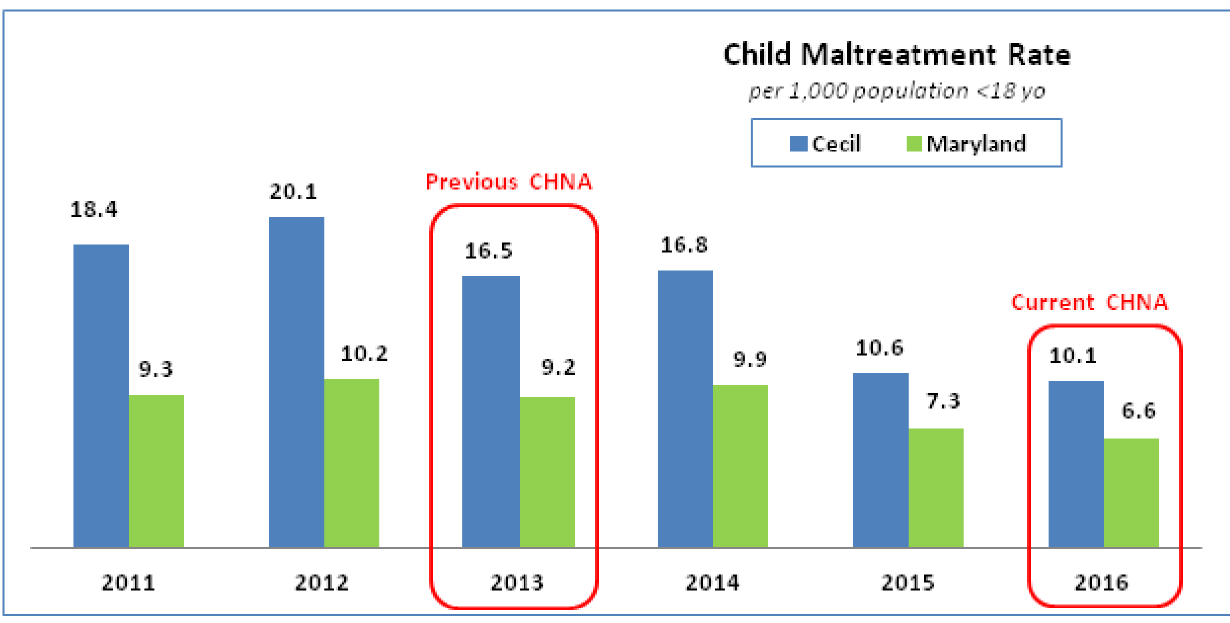
[58] Healthy People 2020. Health Literacy [webpage]. Accessed at: https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-health/interventions-resources/health-literacy

[59] Children's Bureau. Child Welfare Information Gateway, 2016. Definitions of Child Abuse and Neglect in Federal Law [webpage]. Accessed at: https://www.childwelfare.gov/topics/can/defining/federal/

can be carried out by anyone at any time and it does not occur within any specific socio-economic group.

Figure 33 shows the rate of child maltreatment cases per 1,000 population under the age of 18 years in Cecil County from 2011 – 2016. The graph also indicates data reported during the previous CHNA and this current CHNA, which shows that there has been a significant decrease in the case rate from data reported during the previous CHNA and this current CHNA.

Figure 33. Child Maltreatment Rate[60]



During the last CHNA it was reported that the case rate nearly doubled that of the state from year to year (2011-2013). However, for this current CHNA, it is evident that the case rate is becoming more level with that of the state (2015-2016). This may indicate that more emphasis has been placed on benchmarking according to state best practice. This is further supported by the fact that in Cecil County over the last five years there have been many programs and activities created to promote prevention of child abuse by collaborating on strategies to strengthen families, educate on positive parenting skills, encourage mandatory reporting, and enhance access to child and family services available in the community.

Domestic Violence

The US Department of Justice defines domestic violence as:

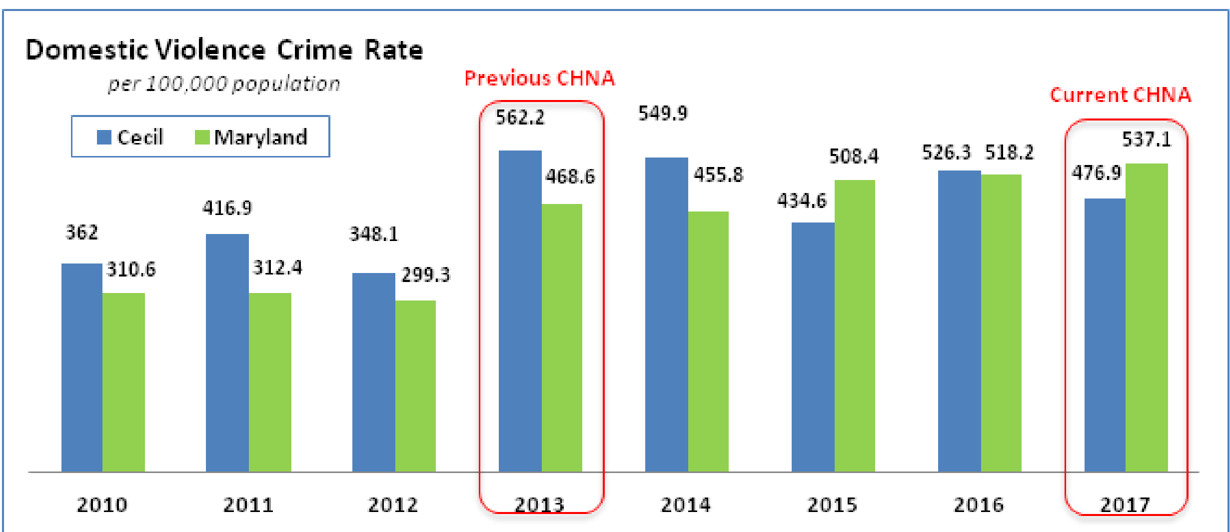
> *…A pattern of abusive behavior in any relationship that is used by one partner to gain or maintain power and control over another intimate partner. Domestic violence can be physical, sexual, emotional, economic, or psychological actions or threats of actions that influence another person. This includes any behaviors that intimidate, manipulate,*

[60] Maryland Governor's Office for Children. Results Scorecard – Cecil County [webpage]. Accessed at: https://goc.maryland.gov/cecil/

humiliate, isolate, frighten, terrorize, coerce, threaten, blame, hurt, injure, or wound someone.[61]

Figure 34 shows the rate of domestic violence crimes in Cecil County compared to the state. Data reported during the previous CHNA showed a county rate higher than that of the state. However, the rate has decreased over the last 4 years, now showing the county rate (2017) below that of the state.

Figure 34. Domestic Violence Crime Rate[62]



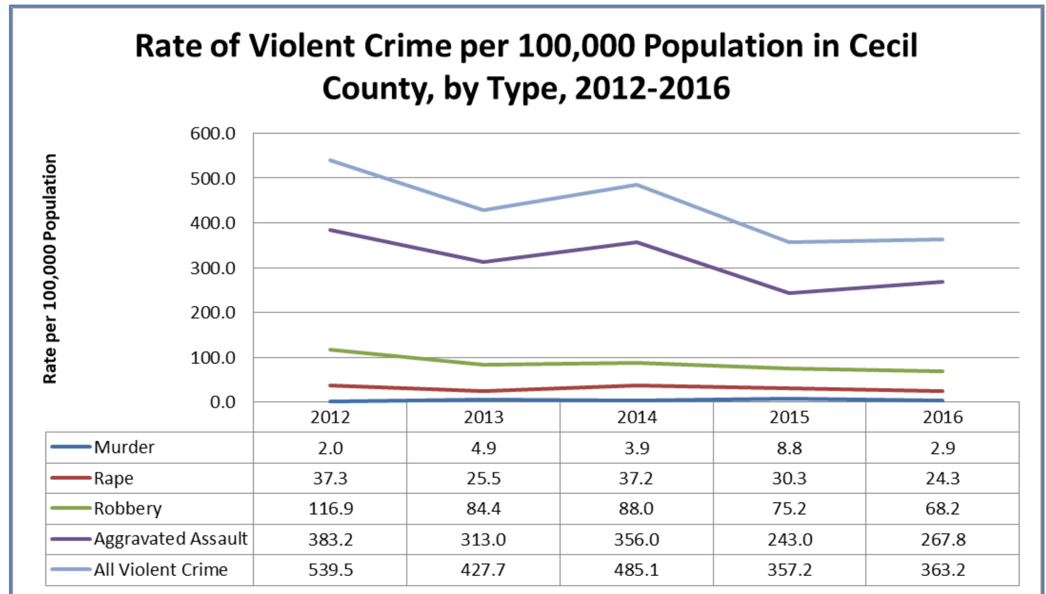
Violent Crime

Violent crimes are defined as offenses that involve face-to-face confrontation between the victim and the perpetrator, including homicide, rape, robbery, and aggravated assault. The violent crime rate is the number of violent crimes reported per 100,000 population. **Figure 35** shows violent crime rate by type in Cecil County from 2012-2016. For the previous CHNA, homicide deaths were reported instead, but there were no breakouts included so the indicator was changed for this assessment.

[61] US Department of Justice. Domestic Violence [webpage]. Accessed at: https://www.justice.gov/ovw/domestic-violence

[62] The Maryland Uniform Crime Reporting Program. Rate of domestic violence crimes per 100,000 population, Cecil County, Maryland [data file]. Accessed at: https://www.uhcc.com/about-us/community-benefit/cecil-county-health-data/

Figure 35. Violent Crime Rate[63]



	2012	2013	2014	2015	2016
Murder	2.0	4.9	3.9	8.8	2.9
Rape	37.3	25.5	37.2	30.3	24.3
Robbery	116.9	84.4	88.0	75.2	68.2
Aggravated Assault	383.2	313.0	356.0	243.0	267.8
All Violent Crime	539.5	427.7	485.1	357.2	363.2

Suicide

The Maryland Youth Risk Behavior Survey (YRBS) is a survey administered to middle and high school students across the state, asking various questions about youth risk behaviors. **Table 13** shows the two survey questions monitored for the Cecil County CHNA. The 2013 YRBS data shows what was reported in the previous CHNA report, and the 2016 YRBS data goes with this current CHNA report. There was a slight increase in feelings of sadness and hopelessness among high school students during the three-year expanse between YRBS surveys.

Table 13. Depression and Thoughts of Suicide among Cecil County High School Students[64]

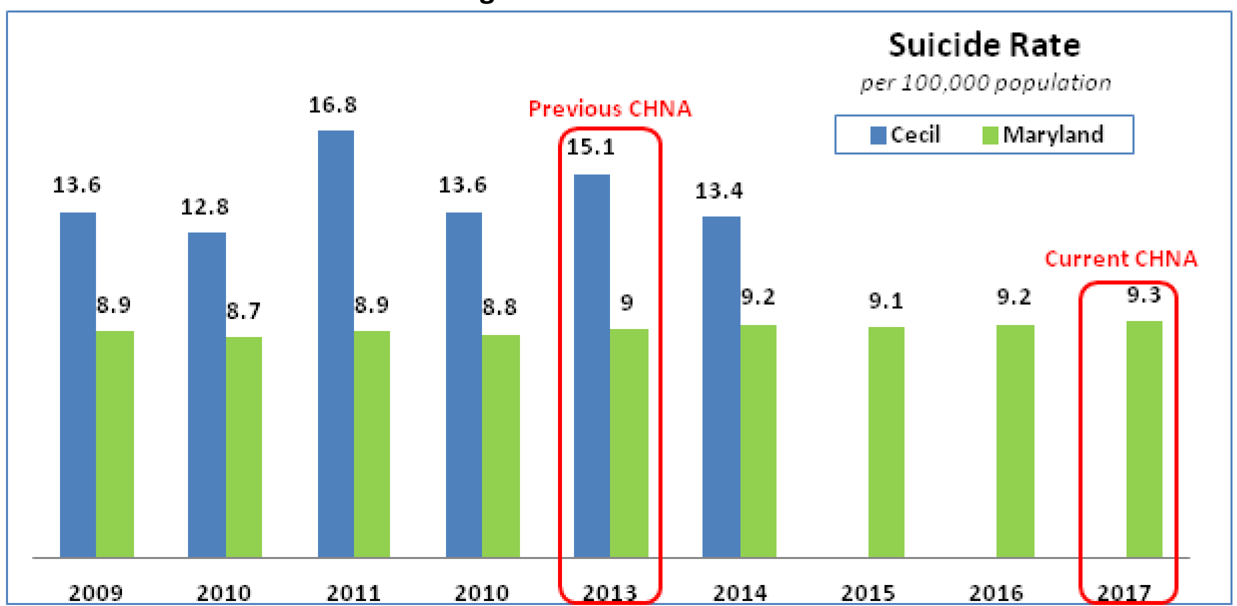
Survey Item	2013	2016
Percentage of students who felt so sad or hopeless almost every day for two weeks or more in a row that they stopped doing some usual activities during the past 12 months	27.5%	↑ 29.7%
Percentage of students who seriously considered attempting suicide during the past 12 months	15.5%	= 16.9%

Figure 36 shows the suicide death rate for adults in Cecil County. Cecil County rates were significantly higher than the state's rates for data analyzed during the previous CHNA; however, for data from 2015-2017 Cecil County rates dropped below the reporting threshold and were not reported in applicable Maryland data sets.

[63] Maryland State Police. Crime in Maryland: 2016 Uniform Crime Report [webpage]. Accessed at: https://www.uhcc.com/about-us/community-benefit/cecil-county-health-data/

[64] Maryland Youth Risk Behavior Survey/Youth Tobacco Survey (YRBS/YTS). 2016 and 2013 Youth Risk Behavior Survey Data [webpages]. Accessed at: https://phpa.health.maryland.gov/ccdpc/Reports/Pages/YRBS-Main.aspx

Figure 36. Suicide Rate[65]



Behavioral Risk Factors

A risk factor is a characteristic or exposure that increases the likelihood of developing a disease, condition, or altered state. Examples include tobacco use, inadequate physical activity, poor nutrition, high blood pressure, unsafe sex, substance use, and alcohol use.[66]

The following changes in behavioral risk factor data were observed in Cecil County between the reporting periods for the previous CHNA and this current assessment:

- **Tobacco use – Adults**[67] **increase**
  - Current: In 2017, an estimated 24.8% of adults reported smoking
  - Previous: In 2014, an estimated 12.4% of adults reported smoking
- **Tobacco use – Teens**[68, 69] **increase**
  - Current: In 2016, 26.6%of high school students reported using any tobacco product, including electronic nicotine delivery systems (e-cigarettes, vaping)
  - Previous: In 2010, 20.5% of high school teens reported having smoked cigarettes on at least one day during the 30 days prior to the survey

[65] Maryland Vital Statistics Administration. Vital Statistics and Reports [webpage]. Accessed at: https://health.maryland.gov/vsa/Pages/reports.aspx
[66] World Health Organization. Risk Factors [webpage]. Accessed at: https://www.who.int/topics/risk_factors/en/
[67] Union Hospital. Cecil County Health Data. Adults who Smoke [data file]. Accessed at: https://www.uhcc.com/about-us/community-benefit/cecil-county-health-data/
[68] Maryland Youth Risk Behavior Survey/Youth Tobacco Survey (YRBS/YTS). 2016 Youth Risk Behavior Survey Data [webpage]. Accessed at: https://phpa.health.maryland.gov/ccdpc/Reports/Pages/YRBS2016.aspx
[69] MDQuit.org. Youth Tobacco Use. Maryland Youth Tobacco Survey [data files]. Accessed at: https://mdquit.org/tobacco-use/youth-tobacco-use

- **Excessive drinking – adults**[70] **no change**
    - Current: In 2016, 18% of adults reported excessive drinking
    - Previous: In 2012, 18% of adults reported excessive drinking
- **Binge drinking –teens**[71, 72] **decrease**
    - Current: In 2016, 17.9% of high school students reported binge drinking (4+ drink for females, 5+ drinks for males, in a row, within a couple of hours, on at least one day in the 30 days prior to the survey)
    - Previous: In 2013, 23% of high school teens reported having had 5 or more drinks in a row, within a couple of hours, on one or more times during the last 30 days

The increases observed in tobacco use among adults and high school teens are significant and could be the result of the mass-marketing of electronic nicotine delivery systems (ENDS), like e-cigarettes and JUULs, which began in 2015. The decrease in teen binge drinking could be a result of the crack-down on sales of alcoholic beverages to minors in Cecil County which was sponsored by the diligent efforts of the Maryland Strategic Prevention Framework 2 coalition (reducing underage drinking) and their collaboration with youth providers, law enforcement, alcohol distributors, and the Cecil County Liquor Board.

Environmental Health

The places where people live, work, and play can have a great effect on our overall health and quality of life. People interact with the environment constantly and these interactions can negatively impact their health. The World Health Organization (WHO) defines environment, as it relates to health, as "all the physical, chemical, and biological factors external to a person, and all the related behaviors."[73] According to the National Association of County and City Health Officials (NACCHO), clean air and water, as well as safely prepared food, are essential to physical health. Exposure to environmental substances such as lead or hazardous waste increases risk for preventable disease. Unintentional home, workplace, or recreational injuries affect all age groups and may result in premature disability or mortality.[74] Maintaining a healthy environment is important to increasing the health and quality of life of Cecil County residents.

Air Quality & Chronic Lower Respiratory Diseases

The quality of the air impacts breathing and the ability to function in outdoor spaces. Poor air quality can lead to health conditions like asthma and other chronic lower respiratory diseases such as COPD and bronchitis. Cecil County has a higher prevalence of respiratory diseases than Maryland. **Figure 37** shows the age-adjusted prevalence of asthma and COPD among Cecil

---

[70] County Health Rankings. Excessive Drinking [data file]. Accessed at: https://www.countyhealthrankings.org/app/maryland/2018/measure/factors/49/data

[71] Maryland Youth Risk Behavior Survey/Youth Tobacco Survey (YRBS/YTS). 2016 Youth Risk Behavior Survey Data [webpage]. Accessed at: https://phpa.health.maryland.gov/ccdpc/Reports/Pages/YRBS2016.aspx#Cecil

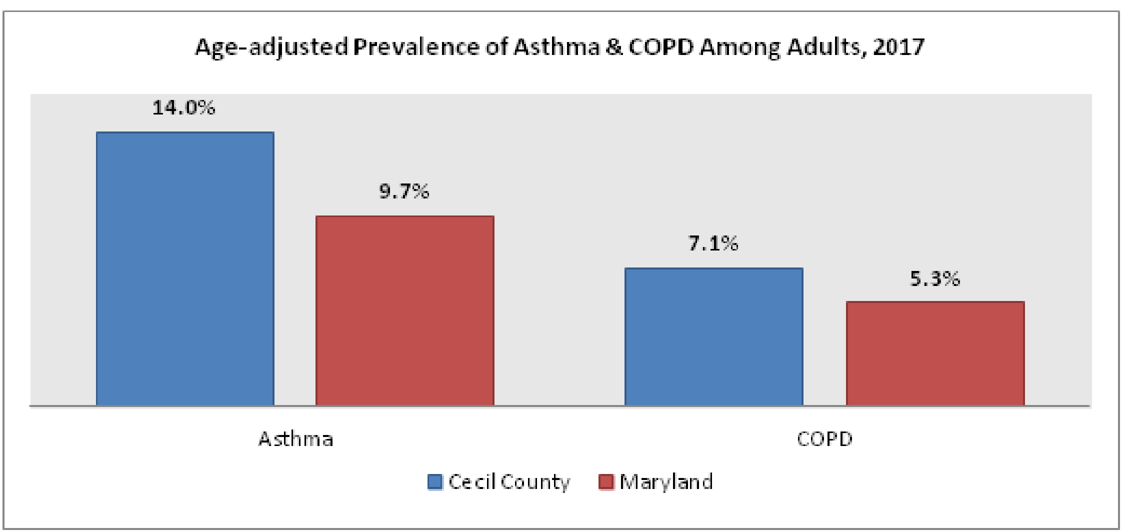
[72] Maryland Youth Risk Behavior Survey/Youth Tobacco Survey (YRBS/YTS). 2013 Youth Risk Behavior Survey Data [webpage]. Accessed at: https://phpa.health.maryland.gov/ccdpc/Reports/Pages/yrbs2013.aspx

[73] World Health Organization. *Report: Preventing disease through healthy environments, 2006.* Accessed at: https://www.who.int/quantifying_ehimpacts/publications/preventing-disease/en/

[74] National Association of County and City Health Officials. Community Health Status Assessment: Core Indicators List, 2016. Category 6: Environmental Health Indicators [webpage]. Accessed at: https://www.naccho.org/

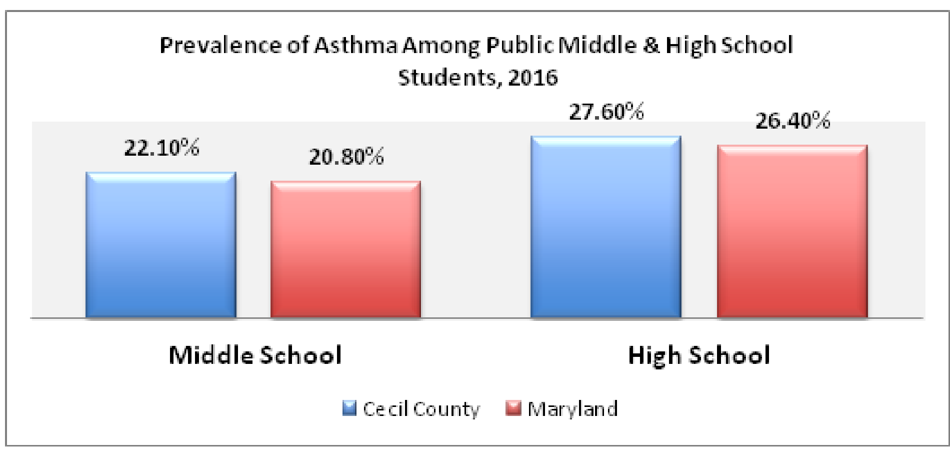
County and Maryland adult residents in 2017. Also, in 2017, 6.2% of Cecil County Medicare beneficiaries were treated for asthma and 16.4% were treated for COPD.[75, 76]

Figure 37. Prevalence of Asthma and COPD in Adults[77]



The prevalence of asthma is even higher among youth in Cecil County and Maryland. **Figure 38** shows the percentage of Cecil County and Maryland middle and high school students who reported ever being told by a doctor or nurse that they had asthma. Among Cecil County high school students, the prevalence of asthma was significantly higher for non-Hispanic Black students (37.0%) than non-Hispanic White students (25.8%).

Figure 38. Prevalence of Asthma in Youth[78]



---

[75] Centers for Medicare and Medicaid Services. Asthma: Medicare Population, Cecil County, Maryland [data file]. Accessed at: http://cecil.md.networkofcare.org/ph/

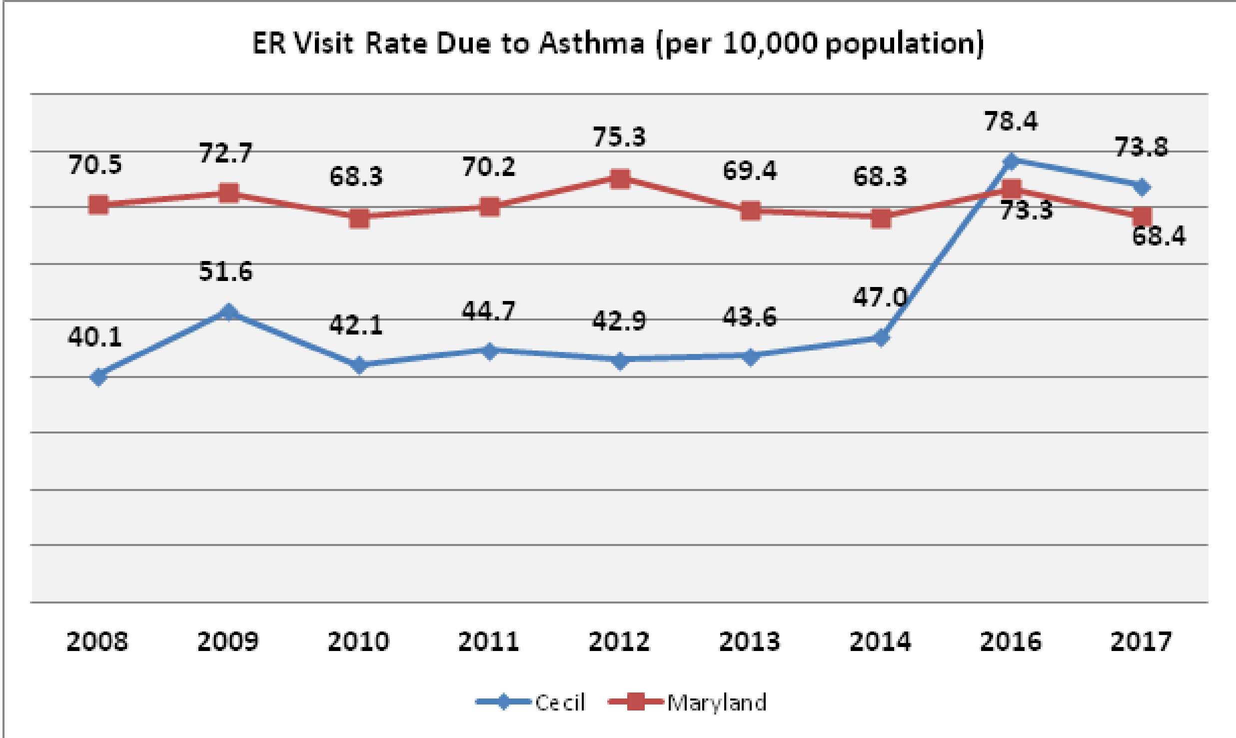
[76] Centers for Medicare and Medicaid Services. COPD: Medicare Population, Cecil County, Maryland [data file]. Accessed at: http://cecil.md.networkofcare.org/ph/

[77] Maryland Behavioral Risk Factor Surveillance System. Adults with Asthma [data file]. Accessed at: http://cecil.md.networkofcare.org/ph/

[78] Maryland Youth Risk Behavior Survey/Youth Tobacco Survey (YRBS/YTS). 2016 Youth Risk Behavior Survey Data [webpage]. Accessed at: https://phpa.health.maryland.gov/ccdpc/Reports/Pages/YRBS2016.aspx#Cecil

In Cecil County ER utilization related to asthma has risen considerably over the last several years, surpassing state averages. **Figure 39** shows the rate of emergency room (ER) visits due to asthma per 10,000 population, from 2008 to 2017 in Cecil County compared to Maryland.

Figure 39. ER Visit Rate due to Asthma[79]



Air Pollution & Poor Health Outcomes

Air pollution is a leading environmental threat to human health. According to the CDC, exposure to fine particulate matter in the air can lead to breathing problems, make asthma symptoms or some heart conditions worse, and lead to low birth weight. In 2014, Cecil County had an average daily density of fine particulate matter in micrograms per cubic meter ($PM_{2.5}$) of 10.7, compared to an average daily density of 9.6 statewide. The national standard for $PM_{2.5}$ is 12.0µg/m3. When $PM_{2.5}$ levels are above 12, air quality is more likely to affect human health.[80]

Exposure to ozone is another threat to human health. Ozone can cause the muscles in the airways to constrict, trapping air in the alveoli and leading to wheezing and shortness of breath. Long-term exposure to ozone can aggravate lung diseases such as asthma, and is likely to

[79] Health Services Cost Review Commission. Research Level Statewide Outpatient Data Files. Rate of Emergency Room Visits due to Asthma per 100,000 population, Cecil County, Maryland, 2008-2017 [data file]. Accessed at: https://www.uhcc.com/about-us/community-benefit/cecil-county-health-data/

[80] Centers for Disease Control and Prevention. National Environmental Public Health Tracking Network. Air Quality: Particulate Matter, 2014 [data file]. Accessed at: https://ephtracking.cdc.gov/

contribute to asthma development.[81] Cecil County residents were exposed to unhealthy levels of ozone for 5 Days in 2014.[82]

Water Quality

Access to safe drinking water is important to prevent illness, birth defects and death. Health-related drinking water violations of community water systems are reported to the national Safe Drinking Water Information System. Cecil County has experienced at least one health-related drinking water violation among its community water systems in both 2016 and 2017.[83]

Vector-Borne Disease

A disease vector is any organism that carries and transmits an infectious pathogen into another living organism. The most common disease vectors are parasites, like mosquitoes, fleas, and ticks. Vector-borne diseases are categorized into four branches:

1) Arboviral Diseases – viruses spread by mosquitoes and ticks (ex. West Nile, Malaria, Zika);
2) Bacterial Diseases – bacteria spread by fleas and ticks (ex. Lyme disease, plague);
3) Dengue – dengue viruses spread by mosquitoes; and
4) Rickettsial Zoonoses – bacteria spread by fleas, ticks, and lice (ex. Rocky Mountain Spotted Fever, typhus fever).[84]

If a person gets bitten by a disease vector and gets sick then they have a vector-borne disease.[85] Vector-borne diseases can pose a threat to infected individuals if the signs and symptoms are not recognized and treated in a timely manner. The most prevalent vector-borne diseases in Cecil County are Lyme disease and rabies.

Lyme Disease

Cecil County has a high incidence of Lyme disease, though the reported incidence has fallen over the past several years (Figure 40). Underreporting of Lyme disease is a problem. It is believed that the true incidence of Lyme disease in the United States is around ten times higher than what is reported.[86]

---

[81] United States Environmental Protection Agency. Health Effects of Ozone Pollution [webpage]. Accessed at: https://www.epa.gov/ground-level-ozone-pollution/health-effects-ozone-pollution

[82] Centers for Disease Control and Prevention. National Environmental Public Health Tracking Network. Ground level Ozone, 2014 [data file]. Accessed at: https://ephtracking.cdc.gov/

[83] United States Environmental Protection Agency. Safe Drinking Water Information System [data file]. Accessed at: https://www.countyhealthrankings.org/app/maryland/2019/measure/factors/124/datasource

[84] Centers for Disease Control and Prevention. Division of Vector-Borne Diseases [webpage]. Accessed at: https://www.cdc.gov/ncezid/dvbd/about.html

[85] Centers for Disease Control and Prevention. Division of Vector-Borne Diseases [webpage]. Accessed at: https://www.cdc.gov/ncezid/dvbd/index.html

[86] Centers for Disease Control and Prevention. Lyme Disease: Data and Surveillance [webpage]. Accessed at: https://www.cdc.gov/lyme/datasurveillance/index.html

Figure 40. Lyme Disease in Cecil County[87]

Rabies

Rabies is a nearly universally fatal zoonotic disease, but is preventable in humans through the administration of post exposure prophylaxis (PEP) to exposed individuals. In Maryland, rabies is most often found in raccoons, skunks, foxes, cats, bats, and groundhogs. Other mammals including dogs, ferrets, and farm animals can get rabies if they are not vaccinated. There have been no reported rabies cases in humans in Cecil County during recent history, however from 2013-2017 there were 34 cases of rabies found in animals in the county. Some 1,466 animal bites were reported in Cecil County during this time period.[88, 89]

Lead Exposure

Lead exposure can contribute to a number of health issues, especially developmental issues among children. Most often lead exposure is identified from children ingesting dust and paint chips from chipping or peeling lead paint found in homes constructed before lead paint was banned in 1978. **Figure 41** shows the percentage of children (12-35 months) enrolled in Medicaid that received blood lead screenings from 2011 to 2017 in Cecil County and Maryland, while **Figure 42** shows the percentage of all children (0-72 months) tested who screened positive for elevated blood levels (>10 µg/dL) from 2009-2017 in Cecil County and Maryland.

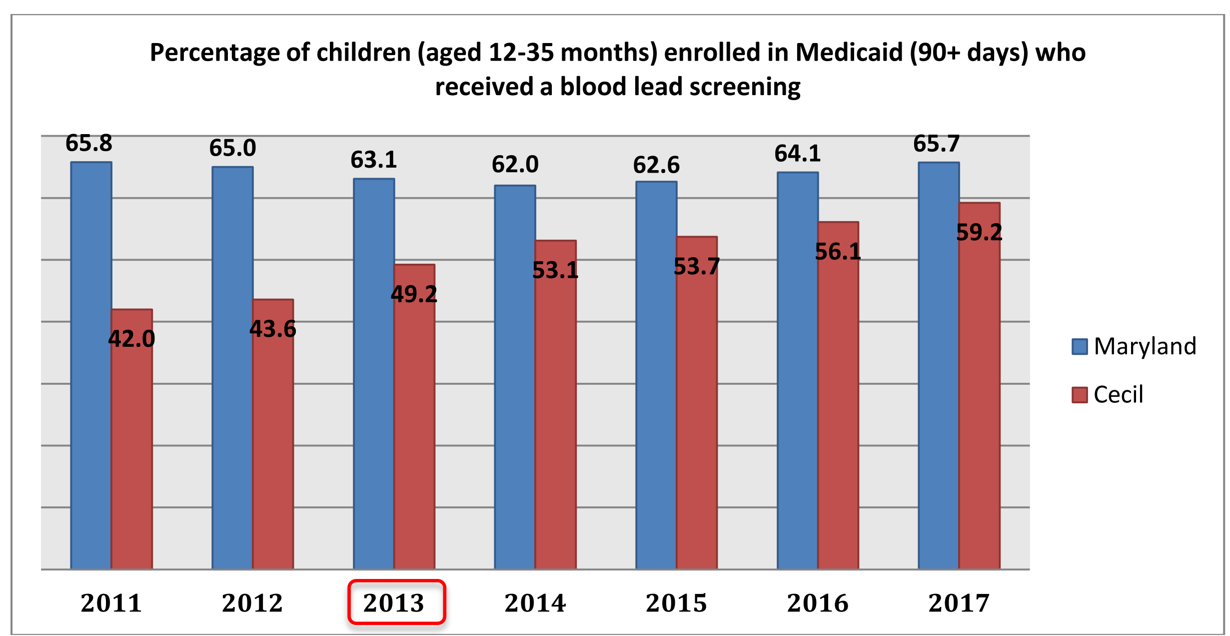
---

[87] Maryland Department of Health. Prevention and Health Promotion Administration. National Electronic Disease Surveillance System Database. Case Rates of Lyme Disease, Cecil County, Maryland, 2010-2017 [data file]. Accessed at: https://phpa.health.maryland.gov/Pages/disease-conditions-count-rates.aspx

[88] Maryland Department of Health. Prevention and Health Promotion Administration. National Electronic Disease Surveillance System Database. Rabies-Animal, Cecil County, Maryland, 2013-2017 [data file]. Accessed at: https://phpa.health.maryland.gov/Pages/disease-conditions-count-rates.aspx

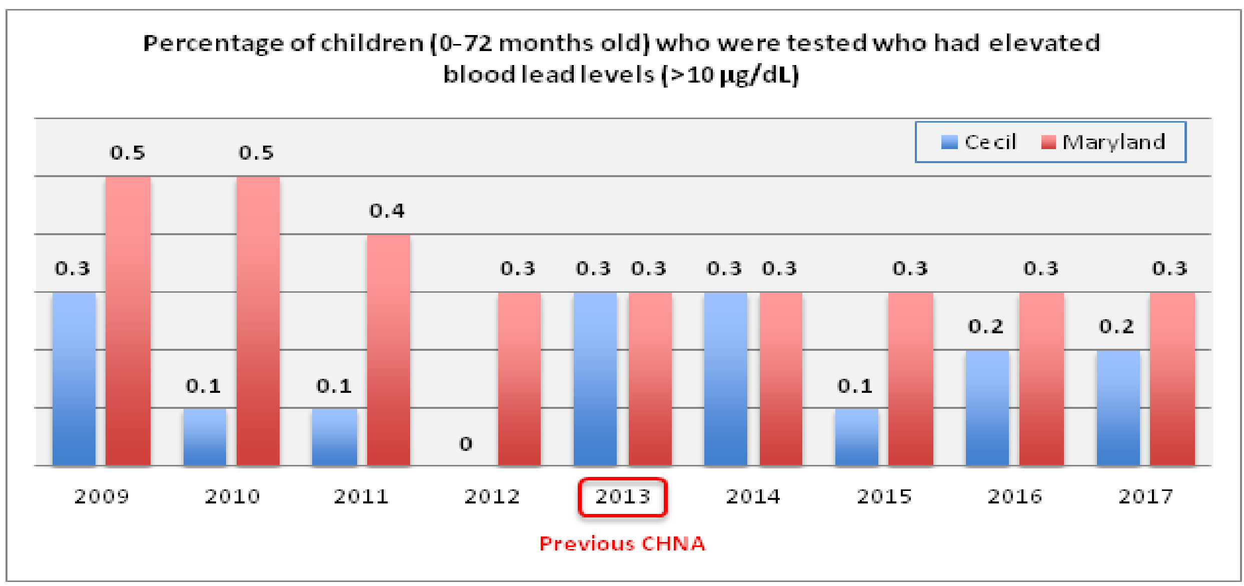
[89] Maryland Department of Health. Prevention and Health Promotion Administration. National Electronic Disease Surveillance System Database. Animal Bites, Cecil County, Maryland, 2013-2017 [data file]. Accessed at: https://phpa.health.maryland.gov/Pages/disease-conditions-count-rates.aspx

Figure 41. Percentage Medicaid Children Receiving a Blood Lead Screening[90]



Previous CHNA

Figure 42. Percentage Children with Elevated Blood Lead Levels[91]



[90] Maryland Medicaid Service Utilization. Percentage of children (aged 12-35 months) enrolled in Medicaid (90+ days) who received a blood lead screening, Cecil County, Maryland, 2011-2017 [data file]. Accessed at: http://ship.md.networkofcare.org/ph/ship-details.aspx?id=md_ship43

[91] Maryland Department of the Environment. Percentage of children (0-72 months old) who were tested and who had elevated blood lead levels (>10 µg/dL), Cecil County, Maryland, 2009-2017 [data file]. Accessed at: http://ship.md.networkofcare.org/ph/ship-details.aspx?id=md_ship13

Maternal & Child Health

Maternal and child health is an important determinant of child growth and development. From womb to world, appropriate care of baby and mother can lead to positive health outcomes and reduce child mortality.

Prenatal Care

It is important for mothers to receive prenatal care in the first trimester in order to engage the mother in caring for herself and baby. The following changes in data were observed in Cecil County between the reporting periods for the previous CHNA and this current assessment:

- **Prenatal care in the first trimester**[92] **no change**
  - Current: In 2017, 75.8% of mothers received prenatal care in the first trimester
  - Previous: In 2013, 76.5% of mothers received prenatal care in the first trimester

Prenatal care can reduce the risk for low birth weight. The steady trend for prenatal care over the last four years matches that of the rate of low birth weight during this same time frame, which may indicate a positive correlation between the two factors.

Teen Birth Rate

Babies born to teen mothers may be born pre-term or with low birth weight. In addition, teen pregnancy and delivery can be harmful to the mother's health and social development. The following changes in data were observed in Cecil County between the reporting periods for the previous CHNA and this current assessment:

- **Teen birth-rate**[93] **decrease**
  - Current: In 2017, there were 18.2 live births per 1,000 teen females
  - Previous: In 2013, there were 22.8 live births per 1,000 teen females

Since 2013, there has been a gradual decrease in the rate of teen births for this age group. This could be due to more promotions for the prevention of teen pregnancy or the risk factors that contribute. It could also be due to the fact that there are not a lot of teen pregnancy resources available in Cecil County. A majority of teens who receive pre- and post-natal care, including delivery, may not be doing so in this county.

Low Birth Weight

Babies born with low birth weight can be deficient as they grow, depending on the cause of the low birth weight. Women who smoke, drink alcohol, and use illicit substances during pregnancy have a greater risk of their babies being born with low birth weight. Developmentally, these babies can suffer from the inability to form organ systems correctly or can have deficiencies in organ and system development and function, as well as cognitive function and development.

---

[92] Maryland Vital Statistics Administration. Vital Statistics and Reports [webpage]. Accessed at: https://health.maryland.gov/vsa/Pages/home.aspx

[93] Maryland Vital Statistics Administration. Vital Statistics and Reports [webpage]. Accessed at: https://health.maryland.gov/vsa/Pages/home.aspx

The following changes in data were observed in Cecil County between the reporting periods for the previous CHNA and this current assessment:

- **Low birth weight**[94] **increase**
  - Current: In 2017, 7.4% of babies were born with low birth weight
  - Previous: In 2013, 6.9% of babies were born with low birth weight

From 2011-2014, there was a steady decline in the percentage of babies born with low birth weight, but then there was a spike from 2014 (5.8%) to 2015 (8.9%). From 2015-2017 there resumed a decline in percentages. From 2014-2015 there may have been an increase in births altogether which could account for the spike in babies with low birth weight, but the specific reasoning is unknown to this assessment.

Sudden Unexpected Infant Death

Sudden Unexpected Infant Death (SUID) occurs in babies that are less than 1 year old usually from a cause that is not obvious before investigation. Deaths primarily occur during sleep, impacted by the state of the baby's sleep area, and often include suffocation during sleep. Prevention education includes safe sleeping practices through programs like Safe to Sleep.[95]

The following changes in data were observed in Cecil County between the reporting periods for the previous CHNA and this current assessment:

- **SUID rate**[96] **increase**
  - Current: In 2016, there were 2.2 SUID deaths per 1,000 live births
  - Previous: In 2013, there was 1 SUID death per 1,000 live births

Unfortunately there is not enough data to determine why there was an increase in the death rate in Cecil County. The Centers for Disease Control and Prevention's Center for Reproductive Health only has SUID monitoring programs in 22 states, which makes more robust surveillance of this issue problematic.[97]

Substance Use during Pregnancy

When mothers use illicit drugs or other harmful substances during pregnancy, babies can be born with Neonatal Abstinence Syndrome (NAS) (baby is born addicted to substances and goes through withdrawal in the first 3-7 days), Fetal Alcohol Syndrome (FAS) (baby is born with cognitive deficits and facial malformations), and a number of other issues and disorders.

A recent assessment of Union Hospital births data for Substance-Effected Newborns (SENS), a diagnosis similar to NAS, revealed that in Calendar Year 2018, of the 577 live births, 93 babies (16%) were diagnosed with SENS. In addition, of the 93 SENS cases, there were 84 reports from

---

[94] Maryland Vital Statistics Administration. Vital Statistics and Reports [webpage]. Accessed at: https://health.maryland.gov/vsa/Pages/home.aspx

[95] Centers for Disease Control and Prevention. Sudden Unexpected Infant Death and Sudden Infant Death Syndrome [webpage]. Accessed at: https://www.cdc.gov/sids/about/index.htm

[96] Union Hospital. Cecil County Health Data. Sudden Unexpected Infant Death Rate [data file]. Accessed at: https://www.uhcc.com/about-us/community-benefit/cecil-county-health-data/

[97] Centers for Disease Control and Prevention. Sudden Unexpected Infant Death and Sudden Infant Death Syndrome [webpage]. Accessed at: https://www.cdc.gov/sids/about/index.htm

Union Hospital to Child Protective Services. This data is important to include because there is not a federal mandatory reporting law for substance use identified during birth. It is usually determined state by state and even hospital by hospital.

In addition, the data set also included NAS births data. Of the 577 live births at Union Hospital in 2018, there were 56 NAS births (about 10%) documented by the medical provider. Data for reports to CPS was not included for this cohort. Union Hospital data was pulled and analyzed to inform the trauma prevention work of the Cecil County Local Management Board's subcommittee on Childhood Trauma.

Communicable Disease

Communicable diseases are transmitted through person-to-person contact or through shared use of contaminated instruments or materials. Many communicable diseases can be prevented through a high level of vaccine coverage of vulnerable populations or through the use of protective measures, such as condoms for the prevention of sexually transmitted infections.

Vaccinations

Vaccines control and eliminate infectious and communicable disease within a population. They are also integral to protecting the growth and development process of persons as they age from infancy to adulthood. There is no population level childhood vaccination data available for Cecil County; however, the percentage of children statewide (aged 19-35 months) receiving recommended vaccines decreased from a high of 78.0% in 2011 to 75.2% in 2017.[98] Among adults, 47.5% of Cecil County residents reported receiving a flu vaccine in the past 12 months, compared to 45.3% statewide.[99]

Sexually Transmitted Infections

Sexually transmitted infections (STIs), also known as sexually transmitted diseases (STDS) are very common and easily preventable. STIs are passed from one person to another through sexual activity including vaginal, oral, and anal sex. STIs don't always cause symptoms or may only cause mild symptoms, so it is possible to have an infection and not know it. Without proper education and prevention practices, STIs can spread rapidly in a population and have a large impact on health. In recent years STI cases have increased dramatically in Cecil County, Maryland and across the nation.

Chlamydia

The rate of reported Chlamydia cases in Cecil County has increased significantly over the last five years; from 253.3 cases per 100,000 population in 2014 to 327 cases per 100,000 population in 2018.[100] Other jurisdictions in Maryland have shown similar increases as shown

---

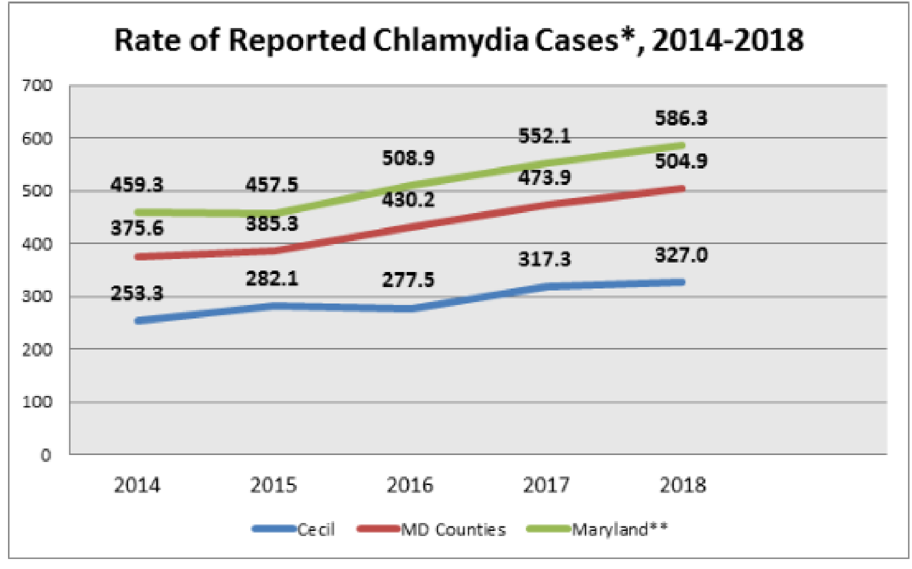
[98] Centers for Disease Control and Prevention. National Immunization Survey [data file]. Accessed at: https://www.cdc.gov/vaccines/imz-managers/nis/index.html

[99] Maryland Behavioral Risk Factor Surveillance System. Adults Receiving Flu Vaccine [data file] Accessed at: https://ibis.health.maryland.gov

[100] Maryland Department of Health. Center for Sexually Transmitted Infection Prevention. Maryland Office of Planning. Chlamydia Cases per 100,000 Population in Cecil County, 2005-2014 [data file]. Accessed at: https://phpa.health.maryland.gov/OIDPCS/CSTIP/Pages/STI-Data-Statistics.aspx

in **Figure 43.** The burden of Chlamydia is highest among youth and young adults in Cecil County. In 2017, over three quarters (76.6%) of reported Chlamydia cases were among those ages 15-24 years of age.[101] The rate of reported Chlamydia cases in Cecil County remains significantly lower than the average for Maryland.

Figure 43. Rate of Reported Chlamydia Cases[102]



*Per 100,000 population
**Includes Baltimore City

Gonorrhea

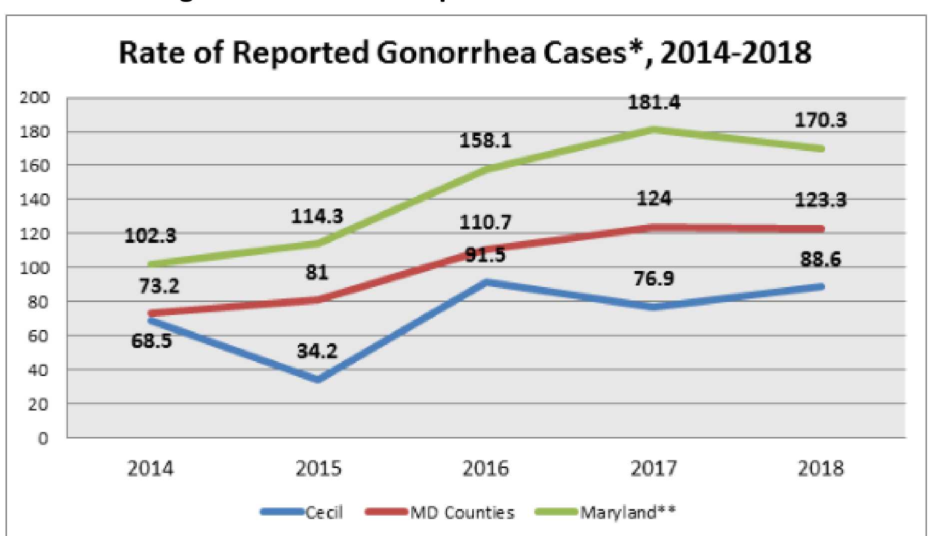
The rate of reported gonorrhea cases in Cecil County also increased significantly over the last five years; from 68.5 cases per 100,000 population in 2014, to 88.6 cases per 100,000 population in 2018. Other jurisdictions in Maryland have shown similar increases as shown in **Figure 44.** Over half of the gonorrhea cases in 2017 were among the 15-24 age group.[103] The rate of reported gonorrhea cases in Cecil County remains significantly lower than the average for Maryland.

[101] Maryland Department of Health. Center for Sexually Transmitted Infection Prevention. Chlamydia Cases per 100,000 Population by age group, Cecil County, Maryland, 2017 [data file]. Accessed at: https://phpa.health.maryland.gov/OIDPCS/CSTIP/Pages/STI-Data-Statistics.aspx

[102] Maryland Department of Health. Center for Sexually Transmitted Infection Prevention. *Sexually Transmitted Infection: 2018 Annual Report.* Accessed at: https://phpa.health.maryland.gov/OIDPCS/CSTIP/Pages/STI-Data-Statistics.aspx

[103] Maryland Department of Health. Center for Sexually Transmitted Infection Prevention. *Gonorrhea Cases per 100,000 Population, by age group, Cecil County, Maryland*, 2017. Accessed at: https://phpa.health.maryland.gov/OIDPCS/CSTIP/Pages/STI-Data-Statistics.aspx

Figure 44. Rate of Reported Gonorrhea Cases



*Per 100,000 population
**Includes Baltimore City

Syphilis

In 2018, two cases of primary and secondary syphilis (1.9 cases per 100,000 population), four cases of early latent syphilis (3.9 cases per 100,000 population), and four cases of late or unknown duration syphilis (3.9 per 100,000 population) were reported in Cecil County.[104]

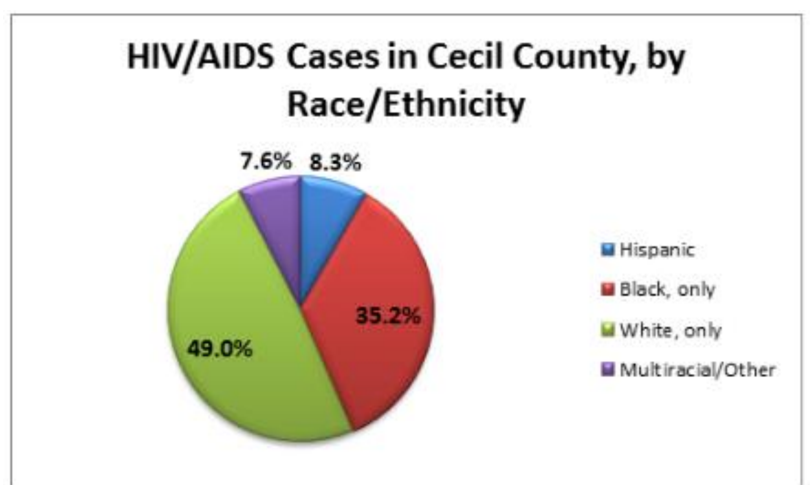
HIV/AIDS

HIV/AIDS can greatly impact population health if not treated and managed appropriately. In 2017, there were 5 new adult or adolescent (age 13+) HIV cases and 145 living HIV/AIDS cases in Cecil County. Certain populations are more likely to have HIV/AIDS in Cecil County. By sex, 62.1% of HIV/AIDS cases. By race/ethnicity, minority populations in Cecil County make up a disproportionate number of living AIDS cases as detailed in **Figure 45.** In addition, certain populations in Cecil County are more likely to have been exposed to HIV/AIDs. The most common exposure categories are men who have sex with men (MSM) (36.6%), heterosexual (32.3%), injection drug user (IDU) (23.2%) and MSM/IDU (4.5%).[105]

[104] Maryland Department of Health. Center for Sexually Transmitted Infection Prevention. *Sexually Transmitted Infection: 2018 Annual Report.* Accessed at: https://phpa.health.maryland.gov/OIDPCS/CSTIP/Pages/STI-Data-Statistics.aspx

[105] Maryland Department of Health. Center for HIV Surveillance, Epidemiology, and Evaluation. *Cecil County HIV Fact Sheet, 2017.* Accessed at: https://phpa.health.maryland.gov/OIDEOR/CHSE/Pages/statistics.aspx

Figure 45. HIV/AIDS Cases in Cecil County by Race & Ethnicity



Other Communicable Disease

Hepatitis C is a viral infection that causes liver inflammation, sometimes leading to serious liver damage. In 2016, the rate of reported chronic hepatitis C cases in Cecil County was 300.2 cases per 100,000 population. This was significantly higher than the average for Maryland of 133.2 cases per 100,000 population.[106]

Mortality

Health status in a community is measured in terms of mortality or rate of death within a population.

Infant Mortality

The following changes in data were observed in Cecil County between the reporting periods for the previous CHNA and this current assessment:

- **Infant Mortality Rate**[107] **decrease**
    - Current: in 2017, there were 5.7 deaths per 1,000 births
    - Previous: In 2013, there were 6.3 deaths per 1,000 live births

[106] Maryland Department of Health. Infectious Disease Prevention and Health Services Bureau. *Viral Hepatitis: State Update: 2018 Annual STI Update.* Accessed at: https://phpa.health.maryland.gov/Pages/infectious-disease.aspx

[107] Maryland Vital Statistics Administration. Vital Statistics and Reports [webpage]. Accessed at: https://health.maryland.gov/vsa/Pages/reports.aspx

Deaths

The Maryland Vital Statistics Administration provides mortality reports.[108] The following changes in data were observed in Cecil County between the reporting periods for the previous CHNA and this current assessment:

- **Total deaths in Cecil County** **increase**
  - Current: In 2017, there were 1,033 total deaths
  - Previous: In 2014, there were 855 total deaths

- **Deaths by race** **increase**
  - Current
    - Whites: 960
    - African Americans: 60
    - Asian/Pacific Islanders: 5
    - Hispanics: 8
  - Previous
    - Whites: 801
    - African Americans: 47
    - Asian/Pacific Islanders: 5
    - Hispanics: 7

Causes of Death

Table 14 shows causes of death for data reported during the previous CHNA (2014) and this current assessment (2017).

Table 14. Age-Adjusted Death Rate by Cause, Cecil County (per 100,000 population)

Causes of Death	2014	2017
All Causes	822.3	889.6
Heart Disease	198.7	205.3
Cancer	185.9	192.3
Stroke	47	55.9
Accidents	33.5	50.7
Chronic Lower Respiratory Disease	64.5	64.1
Diabetes Mellitus	15.8	23
Alzheimer's	22.2	36
Influenza & Pneumonia	16.4	*
Septicemia	12.1	*
Nephritis	16.8	*
Suicide	13.4	*

**Age-adjusted death rates not calculated for fewer than 20 deaths reported*

[108] Maryland Vital Statistics Administration. Vital Statistics and Reports [webpage]. Accessed at: https://health.maryland.gov/vsa/Pages/reports.aspx

COMMUNITY HEALTH IMPROVEMENT PLAN

Prioritizing Health Needs

The CHNA planning team worked with the Community Health Advisory Committee (CHAC) to prioritize the health needs identified from the CHNA. There were two steps to this process: 1) CHAC voting; and 2) CHNA planning team review of all data and prioritization of health needs based on all submitted data.

CHAC Meeting – January 2019

The prioritization process started with the January 2019 CHAC meeting. Dan Coulter (Health Planning, Cecil County Health Department) and Jean-Marie Kelly (Community Benefit, Union Hospital) facilitated the meeting. Meeting participants were asked to review the CHNA data according to the top 15 health needs identified from the Online Community Health Survey (Table 15).

Table 15. Online Community Health Survey – Top 15 Health Needs

Rank	Health Issue	% Respondents
1	Substance Abuse	75.3%
2	Mental Health	37.7%
3	Homelessness	32.9%
4	Access to Health Services	18.9%
5	Poverty	15.7%
6	Obesity	14.2%
7	Affordable Housing	13.9%
8	Child Abuse and Neglect	13.5%
9	Dental Health	10.9%
10	Cancer	10.7%
11	Violent Crime	7.9%
12	Unemployment	6.8%
13	Childhood Trauma	5.9%
14	Educational Attainment	5.6%
15	Diabetes	5.0%

Table 16. NAACHO Criteria for Priority Selection[109]

Criterion	Measurement
Size	How many people are affected by the health problem?
Seriousness	Does the health problem lead to death, disability, and/or reduced quality of life?
Trends	Has the health problem gotten better or worse over time?
Equity	Are there specific groups that are more affected by the health problem?
Intervention	Are there existing strategies available to address the health problem?
Feasibility	Can we reasonably combat the health problem?
Value	How does the community rate the importance of the health problem?
Consequences of Inaction	What is the risk to the population by not acting on the health problem?
Social Determinant/ Root Cause	Does the health problem impact other health issues? What is the root cause of the health problem?

After all data was reviewed, meeting participants (including facilitators) were asked to vote (considering the NACCHO criteria in Table 16) on their top three health needs by placing a sticker next to each selected need on large, wall-hanging flip charts. This method of voting was modeled after NACCHO's "Dotmocracy Method."[110] Participants were only allowed three votes and could not vote in duplicate. After all participants had voted, the marks were tallied and reported aloud for each of the 15 needs:

- Substance abuse – **31 votes**
- Mental health – **24 votes**
- Childhood trauma – **14 votes**
- Access to health services – **11 votes**
- Homelessness – **10 votes**
- Dental health – **10 votes**
- Cancer – **8 votes**
- Obesity – **5 votes**
- Poverty – **2 votes**
- Affordable housing – **2 votes**
- Child abuse and neglect – **1 vote**
- Diabetes – **1 vote**
- Violent crime – **0 votes**

[109] National Association of County and City Health Officials. *White paper: Community Health Assessments and Community Health Improvement Plans for Accreditation Preparation Demonstration Project, pg. 1, 2016*. Accessed at: https://www.naccho.org

[110] National Association of County and City Health Officials. *White paper: Community Health Assessments and Community Health Improvement Plans for Accreditation Preparation Demonstration Project, pg. 4, 2016.* Accessed at: https://www.naccho.org

- Unemployment – **0 votes**
- Educational attainment – **0 votes**

After the voting was completed, meeting participants were informed that the final decision on the health priorities would be decided by the CHNA planning team and communicated to CHAC as soon as possible.

CHNA Planning Team Meeting – February 2019

The prioritization process concluded during the CHNA planning team meeting where the CHAC voting data was considered. The three participants on the CHNA planning team were: Jean-Marie Kelly (Community Benefit, Union Hospital), Dan Coulter (Health Planning, Cecil County Health Department), and Laurie Humphries (acting Health Officer, Cecil County Health Department).

Hanlon Method Scoring Worksheet

Dan Coulter led the meeting and provided a Hanlon Method scoring worksheet with the health needs that had 5-31 CHAC votes (Table 17). The Hanlon Method is an objective scoring tool that ranks health problems based on magnitude, effectiveness, and seriousness.

Table 17. CHNA Hanlon Method Scoring Worksheet

	Size of Health Problem	Seriousness of the Health Problem	Effectiveness of Interventions	Priority Score
Substance Abuse				
Mental Health				
Homelessness				
Access to Health Services				
Dental Health				
Cancer				
Childhood Trauma				
Obesity				

Hanlon Method Guidelines

The guidelines for the CHNA planning team's scoring exercise included:

1) Give each health problem a numerical rating on a scale of 0-10 for each of the three criteria (columns in Table 17).
2) **Apply the PEARL test** – Once health problems have been rated for all criteria, use the PEARL test to screen out health problems based on the following feasibility factors:
    a. **P**ropriety – Is a program for the health problem suitable?
    b. **E**conomics – Does it make economic sense to address the problem?
    c. **A**cceptability – Will the community accept the problem?
    d. **R**esources – Is funding available or potentially available to address the problem?
    e. **L**egality – Do current laws allow program activities to be implemented?

3) **Calculate priority scores** – Based on the three criteria rankings assigned to each health problem in Step 1, calculate the priority scores using the following formula:

   D = [A + (2 x B)] x C

   D = priority score

   A = size of the health problem ranking

   B = Seriousness of the health problem ranking

   C = Effectiveness of intervention ranking

4) **Rank the health problems** – Based on the priority scores calculated in Step 3, assign ranks to the health problems with the highest priority score receiving a rank of 1 and so on.[111]

Results

Table 18 shows the final results of the scoring exercise (scores were averaged from the three participants). The health needs prioritized were: substance abuse, mental health, cancer, and childhood trauma. Substance use and mental health were later combined under "Behavioral Health." It should be noted that the CHNA planning team chose not to emphasize the ranking of the priorities, but rather their importance.

Table 18. Hanlon Scores

Health Issue	Hanlon Score
Substance Abuse	**160**
Mental Health	**158**
Homelessness	103
Access to Health Services	119
Dental Health	144
Cancer	**208**
Childhood Trauma	**150**
Obesity	118

[111] National Association of County and City Health Officials. *Hanlon Method.* Accessed at: https://www.naccho.org/chachipresources

Strategic Planning

The CHNA planning team met with several community groups specializing in the health priority areas identified through the needs assessment (see Table 2). These planning sessions were facilitated in order to "ask the experts" and identify ways in which CHAC members could support them with the goal being to enhance the work already being done in the community. Examples include: supporting current activities, promoting prevention and education, and providing in-kind support. The next section includes the work plans created as a result of the strategic planning sessions.

CHIP Work Plans

The CHIP work plans were created with high level detail in order to be able to accommodate potential changes in community resource allocations and community partner groups' infrastructure and planning, as well as be able to add new objectives and strategies within each priority area to best manage challenges that may arise. In addition, community groups working within the priority areas will be encouraged to use a reporting tool developed during the previous CHNA cycle by one of the CHAC task forces. This tool is not mandatory to use but recommended in order to standardize reporting.

Cancer

CHAC will support the work currently being done by the Cecil County Cancer Task Force in the community for lung cancer screening, to include education, awareness, and increasing health promotions related to getting screened. Union Hospital's Cancer Program and its Commission on Cancer Committee will offer support, as well as Cecil County Health Department's division of Health Promotion.

Key Indicators

- Lung Cancer Incidence
- Lung Cancer Mortality Rate
- Prevalence of Smoking

Goal

- **1.1:** Reduce cancer mortality in Cecil County

Cancer Work Plan

Objective	Strategies
1.1: By June 30, 2022, increase the number of individuals receiving low-dose lung cancer CT screenings by 5% in order to increase awareness for lung cancer prevention. Baseline: 556 people screened (CY16, CY17, and CY18) Measurement goal: 584 individuals screened (CY19, CY20, and CY21) *Source: Union Hospital Cancer Program*	**A**. Raise awareness for lung cancer prevention in order to reduce stigma related to risk factors contributing to lung cancer **B**. Support and engage medical providers in promoting patient awareness of lung cancer prevention efforts (primary prevention: education; secondary prevention: screening; and tertiary prevention: treatment) **C**. Educate and support medical providers on how to talk to patients about quitting smoking **D**. Support medical providers in making community presentations **E**. Promote referrals for smoking cessation among medical providers **F**. Promote the use of self-screening tools in the community for low-dose CT lung cancer screening **G**. Support and engage the community (incl. Community groups, faith-based organizations, and businesses) in promoting lung cancer prevention efforts (primary prevention: education; secondary prevention: screening; and tertiary prevention: treatment) **H**. Provide advertising and media support for health promotions related to the availability of prevention services in the community **I**. Engage the community on lung cancer prevention efforts via social media and other educational and/or advocacy outlets

Behavioral Health

CHAC will be working to enhance and support the efforts to address both Substance Abuse (SA) and Mental Health (MH) in Cecil County. CHAC has met with leadership from Cecil County Health Department's Core Service Agency (MH), as well as the Drug-Free Communities Coalition (SA), Cecil County Drug and Alcohol Abuse Council (SA), and the Opioid Misuse Prevention Program (SA). CHAC will also support the movement towards integrating behavioral health services at the local health department and community level.

Key Indicators

- Prevalence of Youth Substance Use
- Drug-induced Death Rate
- Rate of ED Visits Related to Substance Use Disorders (SUD)
- Rate of ED Visits Related to MH Conditions
- Prevalence of Depression among Youth
- Suicide Death Rate

Goals

- **1.1**: Prevent the initiation of substance use among youth and support youth in treatment and recovery
- **1.2:** Increase Recovery Support Capacity in Cecil County
- **1.3:** Provide support for individuals with behavioral health conditions re-entering the community
- **1.4:** Integrate Behavioral Health Services in Cecil County to improve outcomes for individuals with co-occurring disorders

Behavioral Health Work Plan

Objectives	Strategies
1.1.1: By June 30, 2022, increase protective factors to reduce the prevalence of substance use among Cecil County public high school students by 5%. Baselines: ● Alcohol use in past 30 days: 31.1% ● Marijuana use in past 30 days: 20.9% ● Prescription Drug Use (ever): 13.3% *Source: 2016 Maryland Youth Risk Behavior Survey*	**A**. Expand youth prevention activities for grades 3-12 **B**. Provide ongoing support for Youth Leadership Summit Activities **C**. Expand Drug Free Cecil Youth Coalition efforts **D**. Hire a youth advisor to coordinate Drug Free Cecil youth efforts **E**. Increase protective factors and community resilience **F**. Expand support mechanisms for youth in recovery **G**. Explore the development of a drop-in community recovery center **H**. Explore the development of an adolescent clubhouse **I**. Identify and engage with youth who have SUDs
1.2.1: By June 30, 2022, increase total peer recovery support contacts by _%. Baseline: _ contacts made in 2018 *Source: Cecil County Health Department Alcohol & Drug Recovery Center* **1.2.2:** By June 30, 2022,Increase the number of individuals trained in overdose response by 25%. Baseline: _ individuals were trained (through June 30, 2019) *Source: Cecil County Health*	**A.** Expand Peer Recovery Support capacity **B.** Increase community access to Narcan **C.** Increase recovery support for individuals transitioning from prison or jail back into the community **D.** Research anti-stigma initiatives **E.** Implement an anti-stigma awareness campaign

Department Alcohol & Drug Recovery Center **1.2.3:** By June 30, 2021, implement an anti-stigma educational awareness campaign in Cecil County. Baseline: N/A	
1.3.1: By June 30, 2020, develop a plan to support re-entry for individuals transitioning from jail with mental health disorders. Baseline: N/A **1.3.2:** By June 30, 2022 increase the percentage of individuals with substance use disorders re-entering the community who enter treatment or after-care programs. Baseline: N/A	**A**. Form a workgroup to pursue re-entry planning **B**. Research evidence-based re-entry programs **C**. Seek funding to support re-entry initiatives **D**. Expand treatment and re-entry aftercare programs **E**. Partner with the CCHD Division of Addictions Services for individuals with co-occurring disorders
1.4.1: By June 30, 2020, form a committee to pursue the expansion of behavioral health integration in Cecil County. Baseline: N/A **1.4.2:** By June 30, 2021, develop a joint Behavioral Health Plan for Cecil County. Baseline: N/A	**A**. Form a behavioral health committee made up of stakeholders from the mental health and substance use disorder fields **B**. Hold joint Council meetings to align efforts **C**. Develop and submit a joint Behavioral Health Plan for Cecil County **D**. Engage and educate stakeholders and the community on co-occurring disorders and Behavioral Health Integration

Childhood Trauma

CHAC will serve as support for the Local Management Board's Childhood Trauma Subcommittee as they work through addressing planned recommendations. CHIP planning meetings solidified CHAC responsibilities to support the increase of community and provider education and awareness of childhood trauma. In addition, the Cecil County Health Department will explore evidence-based home visiting programs to implement in Cecil County.

Key Indicators

- Prevalence of ACES
- Child maltreatment incidence rate
- Domestic violence incidence rate

Goals

- **1.1:** Increase education opportunities for the community on childhood trauma
- **1.2:** Educate and empower health care providers to recognize and treat the effects of childhood trauma
- **1.3:** Enhance parenting skills to promote healthy child development

Childhood Trauma Work Plan

Objectives	Strategies
1.1.1: By June 30, 2022, hold at least 6 events to educate the community about childhood trauma. Baseline: N/A	**A.** Hold screenings of the documentary "Resilience: The Biology of Stress & Science of Hope" **B.** Hold community forums related to childhood trauma **C.** Hold trainings related to childhood trauma **D.** Change social norms to support parents and positive parenting **E.** Partner with youth serving organizations on child abuse prevention awareness and education **F.** Participate in the National Child Abuse awareness "Pinwheels for Prevention" campaign **G.** Train community leaders to act as advocates and spread information on childhood trauma in their communities

1.2.1: By June 30, 2020, create and distribute a survey to assess current knowledge of childhood trauma and training needs of health care providers in Cecil County. Baseline: N/A	**A.** Research and develop survey tool **B.** Obtain list of physicians and distribute survey **C.** Analyze results to determine needs
1.2.2: By June 30, 2022, identify and hold at least 2 childhood trauma related trainings for medical professionals. Baseline: N/A	**A.** Identify training resources for physicians and other health care providers **B.** Utilize evidence-based materials to educate physicians on trauma-informed care
1.3.1: By June 30 2021, research evidence-based home visiting programs and determine the feasibility of implementing a program in Cecil County. Baseline: N/A	**A.** Support the creation of evidence-based home visiting programs, such as Healthy Families America program in Cecil County

	The policies set forth do not establish a standard of care to be followed in every case. It is recognized that each case is different and those individuals involved in providing health care are expected to use their clinical judgment in determining what is in the best interests of the patient, based on the circumstances existing at the time. It is impossible to anticipate all possible situations that may exist and to prepare policies for each. Accordingly, these policies should be considered to be guidelines to be consulted for guidance with the understanding that departures from them may be required at times.

POLICY TITLE: Financial Assistance Policy and Procedure	
POLICY #: F-415	
Review Responsibility: Director, Patient Financial Services	
Approved By: Board of Directors	Signature/Date: May 27, 2016 Approval Reflected in Board Minutes
Effective: 03/2004	
Reviewed: 06/2004, 03/2006, 12/2008, 02/2009, 03/2009, 04/2010, 03/2013, 09/2014, 06/2015	
Revised: 03/2004 (replaces Charity Care Policy and Procedure), 06/2004, 09/2004, 03/2006, 12/2008, 02/2009, 04/2010, 08/2012, 09/2014, 06/2015	
Scope: Patient Financial Services	

I. Purpose

A. Union Hospital of Cecil County is a not-for-profit entity established to provide safe, high quality health and wellness services to the residents of Cecil County and neighboring communities. Accordingly, the hospital is committed to providing emergency and medically necessary services to patients, without discrimination, regardless of the patient's financial assistance eligibility.

B. This policy is to ensure that a consistent and equitable process is followed in granting financial assistance to appropriate patients while respecting the individual's dignity.

C. This policy is designed in accordance with the federal Patient Protection and Affordable Care Act (PPACA), Section 501(r)(4) of the Internal Revenue Service Code and Code of Maryland Regulations (COMAR) 10.37.10.26.A

II. Policy

A. Union Hospital of Cecil County is committed to providing programs that facilitate access to care for vulnerable populations including the provision of financial assistance (charity care) to the uninsured, underinsured, those ineligible for governmental insurance programs, or where the ability to pay is a barrier to accessing emergency or medically necessary care.

III. Definitions: The following terms are meant to be interpreted as follows within this policy:

1. **Emergency Care** – Emergency care is immediate care which is necessary to prevent serious jeopardy to a patient's health, serious impairment to bodily functions, and/or serious dysfunction of any bodily organ or part of the body as could reasonably be expected by the prudent layperson. See also 42 US Code § 1395dd.

2. **Financial Counselor** – A financial counselor is an employee of Union Hospital who provides assistance to patients seeking information regarding patient billing, financing, health coverage options including financial assistance.
3. **Financial Hardship** – A financial hardship as defined in COMAR 10.31.26.A is medical debt, incurred by a family over a 12-month period that exceeds 25 percent of the family income.
4. **Free Care** – Free care or a 100% medical debt adjustment is available to patients with household income between 0% and 200% of the Federal Poverty Level (FPL) and who otherwise meet the requirements to receive financial assistance under this policy.
5. **Gross Charge** – Gross charge is the full amount of the bills for a medical service.
6. **Homelessness** – Homelessness is an "individual who lacks housing (without regard to whether the individual is a member of a family), including an individual whose primary residence during the night is a supervised public or private facility that provides temporary living accommodations and an individual who is a resident in transitional housing" (42 U.S.C. § 254b).
7. **Household Income** – As provided in the cost assistance guidelines under PPACA, the amount equal to the Modified Adjusted Gross Income (MAGI) of the head of household and spouse plus the Adjusted Gross Income (AGI), of anyone claimed as a dependent based on most recent tax return with additional updates as appropriate.
8. **Household Size** – Household size is defined per Internal Revenue Service guidelines and generally includes the tax filer, spouse and tax dependents.
9. **Medical Debt** - A medical debt is the amount a patient is responsible for paying after all discounts, deductions, and reimbursements are applied to the gross charges for services provided.
10. **Medically Necessary Services** – A medically necessary service is care rendered to a patient in order to diagnose, alleviate, correct, cure, or prevent the onset of a worsening of conditions that could endanger life, cause suffering or pain, cause physical deformity or malfunction, threaten to cause or aggravate handicap, or result in overall illness or infirmity and based on generally accepted standards of medicine in the community.
11. **Presumptive Eligibility for Financial Assistance** – Presumptive eligibility for financial assistance is provided for a patient who is the beneficiary/recipient of means-tested social programs as defined in COMAR 10.37.10.26 and as listed in this policy.
12. **Reduced-Cost Care** - Reduced-cost care is a pro-rated medical debt adjustment available to patients with household income between 200% and 400% of the Federal Poverty Level (FPL) and who otherwise meet the requirements to receive financial assistance under this policy.
13. **Underinsured Patient** – An underinsured patient is one who has limited healthcare coverage or third-party assistance that leaves the patient with an out-of-pocket liability, and therefore may still require assistance to resolve their medical debt.
14. **Uninsured Patient** – An uninsured patient is one with no insurance or third-party assistance to help resolve their medical debt.

IV. Scope

A. This policy applies to medical debt incurred for emergency or medically necessary services, inpatient or outpatient, rendered at the hospital or its affiliates by the following owned entities:
   - Union Hospital of Cecil County;
   - Union Multi-Specialty Practices;
   - Union Urgent Care;
   - Union Diagnostic Centers;
   - Open MRI of Elkton; and
   - Union Radiation Oncology Center.

B. This policy applies to medical debt incurred for emergency or medically necessary services, inpatient or outpatient, rendered at the hospital by the following contracted physician entities:
   - Maryland Emergency Physicians (MEP);
   - Physician Inpatient Care Specialist (MDICS);
   - Nemours Pediatric Hospitalists.

C. This policy does not apply to any other provider of care rendering services at Union Hospital or its affiliates, to include but not limited to, independent physicians who provide primary or consultation services that operate as their own business entity.
   - These services are generally billed separately from hospital services and are excluded.

V. General Procedure

A. Patient shall make application for financial assistance using the Maryland State Uniform Financial Assistance Application form through a financial counselor.
   1. If appropriate, the financial counselor may take the application orally.
   2. A financial counselor may request verification of income to include:
      - Pay stubs, unemployment benefits, Social Security checks, cash assistance checks, alimony or child support checks;
      - Federal and State Income Tax Returns;
      - Two recent bank statements or financial records;
      - Proof of U.S. citizenship or permanent residency;
      - Proof of address;
      - Proof of screening for either Maryland Medicaid or a Qualified Health Plan with a patient navigator (if uninsured);
      - Proof that employer does not offer a health plan.
   3. The patient is expected to cooperate with the timely completion and submission of all requested information.
      - If the patient does not provide complete verification of income within 30 days of the application, the request for financial assistance may be denied.

B. Patients receive financial counseling, referrals and assistance to identify potential public or private healthcare programs to assist with long term needs.
   1. If uninsured, the patient will be provided assistance to determine Maryland Medicaid or Qualified Health Plan eligibility through the appropriate Maryland Health Connection connector entity or other qualified health insurance marketplace.

C. Union Hospital will use a household income-based eligibility determination and the current Federal Poverty Guidelines to determine if the patient is eligible to receive financial assistance.
   1. The Federal Poverty Guidelines (FPL) are updated annually by the U.S. Department of Health and Human Services.
   2. If the patient's household income is at/or below the amount listed below, financial assistance will be granted in the form of free care (a 100% adjustment) or reduced-cost care (25%-75% adjustment to their medical debt.
      - Household income up to 200% of FPL 100% Adjustment
      - Household income between 201% & 250% of FPL 75% Adjustment
      - Household income between 251% & 300% of FPL 50% Adjustment
      - Household income between 301% & 400% of FPL 25% Adjustment
   3. Patients with household income up to 500% of FPL and with a financial hardship will receive a 25% adjustment.
   4. A payment plan is available for all individuals eligible for financial assistance under this policy and for those with household income up to 500% of FPL, if requested.

D. Once the financial assistance application is complete, decisions regarding eligibility will be made within 15 business days with the following approvals:
   1. < $ 5000.00 – approved by financial counselor;
   2. $ 5000.00 to $ 9999.99 – approved by Director, Patient Financial Services;
   3. > $10,000 – approved by Chief Financial Officer.

VI. Presumptive Eligibility

A. Presumptive Eligibility for Financial Assistance:
   Patients who are beneficiaries/recipients of the following means-tested social services programs are deemed eligible for free care upon completion of a financial assistance application, and proof of enrollment within 30 days (30 additional days permitted if requested):
   1. Households with children in the free or reduced lunch program;
   2. Supplemental Nutritional Assistance Program (SNAP);
   3. Low-income-household energy assistance program;
   4. Women, Infants and Children (WIC);
   5. Other means-tested social services programs deemed eligible for free care policies by the Department of Health and Mental Hygiene (DHMH) and the Health Services Cost Review Commission (HSCRC), consistent with HSCRC regulation COMAR 10.37.10.26.

B. Presumptive eligibility for financial assistance will be granted under the following circumstances without the completion of a financial assistance application but with proof or verification of the situation described:
   1. A patient that is deceased with no estate on file;
   2. A patient that is deemed homeless;
   3. A patient that presents a sliding fee scale or financial assistance approval from a Federally Qualified Health Center or Cecil County Health Department;

- Financial assistance will be awarded as outlined in the approval letter provided from that agency.

4. Non-billable services resulting from guardianship determinations for observation hours or inpatient days;
5. A patient that has been approved for Specified Low-Income Medicare Beneficiary (SLMB) programs after verification is made through the State system.

VII. Eligibility Period

A. Once eligibility for financial assistance has been established, the patient shall remain eligible for free or reduced-cost, emergency and medically necessary care during the 12-month period beginning on the date on which the initial episode of care occurred. If a patient returns to UHCC for treatment during their eligibility period, he/she may be asked to provide additional information to ensure that all eligibility criteria have been met.

B. At the conclusion of the eligibility period, the patient must re-apply for financial assistance.

C. If a patient enrolled in a health plan drops coverage without a qualified life change event taking place, the patient will not be able to apply for financial assistance.

   1. If a qualified life event takes place, the patient will be able to apply for financial assistance if they are denied Medicaid and have been rescreened per Section V of this policy.

D. If within a two-year period after the date of service, the patient is found to have been eligible for free care on that date of service (using the eligibility standards applicable to that date of service) the patient shall be refunded amounts received from the patient/guarantor exceeding $5.00.

   1. If documentation demonstrates lack of cooperation by the patient providing information to determine eligibility for financial assistance, the two-year period may be reduced to 30 days from the date of initial request for information.

E. If a patient has received reduced-cost, medically necessary care due to a financial hardship, the patient or any immediate family member of the patient living in the same household shall remain eligible for reduced-cost, medically necessary care during the 12-month period beginning on the date on which the initial episode of care occurred.

VIII. Reconsideration of Denial of Free or Reduced-Cost Care

A. A patient who is denied financial assistance under this policy has the right to request reconsideration of that denial.

B. Upon request from the patient, the Chief Financial Officer, or designee, will review all components of the application and make the final determination of eligibility.

IX. Medical Debt Determination (Limit on Charges)

A. Financial assistance eligible individuals receiving emergency or medically necessary care will be charged less than gross charges for services. Gross charges will be reduced by one of the following percentages:

1. The 501(r)(4) Amount Generally Billed (“AGB”) method for all services provided by affiliates other than the hospital.
    - In August of each year, the Amount Generally Billed percentage will be calculated utilizing the look-back method with Medicare fee-for-service claims from the previous fiscal year.
2. The COMAR 10.37.10.26.A method for all services provided by the hospital.
    - The hospital mark-up percentage as provided annually in the HSCRC rate order.

B. Each August, the applicable percentage described in IX.A of this policy will be updated on the Maryland Uniform Financial Assistance Application cover sheet and applied as a deduction to gross charges.
    1. A financial assistance adjustment will be applied prior to the final determination of the patient’s medical debt.

X. Balances Eligible for and Excluded from Financial Assistance

A. All self-pay balances, including self-pay balances after insurance payments, including copays, co-insurance and deductibles, may be eligible for consideration for Financial Assistance with the following exceptions:
    1. Balances covered by health insurance.
    2. Balances covered by a government or private program other than health insurance.
    3. Balances for patients that would qualify for Medical Assistance, individual or family health coverage through the Maryland Health Connection or equivalent insurance marketplace, or through an employment-based health plan, but do not apply.
        - Applications received during a non-enrollment period, either through the Maryland Health Connection or through employment-based health care, that were not otherwise screened on a previous account, and that are deemed ineligible for Maryland Medicaid, may be allowed to apply on a case-by-case basis.
        - If the patient chooses not to elect health benefits offered by employer, or as an eligible dependent, or through the Maryland Health Connection, the patient will be deemed ineligible for financial assistance, but may be evaluated on a case-by-case basis for hardship or circumstances justifying lack of employer or Maryland Health Connection coverage.
    4. Balances for patients who are not U.S. residents may be allowed after an administrative review and on a case-by-case basis as approved by the Chief Financial Officer or designee.
    5. Balances on cosmetic surgery and other procedures that are considered elective and without which the patient's general health would not be adversely affected.
    6. Balances for patients who falsify information on, or related to, the application.
    7. Union Hospital of Cecil County reserves the right to evaluate applications with special or extenuating circumstances on a case-by-case basis as approved by the Chief Financial Officer or designee.

XI. Action in the Event of Non-Payment

A. Union Hospital may contract with outside collection services to pursue collection of delinquent accounts. All unpaid accounts without exception or payment arrangements are placed in outside collection after a minimum of 90 days from the initial billing statement and delivery of all scheduled patient account statements to the patient/guarantor.

B. Union Hospital does not conduct, or permit collection agencies to conduct on their behalf, extraordinary collections efforts against individuals.

XII. Measures to publicize this policy

A. Information regarding the UHCC Financial Assistance Program and the availability of financial counseling is communicated broadly.

B. Financial assistance communications include, but are not limited to, the following:
   1. Statement of availability on financial consent form;
   2. Upon discharge from inpatient, observation or surgical services;
   3. On billing statements/invoices.
   4. On electronic or paper signs located at registration locations.

C. A patient can access this policy and a plain language summary through the following methods:
   1. Electronic copies are can be accessed on the Union Hospital of Cecil County Website at:
      - www.uhcc.com/About/Patients-Visitors/Admission/Financial-Assistance
   2. Paper copies are available:
      - By mail: Union Hospital of Cecil County
Patient Financial Services Department
106 Bow St.
Elkton, MD 21921
      - By Phone: 443-406-1337 or 410-392-7033
      - By E-mail: unionhospitalbilling@uhcc.com
      - Upon Request at the following locations:
        a. Outpatient Registration Department
        b. Emergency Department Registration
        c. Patient Financial Services Department
        d. Customer Service Department
   3. Union Hospital informs local public and community organizations that address the health needs of the community's vulnerable and low-income populations of this policy.

XIII. Ensuring Compliance

A. Each August, the Director of Patient Financial Services or designee, will perform an audit to include:
   1. A recalculation of the percentage discount from gross charges as described in IX.A of this policy;
   2. A random sampling of 25 billing statements from the prior fiscal year to ensure all required information is present;

3. A visit to each registration point within the hospital to ensure each location has updated financial assistance policies, applications and supporting materials;
4. An audit of the website to ensure that application and policy are easily accessible;
5. A review of current census data for the primary service area to ensure materials are available in additional languages spoken by greater than 5% of the population served.

XIV. Plain Language Summary

Consistent with its mission to provide safe, high quality health and wellness services to the residents of Cecil County and neighboring communities, Union Hospital of Cecil County and its affiliates are committed to providing free or discounted care to individuals who are in need of emergency or medically necessary treatment and have household income below 400% of the Federal Poverty Level (FPL) Guidelines. Individuals who are eligible for financial assistance will not be charged more than the average amounts generally billed to insured patients, for emergency or medically necessary care.

Financial counselors are available Monday through Friday, from 8:00am until 4:30pm to discuss the application process either in person at Union Hospital or via phone at 443-406-1337 or 410-392-7033.

Union Hospital will not pursue extraordinary collection actions against any individual.

For a free copy of the entire Financial Assistance Policy and/or an Application for Financial Assistance in English or Spanish, patients can:

- Visit the website at: www.uhcc.com/About/Patients-Visitors/Admission/Financial-Assistance
- Send a request by mail to: Union Hospital of Cecil County
Patient Financial Services Department
106 Bow St.
Elkton, MD 21921
- Request by calling 443-406-1337 or 410-392-7033
- Send a request by E-mail to unionhospitalbilling@uhcc.com
- Request in person at the following locations:
  - Outpatient Registration Department
  - Emergency Department Registration
  - Patient Financial Services Department
  - Customer Service Department

XV. References

A. Code of Maryland Regulations (COMAR) 10.37.10.26
B. Patient Protection and Affordable Care Act, Public Law 111-148 (124 Stat. 119 (2010))

C. Department of Treasury, Internal Revenue Service Code 501(r)(4)
D. US Department of Health and Human Services: Federal Register and the Annual Federal Poverty Guidelines
E. US Code Title 42 Chapter 6A Subchapter II Part D Subpart I § 254b – Health Centers
F. US Code Title 42 Chapter 7 Subchapter XVIII Part E § 1395dd – Examination and treatment for emergency medical conditions and women in labor

XVI. Related Documents/Policies:

Maryland State Uniform Financial Assistance Application

From:	Coombes, Katie Wolinski
To:	Hilltop HCB Help Account
Subject:	RE: Clarification Required - ChristianaCare Union Hospital FY 21 Community Benefit Narrative
Date:	Tuesday, May 31, 2022 3:47:45 PM

Report This Email

Good afternoon,

I have provided my answers in blue. Please let me know if additional information is needed. Thanks!

- For Question 3 on page 1 of the attached, your response indicated that ChristianaCare, Union Hospital is not the proper name for your hospital. However, no correct name was submitted in the corresponding text box. Please clarify the proper name for your hospital.

  ChristianaCare, Union Hospital is how we refer to the hospital on written materials. It would be what I think of as the proper name. The legal name for the hospital is Union Hospital of Cecil County, Inc. Is the "proper name" you're looking for how we refer to it or the legal name?

- Please respond to Question 5 on page 1. If applicable, please note any additional community health statistics used by your hospital in Question 6 on page 1.

  The primary statistic ChristianaCare, Union Hospital is concerned with is number served. The areas of need: cancer, behavioral health, and childhood trauma were selected because the numbers of Cecil County residents dying from cancer or overdose deaths or who experienced adverse childhood experiences are high. Our goals are to connect people to cancer screenings and substance use disorder treatment. At this time, we are not focused on particular populations among our residents.

- For Question 44, on page 6, your hospital's facility-level Community Benefit Staff is listed as helping in many ways with the CHNA process. However, for Question 46, on page 7, the same position is listed as "N/A – Position or Department does not exist." Please clarify the status of this entity.

  When the 2019 CHNA was developed, a staff member in a community benefit position was intricately involved in its development and execution. However, that individual left Union Hospital after the 2019 CHNA and CHIP was completed and then Union Hospital joined ChristianaCare. The position has not been filled as consideration is being given as to whether this position should continue to exist on the facility level or if the system level community benefit staff should continue to assume those duties.

- Please confirm that the selection of "Yes" for Question 223 on page 21 was not intentional and that the correct response to that item is "No," as no subsidies were reported on your hospital's financial spreadsheet.

  The correct response is "no." We did not report any subsidies. My apologies for the error.

From: Hilltop HCB Help Account <hcbhelp@hilltop.umbc.edu>

Sent: Friday, May 27, 2022 10:03 AM

To: Hilltop HCB Help Account <hcbhelp@hilltop.umbc.edu>; Coombes, Katie Wolinski <Katie.W.Coombes@ChristianaCare.org>

Subject: [EXTERNAL] Clarification Required - ChristianaCare Union Hospital FY 21 Community Benefit Narrative

Thank you for submitting the FY 2021 Hospital Community Benefit Narrative report for your hospital. In reviewing the narrative, we encountered some items that require clarification:

- For Question 3 on page 1 of the attached, your response indicated that ChristianaCare, Union Hospital is not the proper name for your hospital. However, no correct name was submitted in the corresponding text box. Please clarify the proper name for your hospital.
- Please respond to Question 5 on page 1. If applicable, please note any additional community health statistics used by your hospital in Question 6 on page 1.
- For Question 44, on page 6, your hospital's facility-level Community Benefit Staff is listed as helping in many ways with the CHNA process. However, for Question 46, on page 7, the same position is listed as "N/A – Position or Department does not exist." Please clarify the status of this entity.
- Please confirm that the selection of "Yes" for Question 223 on page 21 was not intentional and that the correct response to that item is "No," as no subsidies were reported on your hospital's financial spreadsheet.

Please provide your clarifying answers as a response to this message.

.