



May 29, 2015

**Public Health Preparedness and Situational Awareness Report: #2015:20
Reporting for the week ending 05/23/15 (MMWR Week #20)**

CURRENT HOMELAND SECURITY THREAT LEVELS

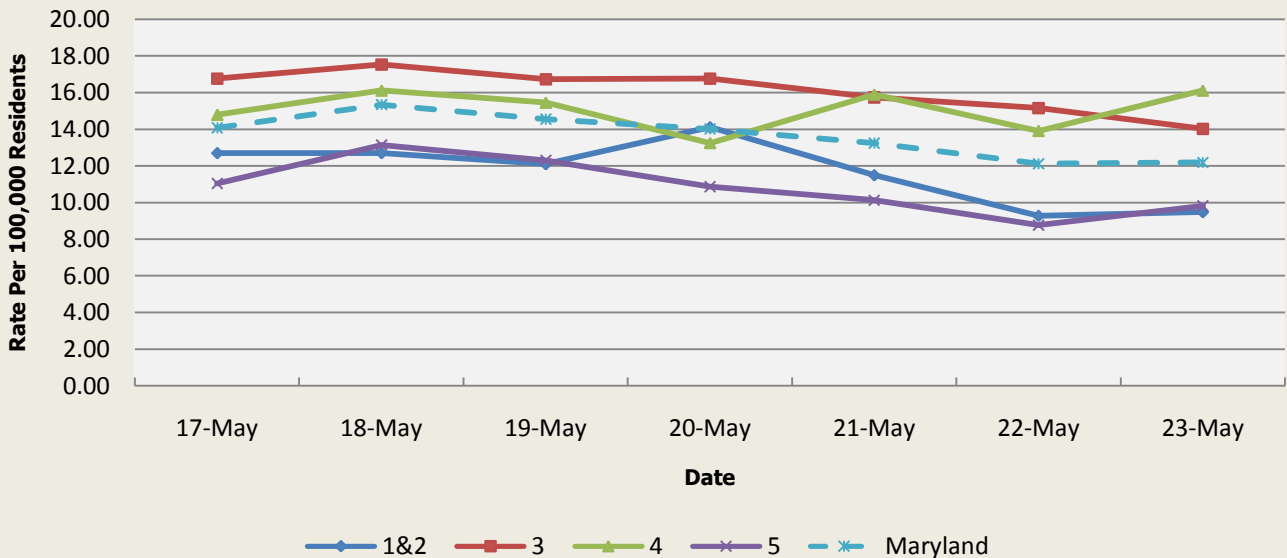
National: No Active Alerts
Maryland: Level Four (MEMA status)

SYNDROMIC SURVEILLANCE REPORTS

ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):

Graphical representation is provided for all syndromes (excluding the "Other" category; see Appendix 1) by Health and Medical Regions (See Appendix 2). Emergency department chief complaint data is presented as rates per 100,000 residents using data from the 2010 census.

**Emergency Department Chief Complaints for Gastrointestinal Syndrome
Rate Per 100,000 Residents**



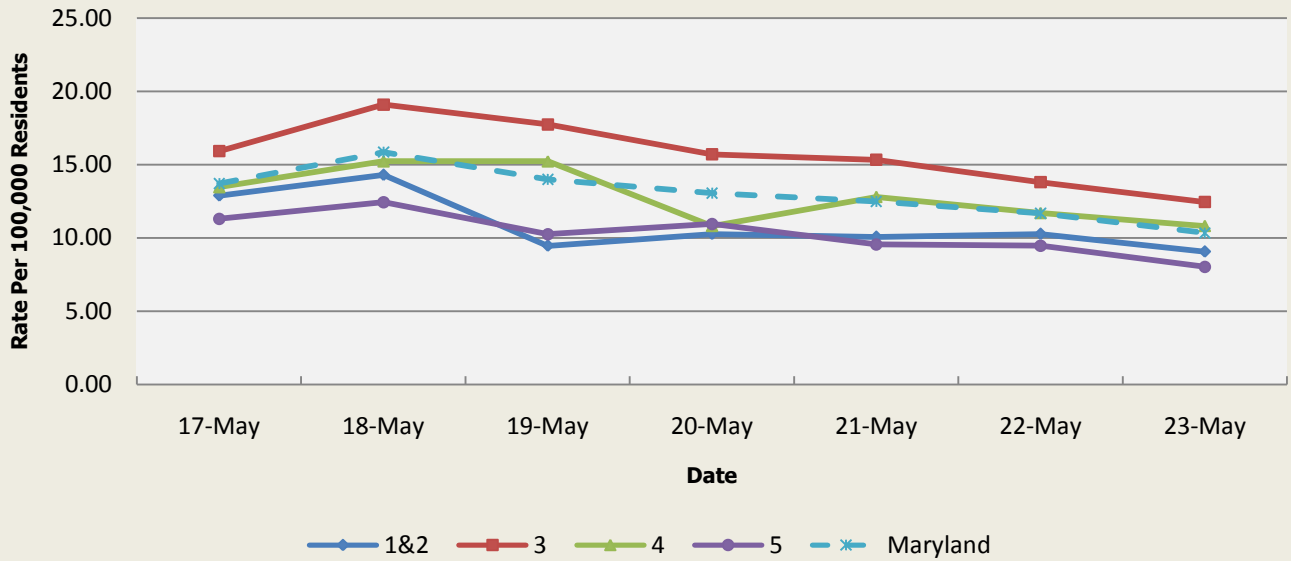
There was 1 gastrointestinal illness outbreak reported this week: 1 outbreak of gastroenteritis/foodborne associated with a private home (Region 3).

**Gastrointestinal Syndrome Baseline Data
January 1, 2010 - Present**

| Health Region | 1&2 | 3 | 4 | 5 | Maryland |
|---------------|-------|-------|-------|-------|----------|
| Mean Rate* | 13.11 | 14.38 | 15.46 | 10.18 | 12.74 |
| Median Rate* | 12.91 | 13.99 | 14.57 | 9.95 | 12.47 |

* Per 100,000 Residents

**Emergency Department Chief Complaints for Respiratory Syndrome
Rate Per 100,000 Residents**

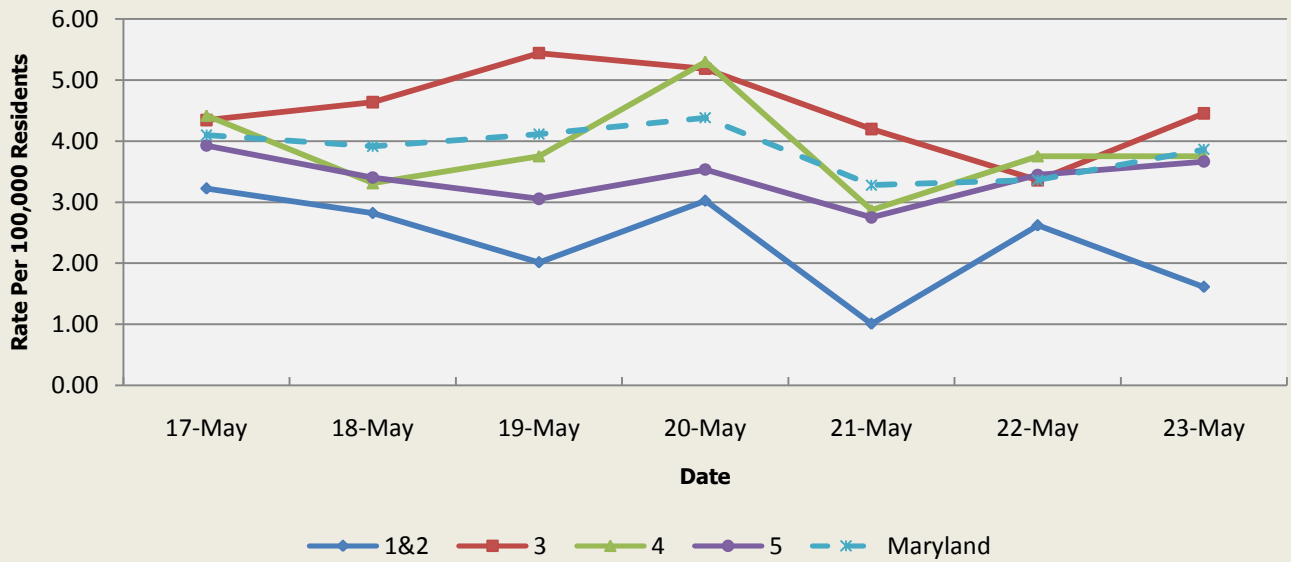


There were no respiratory outbreaks reported this week.

| Respiratory Syndrome Baseline Data January 1, 2010 - Present | | | | | |
|---|-------|-------|-------|------|----------|
| Health Region | 1&2 | 3 | 4 | 5 | Maryland |
| Mean Rate* | 12.13 | 13.55 | 13.91 | 9.74 | 12.00 |
| Median Rate* | 11.70 | 12.86 | 13.25 | 9.26 | 11.46 |

* Per 100,000 Residents

**Emergency Department Chief Complaints for Fever Syndrome
Rate Per 100,000 Residents**

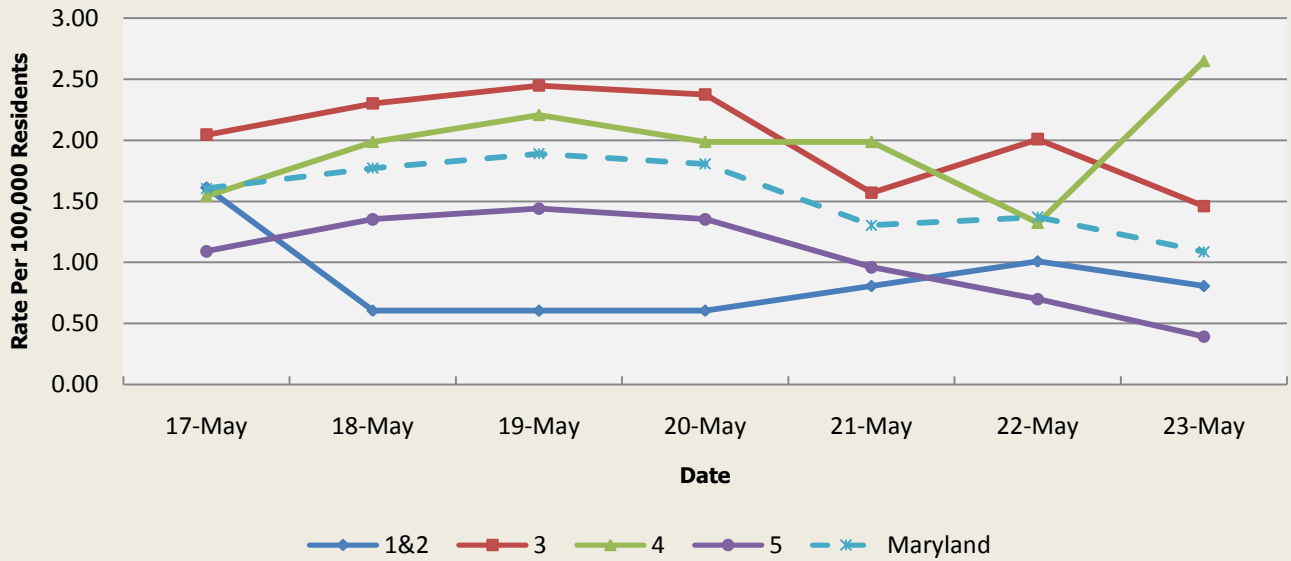


There were no fever outbreaks reported this week.

| Fever Syndrome Baseline Data January 1, 2010 - Present | | | | | |
|---|------|------|------|------|----------|
| Health Region | 1&2 | 3 | 4 | 5 | Maryland |
| Mean Rate* | 3.17 | 3.65 | 3.91 | 3.06 | 3.40 |
| Median Rate* | 3.02 | 3.47 | 3.75 | 2.92 | 3.25 |

Per 100,000 Residents

**Emergency Department Chief Complaints for Localized Lesion Syndrome
Rate Per 100,000 Residents**

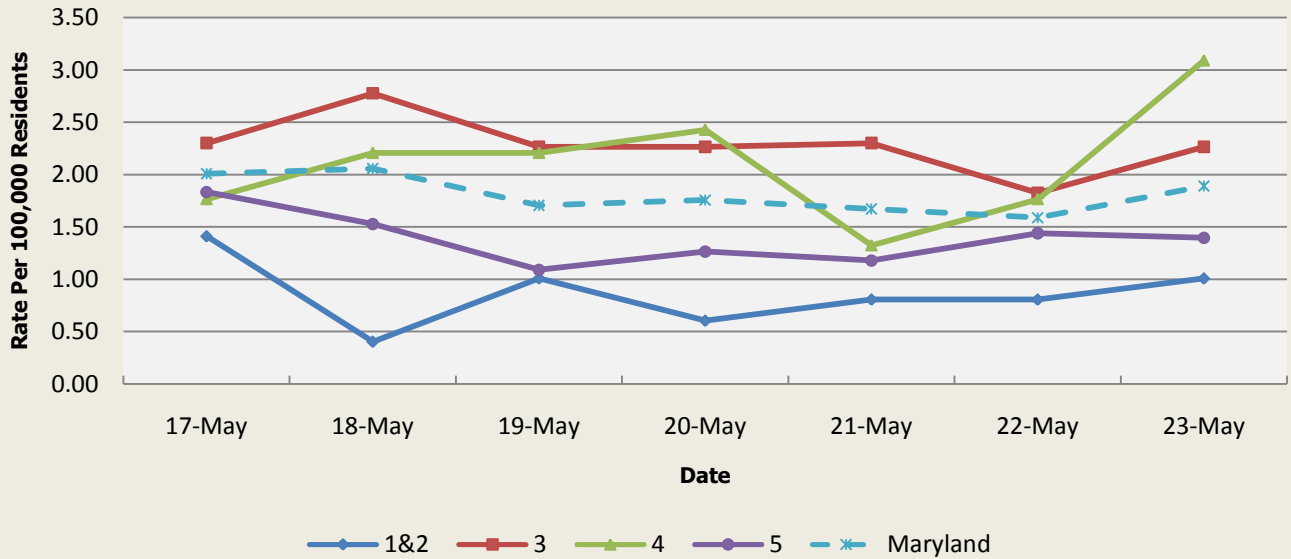


There were no localized lesion outbreaks reported this week.

| Localized Lesion Syndrome Baseline Data January 1, 2010 - Present | | | | | |
|--|------|------|------|------|----------|
| Health Region | 1&2 | 3 | 4 | 5 | Maryland |
| Mean Rate* | 1.12 | 1.92 | 2.05 | 0.99 | 1.51 |
| Median Rate* | 1.01 | 1.83 | 1.99 | 0.96 | 1.44 |

* Per 100,000 Residents

**Emergency Department Chief Complaints for Rash Syndrome
Rate Per 100,000 Residents**

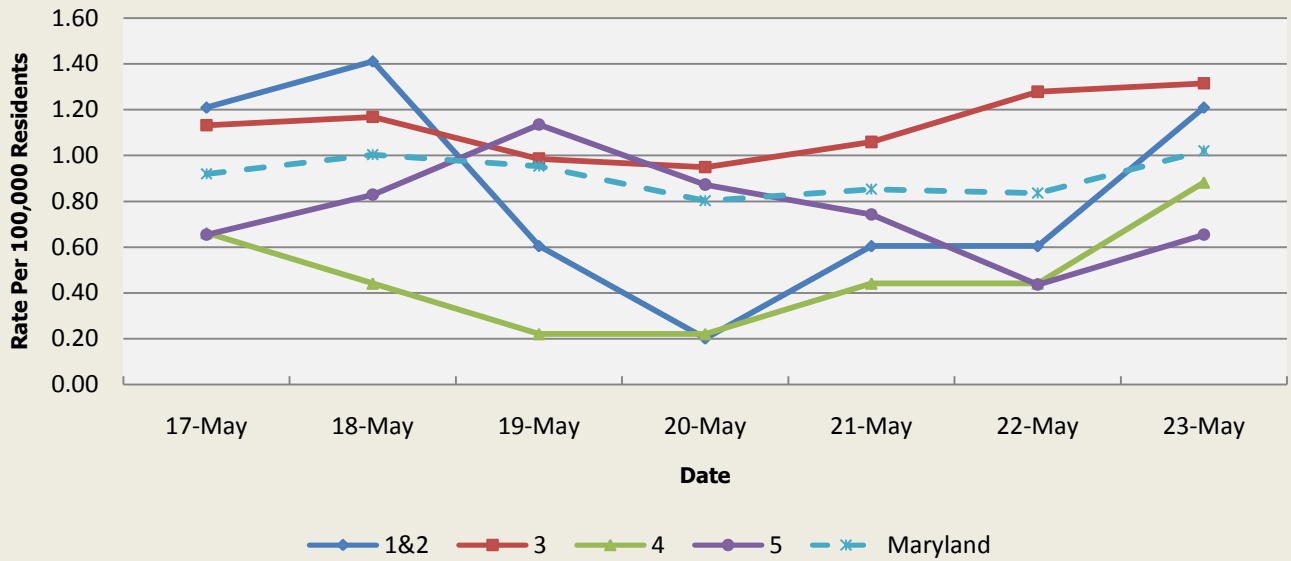


There were no rash illness outbreaks reported this week.

| Rash Syndrome Baseline Data January 1, 2010 - Present | | | | | |
|--|------|------|------|------|----------|
| Health Region | 1&2 | 3 | 4 | 5 | Maryland |
| Mean Rate* | 1.36 | 1.72 | 1.78 | 1.05 | 1.44 |
| Median Rate* | 1.21 | 1.64 | 1.77 | 1.00 | 1.37 |

* Per 100,000 Residents

**Emergency Department Chief Complaints for Neurological Syndrome
Rate Per 100,000 Residents**

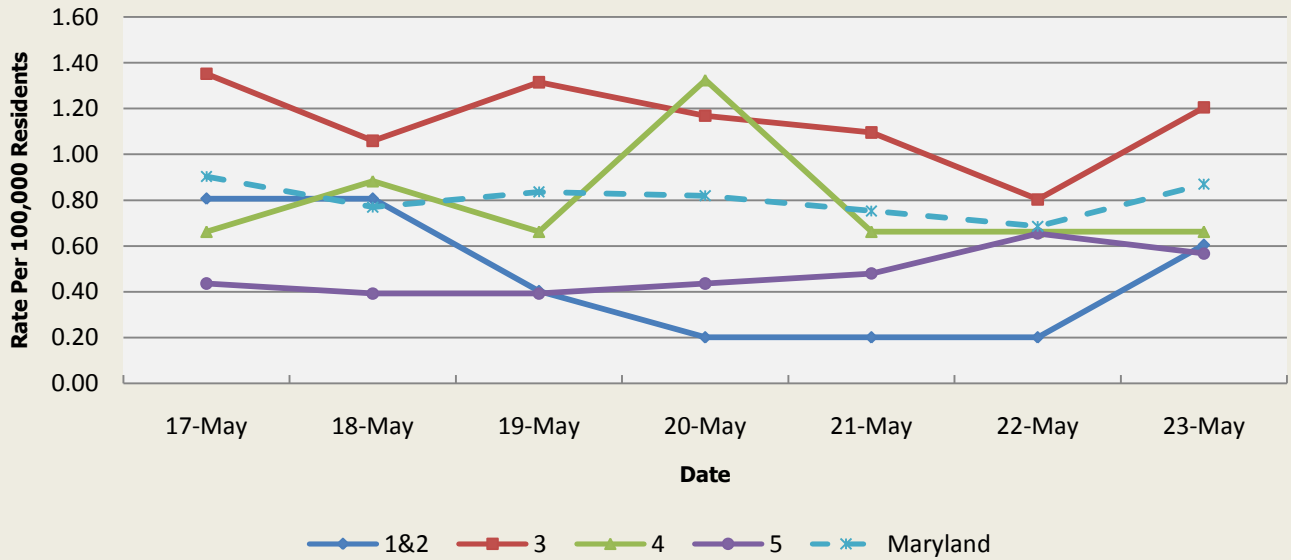


There were no neurological outbreaks reported this week.

| Neurological Syndrome Baseline Data January 1, 2010 - Present | | | | | |
|--|------|------|------|------|----------|
| Health Region | 1&2 | 3 | 4 | 5 | Maryland |
| Mean Rate* | 0.62 | 0.65 | 0.61 | 0.43 | 0.56 |
| Median Rate* | 0.60 | 0.62 | 0.66 | 0.39 | 0.54 |

* Per 100,000 Residents

**Emergency Department Chief Complaints for Severe Illness or Death Syndrome
Rate Per 100,000 Residents**



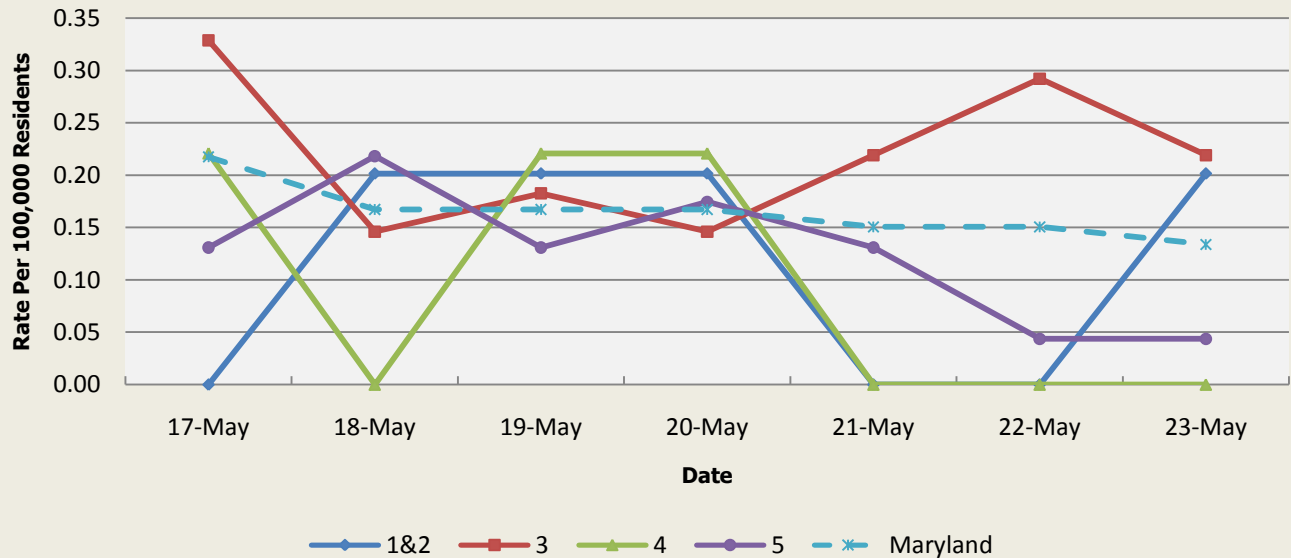
There were no severe illness or death outbreaks reported this week.

| Severe Illness or Death Syndrome Baseline Data January 1, 2010 - Present | | | | | |
|---|------|------|------|------|----------|
| Health Region | 1&2 | 3 | 4 | 5 | Maryland |
| Mean Rate* | 0.77 | 0.95 | 0.89 | 0.41 | 0.73 |
| Median Rate* | 0.81 | 0.91 | 0.88 | 0.39 | 0.72 |

* Per 100,000 Residents

SYNDROMES RELATED TO CATEGORY A AGENTS

**Emergency Department Chief Complaints for Botulism-like Syndrome
Rate Per 100,000 Residents**

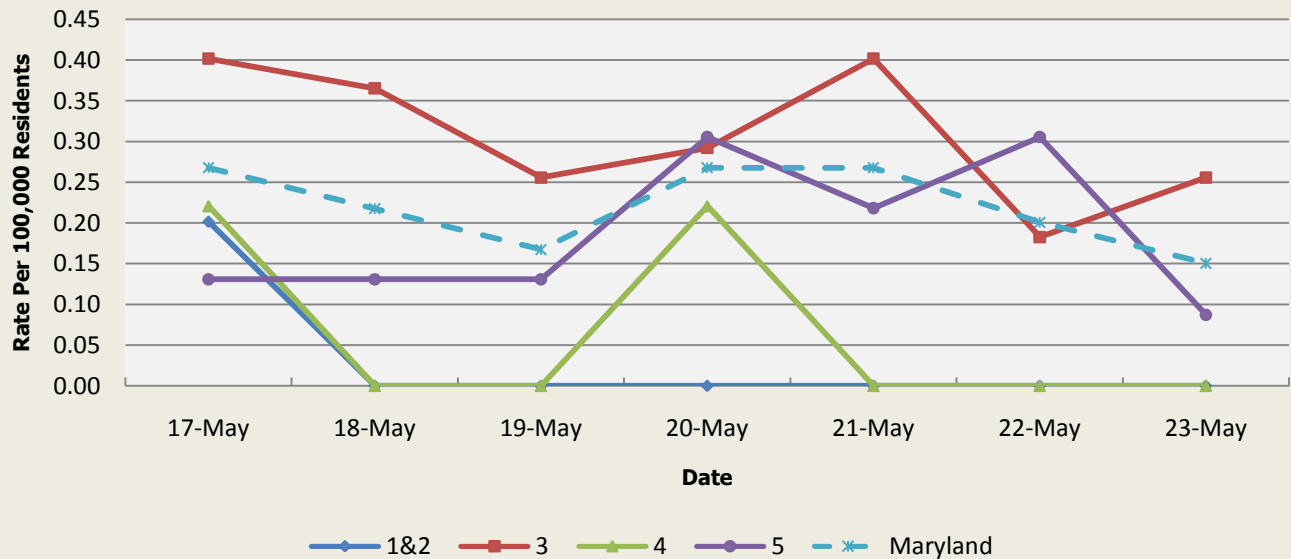


There was an appreciable increase above baseline in the rate of ED visits for Botulism-like Syndrome on 5/17 (Regions 3,4,5), 5/18 (Regions 1&2,3,5), 5/19 (Regions 1&2,3,4,5), 5/20 (Regions 1&2,3,4,5), 5/21 (Regions 3,5), 5/22 (Region 3), and 5/23 (Regions 1&2,3). These increases are not known to be associated with any outbreaks.

| Botulism-like Syndrome Baseline Data January 1, 2010 - Present | | | | | |
|---|------|------|------|------|----------|
| Health Region | 1&2 | 3 | 4 | 5 | Maryland |
| Mean Rate* | 0.06 | 0.04 | 0.04 | 0.03 | 0.04 |
| Median Rate* | 0.00 | 0.04 | 0.00 | 0.00 | 0.03 |

* Per 100,000 Residents

**Emergency Department Chief Complaints for Hemorrhagic Illness Syndrome
Rate Per 100,000 Residents**

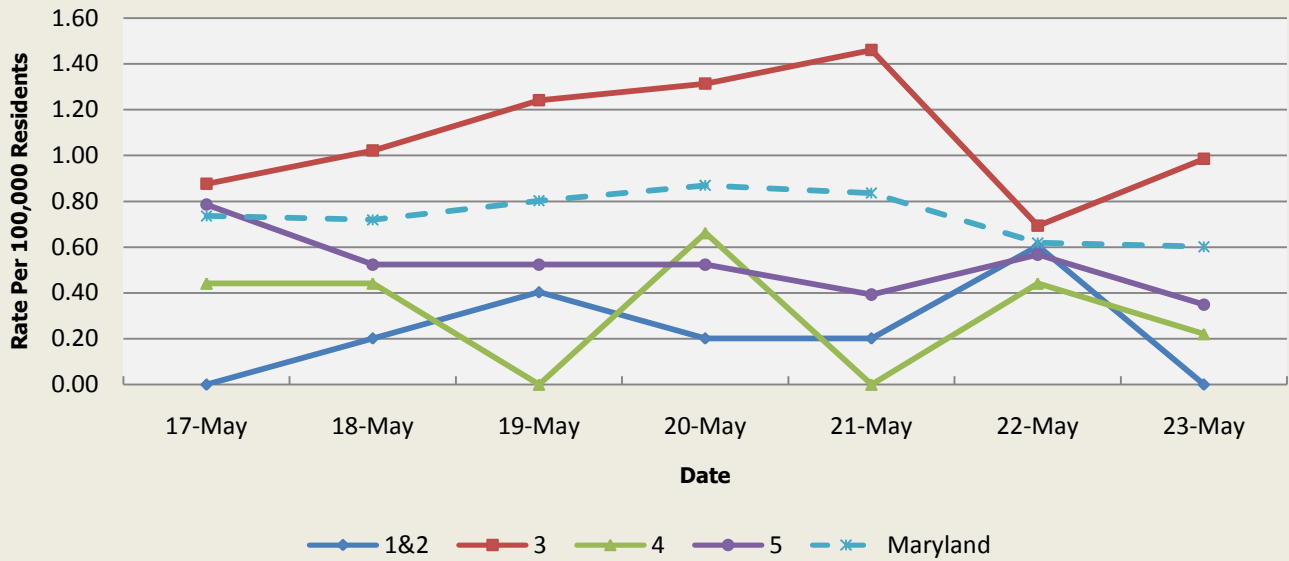


There was an appreciable increase above baseline in the rate of ED visits for Hemorrhagic Illness Syndrome on 5/17 (Regions 1&2,3,4,5), 5/18 (Regions 1&2,5), 5/19 (Regions 3,5), 5/20 (Regions 3,4,5), 5/21 (Regions 3,5), 5/22 (Regions 3,5), and 5/23 (Region 3). These increases are not known to be associated with any outbreaks.

| Hemorrhagic Illness Syndrome Baseline Data January 1, 2010 - Present | | | | | |
|---|------|------|------|------|----------|
| Health Region | 1&2 | 3 | 4 | 5 | Maryland |
| Mean Rate* | 0.03 | 0.05 | 0.03 | 0.04 | 0.04 |
| Median Rate* | 0.00 | 0.04 | 0.00 | 0.00 | 0.03 |

* Per 100,000 Residents

**Emergency Department Chief Complaints for Lymphadenitis Syndrome
Rate Per 100,000 Residents**



There was an appreciable increase above baseline in the rate of ED visits for Lymphadenitis Syndrome on 5/17 (Regions 3,5), 5/18 (Region 3), 5/19 (Region 3), 5/20 (Region 3), 5/21 (Region 3), and 5/23 (Region 3). These increases are not known to be associated with any outbreaks.

| Lymphadenitis Syndrome Baseline Data January 1, 2010 - Present | | | | | |
|---|------|------|------|------|----------|
| Health Region | 1&2 | 3 | 4 | 5 | Maryland |
| Mean Rate* | 0.32 | 0.36 | 0.34 | 0.25 | 0.31 |
| Median Rate* | 0.21 | 0.34 | 0.22 | 0.23 | 0.29 |

* Per 100,000 Residents

MARYLAND REPORTABLE DISEASE SURVEILLANCE

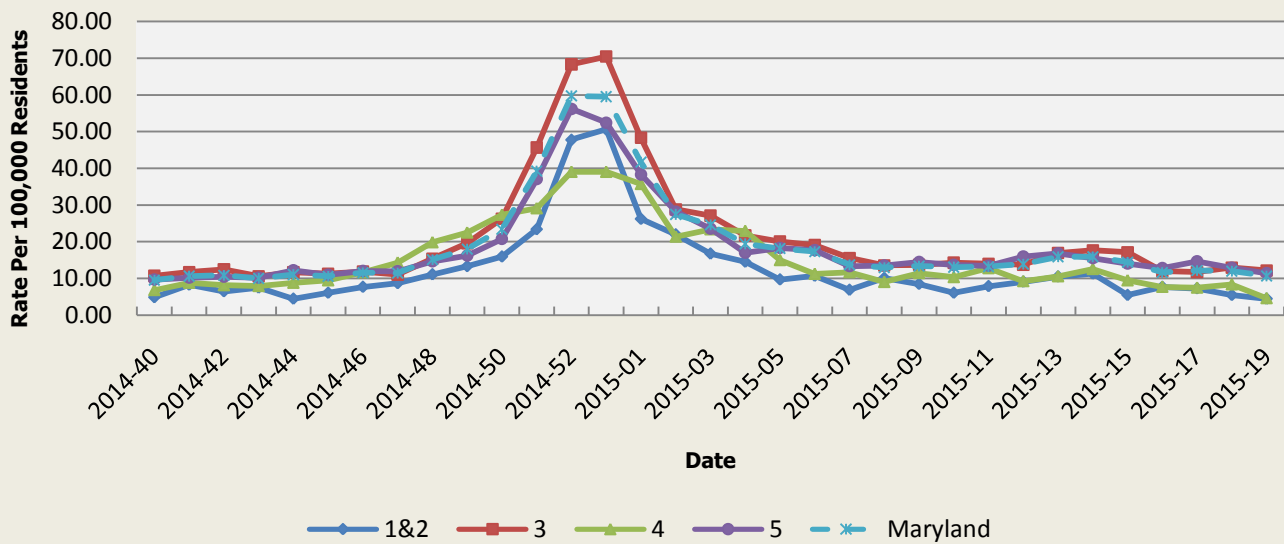
| Condition | Counts of Reported Cases† | | | | | |
|---|---------------------------|-------|---------|-----------------------------|-------|---------|
| | May | | | Cumulative (Year to Date)** | | |
| Vaccine-Preventable Diseases | 2015 | Mean* | Median* | 2015 | Mean* | Median* |
| Aseptic meningitis | 15 | 26.8 | 24 | 99 | 144.8 | 153 |
| Meningococcal disease | 0 | 0.6 | 1 | 1 | 3.8 | 3 |
| Measles | 0 | 0 | 0 | 0 | 0 | 0 |
| Mumps | 1 | 0.6 | 1 | 4 | 19.4 | 1 |
| Rubella | 0 | 0.4 | 0 | 0 | 0.8 | 1 |
| Pertussis | 0 | 9.4 | 9 | 34 | 59.6 | 53 |
| Foodborne Diseases | 2015 | Mean* | Median* | 2015 | Mean* | Median* |
| Salmonellosis | 25 | 54 | 57 | 181 | 251.8 | 273 |
| Shigellosis | 2 | 11.8 | 9 | 80 | 59.2 | 39 |
| Campylobacteriosis | 17 | 39.6 | 34 | 165 | 177 | 170 |
| Shiga toxin-producing Escherichia coli (STEC) | 3 | 3 | 3 | 15 | 17.2 | 18 |
| Listeriosis | 1 | 1.2 | 1 | 4 | 3.6 | 4 |
| Arboviral Diseases | 2015 | Mean* | Median* | 2015 | Mean* | Median* |
| West Nile Fever | 0 | 0 | 0 | 0 | 0 | 0 |
| Lyme Disease | 13 | 94.6 | 92 | 138 | 294.2 | 287 |
| Emerging Infectious Diseases | 2015 | Mean* | Median* | 2015 | Mean* | Median* |
| Chikungunya | 0 | 0.6 | 0 | 11 | 0.6 | 0 |
| Dengue Fever | 0 | 0.6 | 0 | 3 | 2.6 | 2 |
| Other | 2015 | Mean* | Median* | 2015 | Mean* | Median* |
| Legionellosis | 6 | 11.8 | 13 | 26 | 32.2 | 33 |

† Counts are subject to change *Timeframe of 2009-2014 **Includes January through May

SYNDROMIC INFLUENZA SURVEILLANCE

Seasonal Influenza reporting occurs from MMWR Week 40 through MMWR Week 22 (October through May). Seasonal influenza activity for Week 20 was: Sporadic Activity with Minimal Intensity.

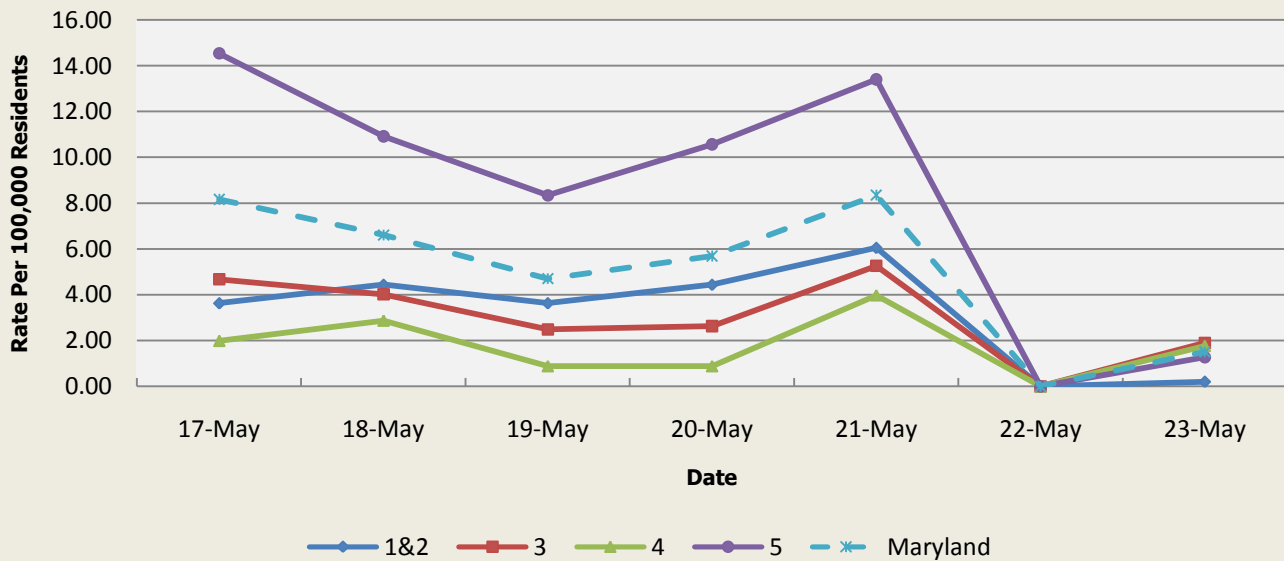
**Emergency Department Chief Complaints for Influenza-like Illness
Rate Per 100,000 Residents**



| Influenza-like Illness Baseline Data Week 1 2010 - Present | | | | | |
|---|------|-------|-------|-------|----------|
| Health Region | 1&2 | 3 | 4 | 5 | Maryland |
| Mean Rate* | 9.81 | 10.92 | 11.22 | 10.05 | 10.52 |
| Median Rate* | 7.86 | 8.40 | 8.83 | 7.38 | 7.98 |

* Per 100,000 Residents

**Over-the-Counter Medication Sales Related to Influenza
Rate Per 100,000 Residents**

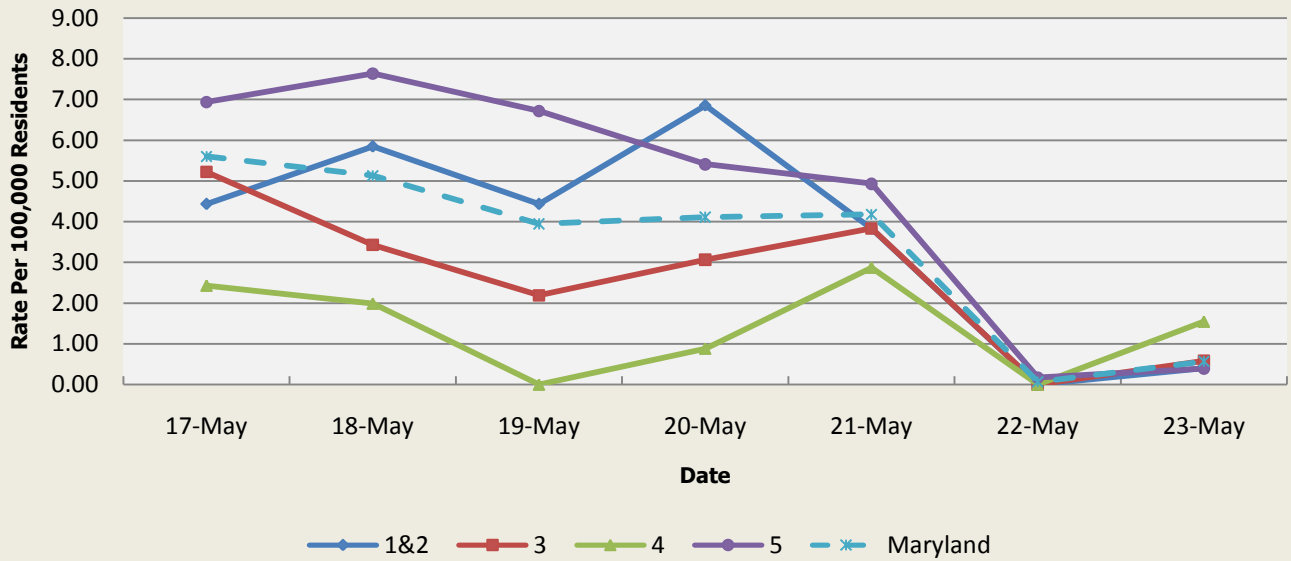


| OTC Sales Baseline Data January 1, 2010 - Present | | | | | |
|--|------|------|------|-------|----------|
| Health Region | 1&2 | 3 | 4 | 5 | Maryland |
| Mean Rate* | 5.57 | 6.27 | 3.10 | 14.27 | 9.04 |
| Median Rate* | 4.23 | 5.15 | 2.65 | 11.53 | 7.28 |

* Per 100,000 Residents

There was not an appreciable increase above baseline in the rate of OTC flu medication sales this week.

**Over-the-Counter Thermometer Sales
Rate Per 100,000 Residents**



There was not an appreciable increase above baseline in the rate of OTC thermometer sales this week.

| Thermometer Sales Baseline Data January 1, 2010 - Present | | | | | |
|--|------|------|------|------|----------|
| Health Region | 1&2 | 3 | 4 | 5 | Maryland |
| Mean Rate* | 5.86 | 4.86 | 3.40 | 8.05 | 6.06 |
| Median Rate* | 5.04 | 4.42 | 3.09 | 7.33 | 5.56 |

* Per 100,000 Residents

PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is ALERT. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

Influenza A (H7N9) is one of a subgroup of influenza viruses that normally circulate among birds. Until recently, this virus had not been seen in people. However, human infections have now been detected. As yet, there is limited information about the scope of the disease the virus causes and about the source of exposure. The disease is of concern because most patients have been severely ill. There is no indication thus far that it can be transmitted between people, but both animal-to-human and human-to-human routes of transmission are being actively investigated.

Alert phase: This is the phase when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment, at local, national and global levels, are characteristic of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a de-escalation of activities towards those in the interpandemic phase may occur. As of May 1, 2015, the WHO-confirmed global total (2003-2015) of human cases of H5N1 avian influenza virus infection stands at 840, of which 447 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 53%.

Avian Influenza in Humans:

H7N9 (CHINA): Read more: <http://www.promedmail.org/direct.php?id=3382639>

H9N2 and INFLUENZA B (EGYPT): Read more: <http://www.promedmail.org/direct.php?id=3378923>

There were no reports of human cases of avian influenza in the United States at the time that this report was compiled.

Avian Influenza in Poultry:

H5N1 (USA-NE, MN): Read more: <http://www.promedmail.org/direct.php?id=3388357>

H5N1 (USA-IA, MN): Read more: <http://www.promedmail.org/direct.php?id=3381351>

NATIONAL DISEASE REPORTS

BOURBON VIRUS (OK): 28 May 2015 Health officials say an Oklahoma resident has been diagnosed with a rare tick-borne disease. Read more: <http://www.promedmail.org/direct.php?id=3390595>

ANTHRAX (USA): 28 May 2015 The military used commercial carriers to deliver what it thought was inert anthrax to research laboratories. The US military accidentally sent live anthrax samples to as many as 9 labs across the country and to a US military base in South Korea, the Pentagon says. Read more: <http://www.promedmail.org/direct.php?id=3392299>

LASSA FEVER (NJ): 26 May 2015 A U.S. traveler who recently returned from West Africa has died in a New Jersey hospital of Lassa Fever, a viral hemorrhagic fever rarely seen in the United States, the U.S. Centers for Disease Control and Prevention announced late Monday night [25 May 2015]. Read more: <http://www.promedmail.org/direct.php?id=3386913>

TULAREMIA (CO): 22 May 2015 The Larimer County [Colorado] Department of Health has confirmed the 1st human case in 2015 of tularemia, otherwise known as "rabbit fever". Read more: <http://www.promedmail.org/direct.php?id=3379806>

INTERNATIONAL DISEASE REPORTS

ANTHRAX (human) (INDIA): 27 May 2015 A team of health officials on Tuesday visited Kapadanga village under Sankarada gram panchayat of Kashipur block after 2 persons died of anthrax since 19 May 2015. 8 others from the village have been affected by the disease. Read more: <http://www.promedmail.org/direct.php?id=3389677>

EBOLA (SIERRA LEONE): 27 May 2015 WHO data and statistics update. Read more: <http://www.promedmail.org/direct.php?id=3390140>

MERS-COV (MULTI-COUNTRY): 26 May 2015 Another case of Middle East respiratory syndrome has been confirmed in Korea, bringing the total number of cases to 5 since the 1st case was confirmed last week. Read more: <http://www.promedmail.org/direct.php?id=3383778>

SEASONAL INFLUENZA (EUROPE): 26 May 2015 ECDC-WHO update. The 2014–2015 influenza season has ended. Read more: <http://www.promedmail.org/direct.php?id=3386157>

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: <http://preparedness.dhmm.maryland.gov/> or follow us on Facebook at www.facebook.com/MarylandOPR.

More data and information on influenza can be found on the DHMH website: <http://phpa.dhmm.maryland.gov/influenza/fluwatch/SitePages/Home.aspx>

Please participate in the Maryland Resident Influenza Tracking System (MRITS): <http://flusurvey.dhmm.md.gov/>

NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail us. If you have information that is pertinent to this notification process, please send it to us to be included in the routine report.

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Appendix 1: ESSENCE Syndrome Definitions and Associated Category A Conditions

| Syndrome | ESSENCE Definition | Category A Conditions |
|-------------------------|--|---|
| Botulism-like | (Botulism or (DifficultyFocusing and DifficultySpeaking) or (DifficultySpeaking and DifficultySwallowing) or (DifficultySwallowing and DifficultyFocusing) or DoubleVision or FacialParalysis or GuillainBarre or Ptosis) and not GeneralExclusions | Botulism |
| Fever | (Chills or (FeverPlus and (Drowsiness or Seizure)) or FeverOnly or SepsisGroup or ViralSyndrome) and not GeneralExclusions | N/A |
| Gastrointestinal | (AbdominalCramps or AbdominalPainGroup or Diarrhea or FoodPoisoning or Gastroenteritis or GIBleeding or Peritonitis or Vomiting) and not (GeneralExclusions or Gynecological or Obstetric or Reproductive or UrinaryTract) | Anthrax (gastrointestinal) |
| Hemorrhagic Illness | (FeverOrChills and (AcuteBloodAbnormalitiesGroup or BleedingFromMouth or BleedingGums or GIBleeding or Hematemesis or Hemoptysis or Nosebleed or Petechiae or Purpura)) and not GeneralExclusions | Viral Hemorrhagic Fever |
| Localized Lesion | (Boils or Bump or Carbuncle or DepressedUlcer or Eschar or Furuncle or InsectBite or SkinAbscess or (SkinSores and not AllOverBody) or SkinUlcer or SpiderBite) and not (GeneralExclusions or Decubitus or Diabetes or StasisUlcer) | Anthrax (cutaneous) Tularemia |
| Lymphadenitis | (BloodPoisoning or Bubo or CatScratchDisease or SwollenGlands) and not GeneralExclusions | Plague (bubonic) |
| Neurological | (((Age<75] and AlteredMentalStatus) or (FeverPlus and (Confusion or Drowsiness or Petechiae or StiffNeck))) or Delirium or Encephalitis or Meningitis or UnconsciousGroup) and not GeneralExclusions | N/A |
| Rash | (ChickenPox or Measles or RashGeneral or Roseola or (Rubella and not Pregnancy) or Shingles or (SkinSores and AllOverBody) or Smallpox) and not GeneralExclusions | Smallpox |
| Respiratory | (Anthrax or Bronchitis or (ChestPain and [Age<50]) or Cough or Croup or DifficultyBreathing or Hemothorax or Hypoxia or Influenza or Legionnaires or LowerRespiratoryInfection or Pleurisy or Pneumonia or RespiratoryDistress or RespiratoryFailure or RespiratorySyncytialVirus or RibPain or ShortnessOfBreath or Wheezing) and not (GeneralExclusions or Cardiac or (ChestPain and Musculoskeletal) or Hyperventilation or Pneumothorax) | Anthrax (inhalational) Tularemia Plague (pneumonic) |
| Severe Illness or Death | CardiacArrest or CodeGroup or DeathGroup or (Hypotension and FeverPlus) or RespiratoryArrest or SepsisGroup or Shock | N/A |

Appendix 2: Maryland Health and Medical Region Definitions

| Health and Medical Region | Counties Reporting to ESSENCE |
|---------------------------|---|
| Regions 1 & 2 | Allegany County Frederick County Garrett County Washington County |
| Region 3 | Anne Arundel County Baltimore City Baltimore County Carroll County Harford County Howard County |
| Region 4 | Caroline County Cecil County Dorchester County Kent County Queen Anne's County Somerset County Talbot County Wicomico County Worcester County |
| Region 5 | Calvert County Charles County Montgomery County Prince George's County St. Mary's County |

