## HARFORD COUNTY SEPSIS INDICATORS 2010-2012

Regarding indicators of sepsis in Harford County, DHMH IDEOR has checked existing data and doesn't find other evidence of unusual sepsis rates in Harford County.

First, we reviewed records from the DHMH Vital Statistics Administration. With this data, we analyzed the cause of death from septicemia in Harford County versus statewide deaths from septicemia and did not find higher rates than expected in Harford County residents in 2010-2012(Table 1).

Table 1: Rates of Death per 100,000 for which Septicemia was the underlying cause or a contributing cause of death by location and year of death

|  | Maryland | Harford |
| :--- | :--- | :--- |
| 2010 | 58.5 | 38.0 |
| 2011 | 54.8 | 45.0 |
| 2012 | 56.3 | 42.9 |

## Source: DHMH Vital Statistics Administration

Second, while sepsis is not a reportable disease in Maryland, DHMH OIDEOR monitors rates of certain reportable diseases that can cause sepsis (specifically, invasive Group A Streptococcus (GAS), invasive Group B Streptococcus (GBS) invasive Streptococcus pneumoniae and Haemophilus influenza) and is able to compare such rates in Harford County versus other Maryland counties from 2010-2012.

These infection rates were slightly higher in Harford County, for GAS and S. pneumoniae (and slightly lower for GBS and $H$. influenzae) than the state averages (Table 2). Therefore, we do not have indirect evidence from our surveillance data that there is a higher rate of sepsis from infectious diseases in Harford County than in other Maryland regions in 2010-2012.

Additionally, we briefly reviewed the healthcare associated infection (CLABSI and SSI) rates for Upper Chesapeake Hospital and Harford Memorial Hospital that are posted on the MHCC website, and there was no indication that rates were higher than expected in either facility (http://mhcc.maryland.gov/consumerinfo/hospitalguide/hospital guide/reports/find a hospital/clabsi all h ospital table.asp?icu id=AdPed).

Thus, there is no indirect or direct evidence from Maryland data to suggest higher than expected rates of sepsis or septicemia deaths in Harford County.

Table 2: Confirmed Cases of Selected Notifiable Diseases for Three Years and Annual Case Rates* per 100,000
Population by Jurisdiction of Residence: Maryland, 2010-2012
(Source: NEDSS--National Electronic Disease Surveillance System. Database accessed 8-21-13)

| Jurisdiction | Group B Strep |  | Group A Strep |  | Streptococcus <br> pneumoniae |  | Haemophilus <br> influenzae |  |
| :--- | ---: | :---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Cases <br> $\mathbf{2 0 1 0 - 2 0 1 2}$ |  | Annual <br> Rate | Cases <br> $\mathbf{2 0 1 0 - 2 0 1 2}$ | Annual <br> Rate | Cases <br> $\mathbf{2 0 1 0 - 2 0 1 2}$ | Annual <br> Rate | Cases <br> $\mathbf{2 0 1 0 - 2 0 1 2}$ |
| Annual <br> Rate |  |  |  |  |  |  |  |  |
| Maryland | $\mathbf{1 , 5 4 6}$ | $\mathbf{8 . 8}$ | $\mathbf{4 7 5}$ | $\mathbf{2 . 7}$ | $\mathbf{1 , 5 4 0}$ | $\mathbf{8 . 8}$ | $\mathbf{2 5 3}$ | $\mathbf{1 . 4}$ |
| Allegany County | 26 | 11.6 | 4 | 1.8 | 27 | 12.1 | 5 | 2.2 |
| Anne Arundel County | 138 | 8.4 | 46 | 2.8 | 159 | 9.7 | 17 | 1.0 |


| Baltimore City | 282 | 15.1 | 128 | 6.9 | 389 | 20.9 | 45 | 2.4 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Baltimore County | 288 | 11.8 | 93 | 3.8 | 229 | 9.4 | 53 | 2.2 |
| Calvert County | 18 | 6.7 | 8 | 3.0 | 31 | 11.6 | 0 | - |
| Caroline County | 11 | 11.1 | 0 | - | 3 | 3.0 | 2 | 2.0 |
| Carroll County | 52 | 10.4 | 11 | 2.2 | 61 | 12.2 | 8 | 1.6 |
| Cecil County | 18 | 5.9 | 3 | 1.0 | 22 | 7.2 | 6 | 2.0 |
| Charles County | 37 | 8.3 | 0 | - | 30 | 6.7 | 4 | 0.9 |
| Dorchester County | 8 | 8.2 | 1 | 1.0 | 2 | 2.0 | 2 | 2.0 |
| Frederick County | 29 | 4.1 | 5 | 0.7 | 50 | 7.0 | 9 | 1.3 |
| Garrett County | 1 | 1.1 | 0 | - | 6 | 6.7 | 2 | 2.2 |
| Harford County | $\mathbf{6 3}$ | $\mathbf{8 . 5}$ | $\mathbf{2 4}$ | $\mathbf{3 . 2}$ | $\mathbf{7 8}$ | $\mathbf{1 0 . 5}$ | $\mathbf{6}$ | $\mathbf{0 . 8}$ |
| Howard County | 57 | 6.5 | 16 | 1.8 | 54 | 6.1 | 10 | 1.1 |
| Kent County | 7 | 11.5 | 1 | 1.6 | 7 | 11.5 | 0 | - |
| Montgomery County | 159 | 5.3 | 52 | 1.7 | 111 | 3.7 | 30 | 1.0 |
| Prince George's County | 201 | 7.7 | 42 | 1.6 | 147 | 5.6 | 33 | 1.3 |
| Queen Anne's County | 10 | 6.9 | 2 | 1.4 | 10 | 6.9 | 1 | 0.7 |
| Saint Mary's County | 23 | 7.1 | 2 | 0.6 | 8 | 2.5 | 5 | 1.6 |
| Somerset County | 10 | 12.6 | 0 | - | 5 | 6.3 | 0 | - |
| Talbot County | 10 | 8.8 | 1 | 0.9 | 1 | 0.9 | 3 | 2.6 |
| Washington County | 44 | 9.9 | 16 | 3.6 | 55 | 12.3 | 6 | 1.3 |
| Wicomico County | 31 | 10.3 | 13 | 4.3 | 37 | 12.4 | 5 | 1.7 |
| Worcester County | 23 | 14.9 | 7 | 4.5 | 18 | 11.7 | 1 | 0.6 |

* Rates are on an annual basis - average number of cases per year per 100,000 average population

