



**August 28, 2015**

**Public Health Preparedness and Situational Awareness Report: #2015:33  
Reporting for the week ending 08/22/15 (MMWR Week #33)**

**CURRENT HOMELAND SECURITY THREAT LEVELS**

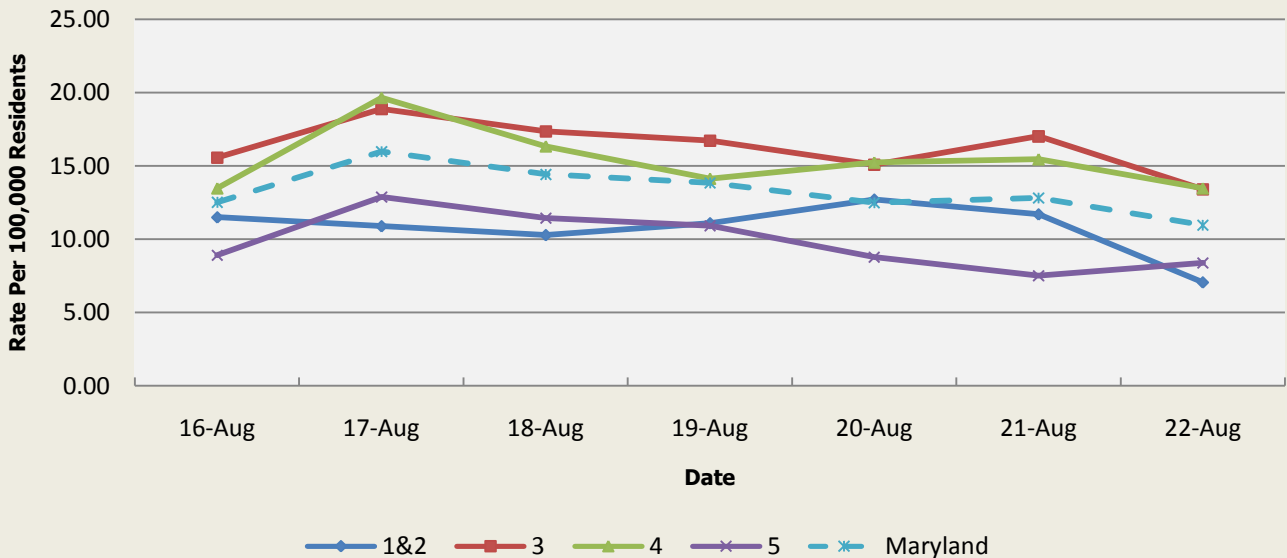
**National: No Active Alerts**  
**Maryland: Level Four (MEMA status)**

**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**



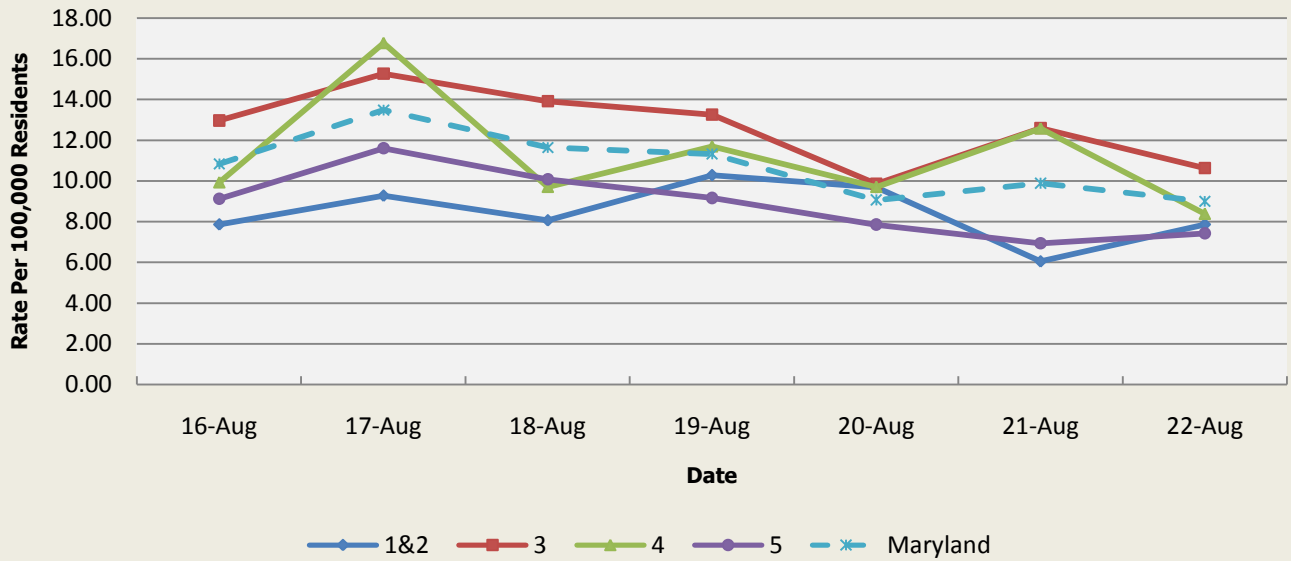
There were two gastrointestinal illness outbreaks reported this week: 1 outbreak of gastroenteritis in a nursing home (Region 3) and one outbreak of gastroenteritis in an assisted living facility (Regions 1&2).

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

Health Region	1&2	3	4	5	Maryland
Mean Rate*	12.94	14.32	15.28	10.11	12.67
Median Rate*	12.91	14.10	14.57	10.00	12.52

\* Per 100,000 Residents

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

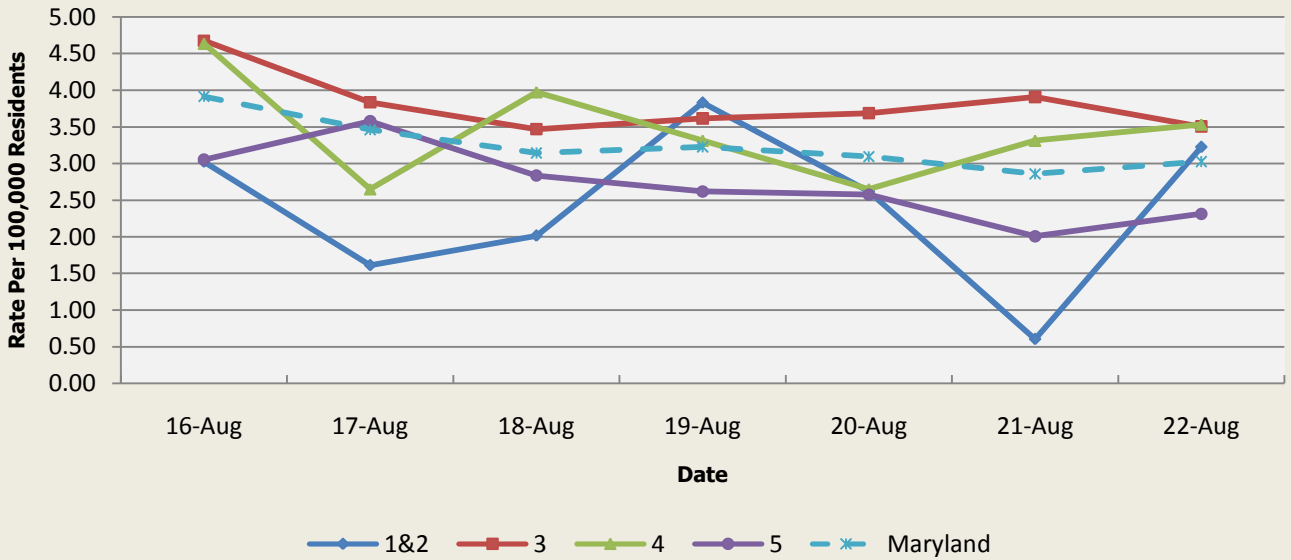


There was one respiratory outbreak reported this week:  
1 outbreak of ILI/pneumonia in a nursing home  
(Regions 1&2).

Respiratory Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	11.90	13.41	13.71	9.62	11.86
Median Rate*	11.49	12.93	13.25	9.26	11.45

\* Per 100,000 Residents

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

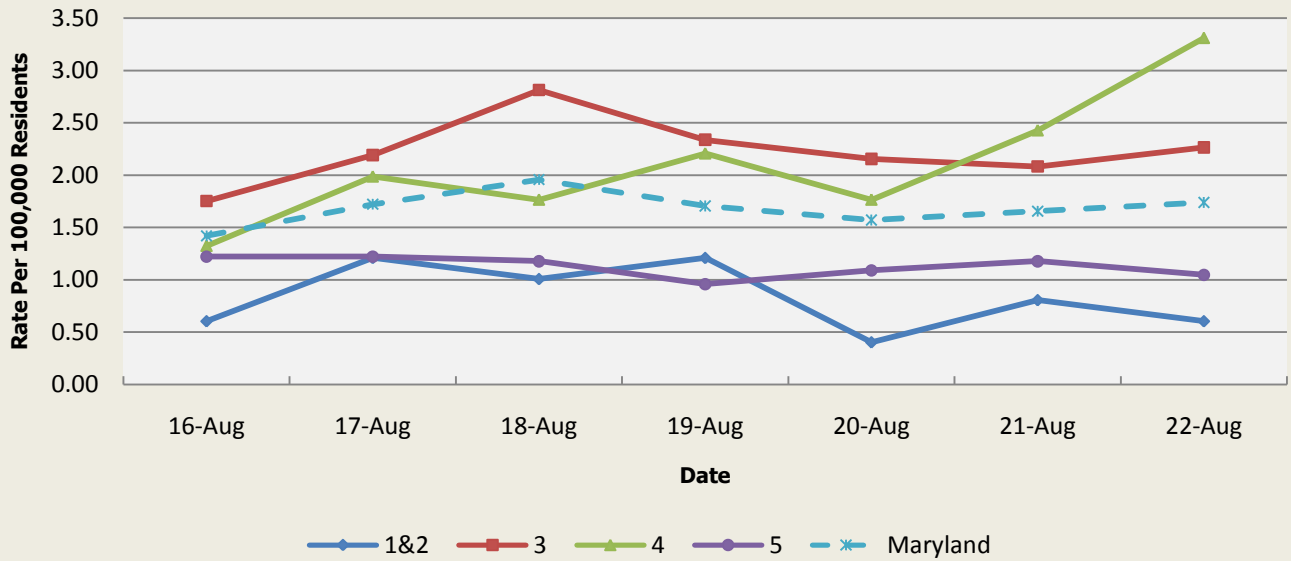


There were no fever outbreaks reported this week.

Fever Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.12	3.66	3.88	3.04	3.39
Median Rate*	3.02	3.51	3.75	2.92	3.26

Per 100,000 Residents

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

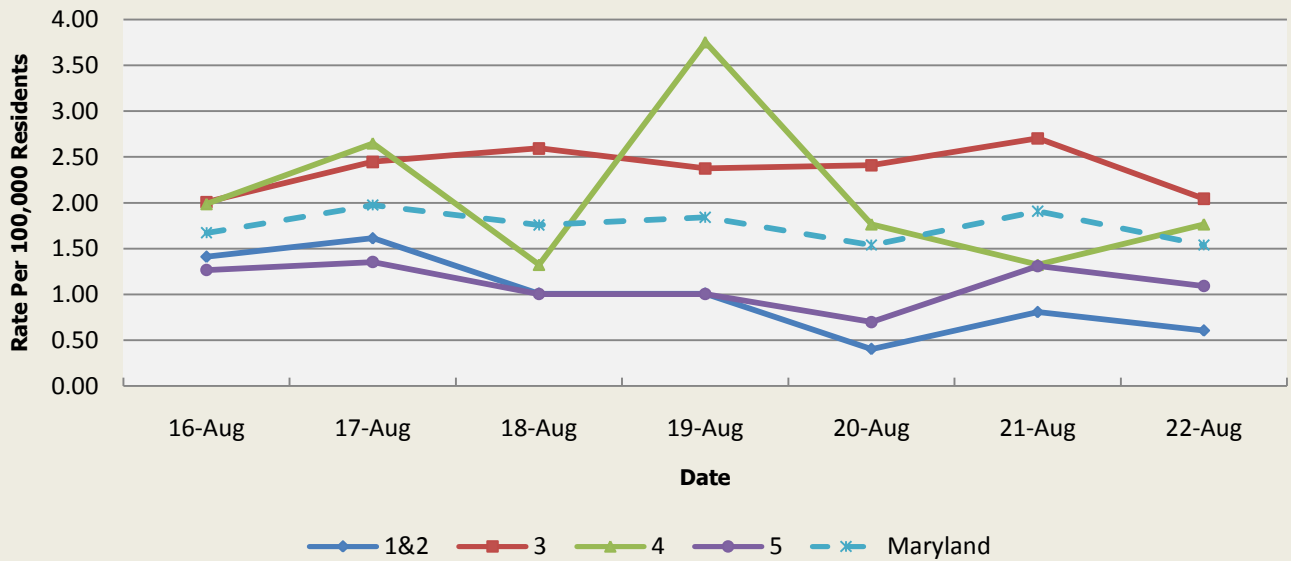


There were no localized lesion outbreaks reported this week.

Localized Lesion Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	1.10	1.92	2.05	1.00	1.51
Median Rate*	1.01	1.86	1.99	0.96	1.46

\* Per 100,000 Residents

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

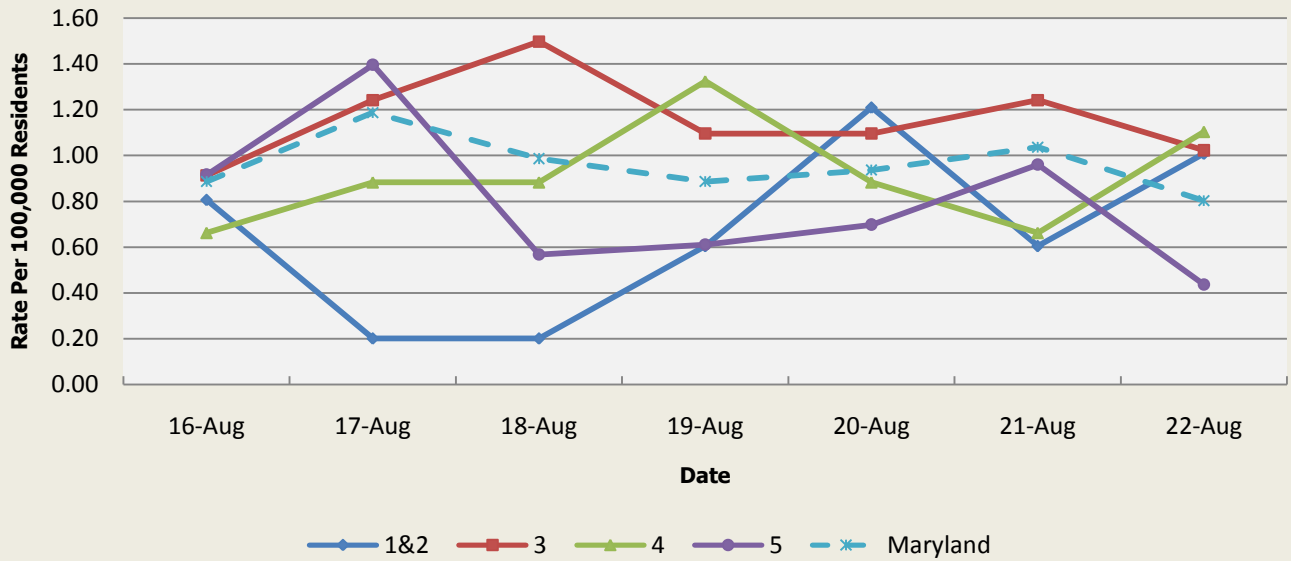


There were no rash illness outbreaks reported this week.

Rash Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	1.33	1.73	1.77	1.05	1.44
Median Rate*	1.21	1.66	1.77	1.00	1.41

\* Per 100,000 Residents

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

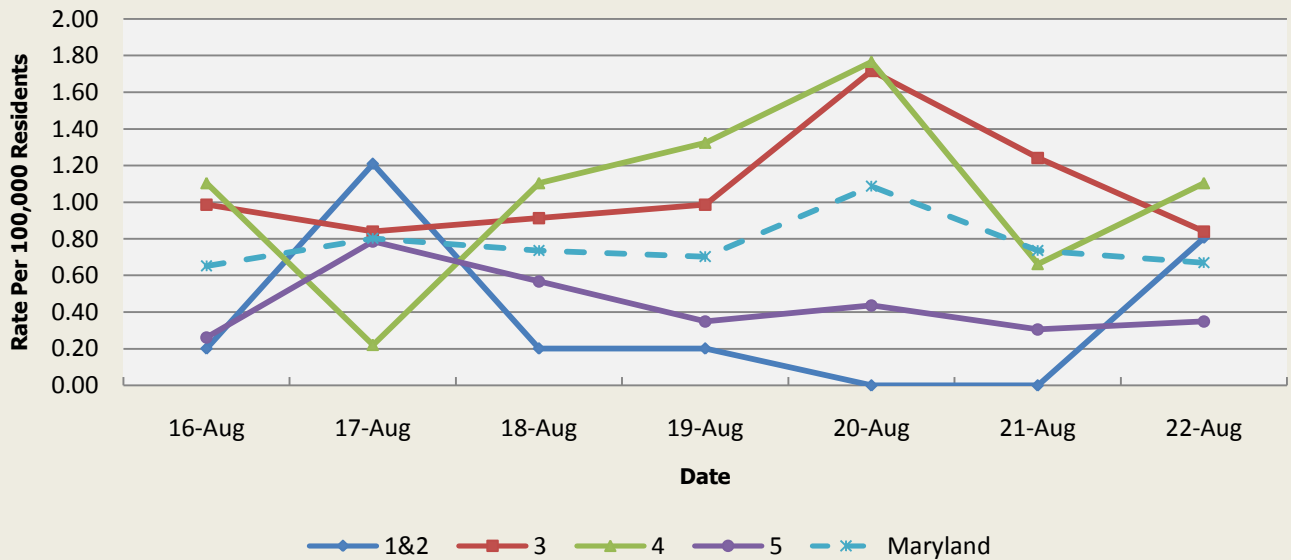


There were no neurological outbreaks reported this week.

Neurological Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.62	0.66	0.62	0.44	0.57
Median Rate*	0.60	0.62	0.66	0.44	0.54

\* Per 100,000 Residents

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



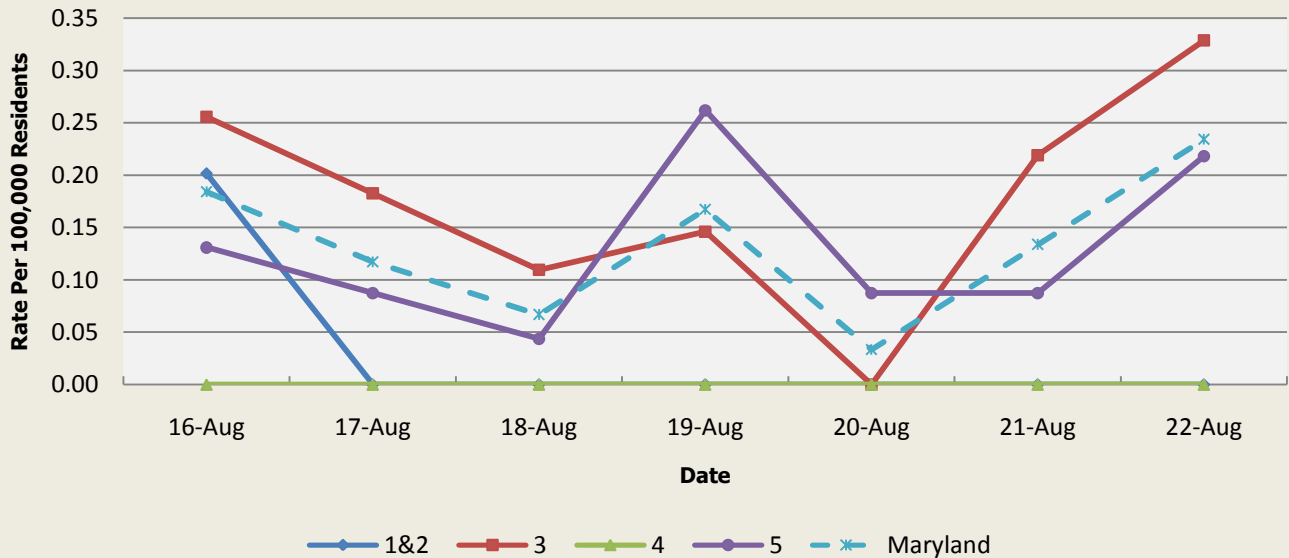
There were no severe illness or death outbreaks reported this week.

Severe Illness or Death Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.75	0.95	0.88	0.42	0.73
Median Rate*	0.71	0.95	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**

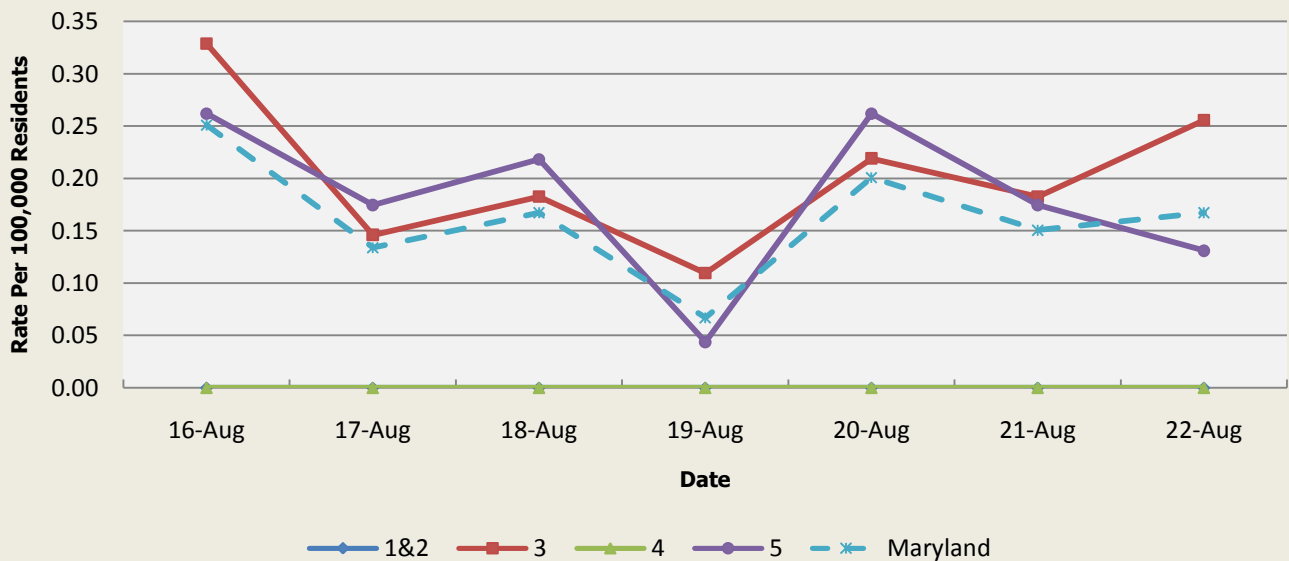


There was an appreciable increase above baseline in the rate of ED visits for Botulism-like Syndrome on 8/16 (Regions 1&2,3,5), 8/17 (Region 3), 8/19 (Regions 3,5), 8/21 (Region 3), and 8/22 (Regions 3,5). These increases are not known to be associated with any outbreaks.

Botulism-like Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.06	0.06	0.04	0.04	0.05
Median Rate*	0.00	0.04	0.00	0.04	0.03

\* Per 100,000 Residents

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

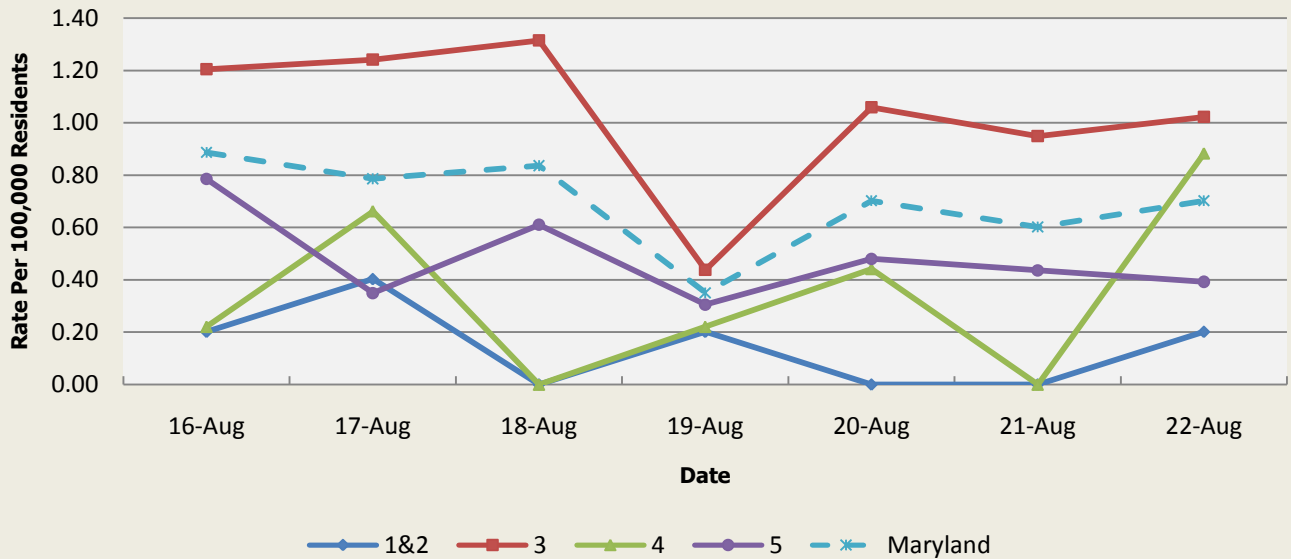


There was an appreciable increase above baseline in the rate of ED visits for Hemorrhagic Illness Syndrome on 8/16 (Regions 3,5), 8/17 (Regions 3,5), 8/18 (Regions 3,5), 8/20 (Regions 3,5), 8/21 (Regions 3,5), and 8/22 (Regions 3,5). These increases are not known to be associated with any outbreaks.

Hemorrhagic Illness Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.03	0.06	0.03	0.04	0.05
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 8/16 (Regions 3,5), 8/17 (Region 3), 8/18 (Regions 3,5), 8/20 (Region 3), 8/21 (Region 3), and 8/22 (Regions 3,4). 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*	0.31	0.37	0.34	0.25	0.32
Median Rate*	0.20	0.33	0.22	0.22	0.30

\* Per 100,000 Residents

**MARYLAND REPORTABLE DISEASE SURVEILLANCE**

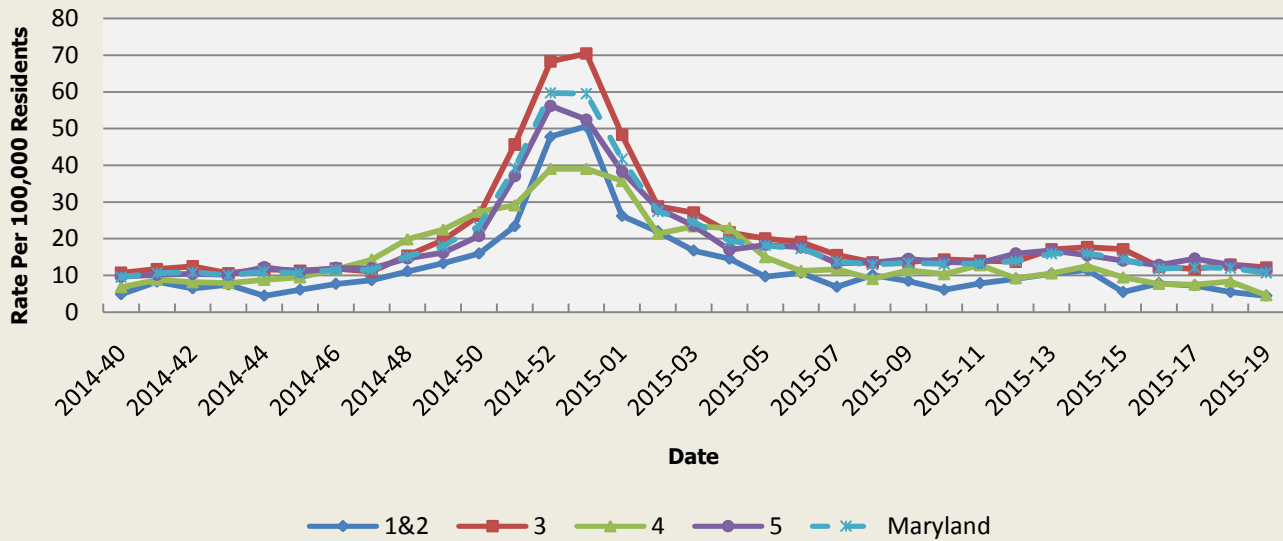
Condition	Counts of Reported Cases‡					
	August			Cumulative (Year to Date)**		
Vaccine-Preventable Diseases	2015	Mean*	Median*	2015	Mean*	Median*
Aseptic meningitis	28	37.6	33	269	265	288
Meningococcal disease	0	0.4	0	1	5	5
Measles	0	0	0	0	0.2	0
Mumps	0	0.2	0	7	20.4	2
Rubella	0	0.2	0	1	1.2	1
Pertussis	2	18.4	18	57	122.6	114
Foodborne Diseases	2015	Mean*	Median*	2015	Mean*	Median*
Salmonellosis	53	103.6	107	496	613.8	608
Shigellosis	10	13.2	12	137	105.8	93
Campylobacteriosis	23	51.8	52	409	402.8	414
Shiga toxin-producing Escherichia coli (STEC)	2	7.2	8	57	45.2	41
Listeriosis	0	2.4	2	12	9.8	10
Arboviral Diseases	2015	Mean*	Median*	2015	Mean*	Median*
West Nile Fever	0	2.8	2	2	3.6	2
Lyme Disease	21	78.6	75	745	903.2	903
Emerging Infectious Diseases	2015	Mean*	Median*	2015	Mean*	Median*
Chikungunya	1	1	0	13	5	0
Dengue Fever	0	1	1	4	5.6	5
Other	2015	Mean*	Median*	2015	Mean*	Median*
Legionellosis	10	12.2	13	81	82	80

‡ Counts are subject to change \*Timeframe of 2009-2014 \*\*Includes January through August

## SYNDROMIC INFLUENZA SURVEILLANCE

Seasonal Influenza reporting occurs from MMWR Week 40 through MMWR Week 21 (October through May).

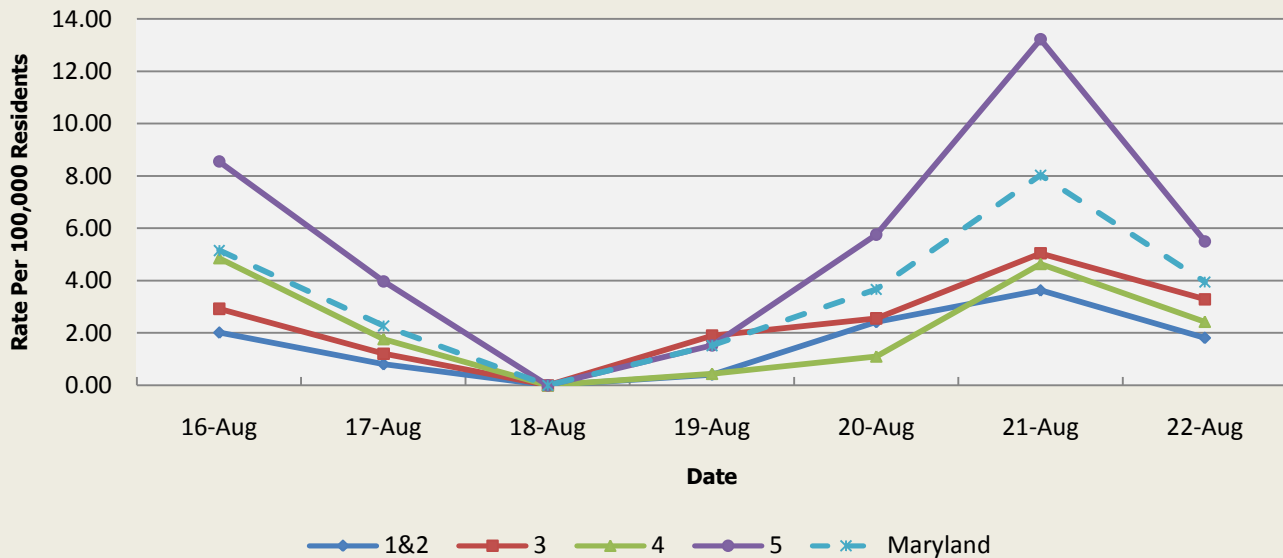
**Emergency Department Chief Complaints for Influenza-like Illness  
Rate Per 100,000 Residents**



Influenza-like Illness Baseline Data Week 1 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	9.39	10.63	10.72	9.79	10.21
Median Rate*	7.66	8.29	8.83	7.42	7.94

\* Per 100,000 Residents

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

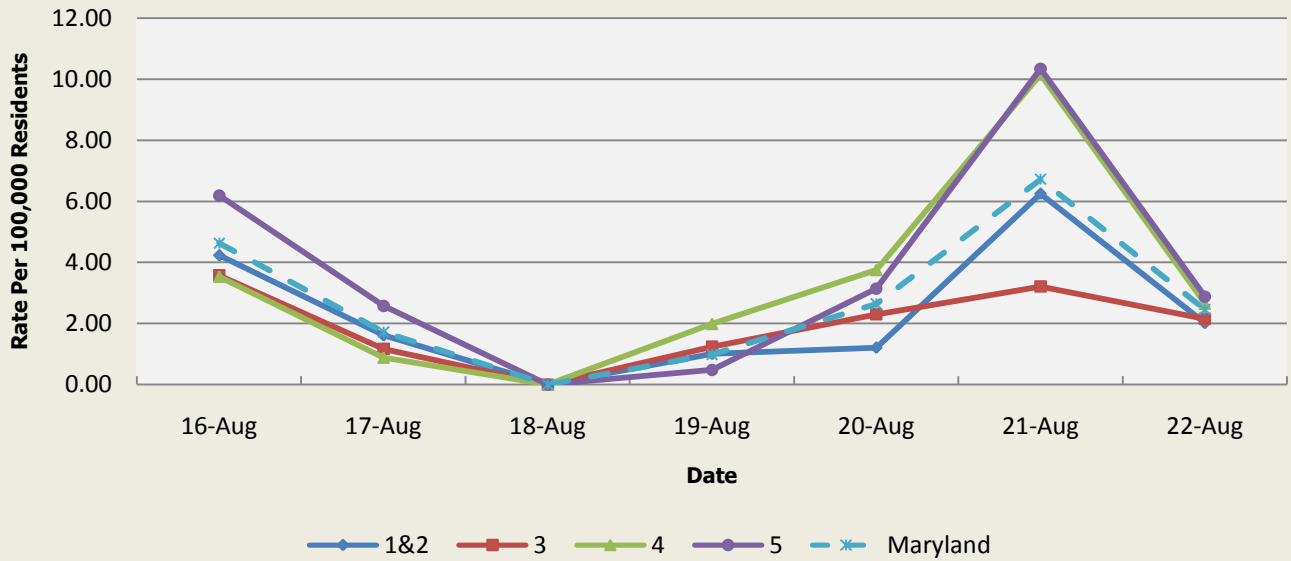


OTC Sales Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	5.36	6.04	3.03	13.78	8.72
Median Rate*	4.03	4.90	2.65	11.22	7.06

\* 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*	5.67	4.71	3.36	7.79	5.87
Median Rate*	5.04	4.35	3.09	7.16	5.42

\* 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 July 17, 2015, the WHO-confirmed global total (2003-2015) of human cases of H5N1 avian influenza virus infection stands at 844, of which 449 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 53%.

### **Avian Influenza in Humans:**

No avian influenza in humans reports this week.

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 (NIGERIA):** 26 Aug 2015 Delta State Ministry of Agriculture and Natural Resources took proactive steps to avert the spread of the avian influenza disease in the state as it destroyed 750 birds, including chickens and turkeys, which were confirmed to be positive carriers of the disease. Read More: <http://www.promedmail.org/direct.php?id=3602516>

## **NATIONAL DISEASE REPORTS**

**PLAGUE (MULTI-STATE):** 26 Aug 2015 Since 1 Apr 2015, a total of 11 cases of human plague have been reported in residents of 6 states: Arizona (2), California (1), Colorado (4), Georgia (1), New Mexico (2), and Oregon (1). The cases in Georgia and California residents have been linked to exposures at or near Yosemite National Park in the southern Sierra Nevada Mountains of California. Read More: <http://www.promedmail.org/direct.php?id=3602201>

**MUMPS (IOWA):** 21 Aug 2015 Health officials in Johnson County say they've seen an increase in mumps cases in recent weeks, just as thousands of students begin returning to the University of Iowa. Doug Beardsley, Director of Johnson County Public Health, said there have been 15 cases of mumps reported in Johnson County in 2015. Read More: <http://www.promedmail.org/direct.php?id=3594465>

**ANTIBIOTIC -RESISTANT ENTEROBACTERIAEAE (MULTI-STATE):** 20 Aug 2015 US health officials issued a safety warning on a specialty endoscope that has been linked to the transmission of a drug-resistant superbug known as carbapenem-resistant Enterobacteriaceae, or CRE. Federal regulators have uncovered new violations by the manufacturer of medical scopes recently linked to outbreaks of deadly "superbug" bacteria at US hospitals. Read More: <http://www.promedmail.org/direct.php?id=3590315>

## **INTERNATIONAL DISEASE REPORTS**

**MENINGITIS, MENINGOCOCCAL (UNITED KINGDOM, SWEDEN):** 26 Aug 2015 Between 8-19 Aug 2015, 8 cases (5 confirmed and 3 suspected) of meningococcal disease were reported from the UK (Scotland) and Sweden following attendance at the World Scout Jamboree (WSJ), Yamaguchi, Japan from 28 Jul-8 Aug 2015. *Neisseria meningitidis* serogroup W was isolated from blood samples of 2 of the cases. Read More: <http://www.promedmail.org/direct.php?id=3604861>

**E. COLI EHEC (CANADA):** 26 Aug 2015 The Public Health Agency of Canada is warning the public about an outbreak of a potentially deadly form of *E. coli* after at least 24 people became infected and 5 of them ended up being hospitalized. Read More: <http://www.promedmail.org/direct.php?id=3602244>

**MERS-COV (SAUDI ARABIA):** As of 25 Aug 2015, there have been a total of:1162 laboratory confirmed cases of MERS-CoV infection, including 498 deaths, 598 recoveries, and 66 currently active cases (including 9 on home isolation). Read More: <http://www.promedmail.org/direct.php?id=3602455>

**EBOLA (MULTI-COUNTRY):** 26 Aug 2015 Read More: <http://www.promedmail.org/direct.php?id=3604518>

### **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](http://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/>

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**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.

Rachel Gallo, MPH  
Office of Preparedness and Response  
Maryland Department of Health & Mental Hygiene  
300 W. Preston Street, Suite 202  
Baltimore, MD 21201  
Office: 410-767-9647  
Fax: 410-333-5000  
Email: [Rachel.Gallo@maryland.gov](mailto:Rachel.Gallo@maryland.gov)

Anikah H. Salim, MPH, CPH  
Biosurveillance Epidemiologist  
Office of Preparedness and Response  
Maryland Department of Health & Mental Hygiene  
300 W. Preston Street, Suite 202  
Baltimore, MD 21201  
Office: 410-767-2074  
Fax: 410-333-5000  
Email: [Anikah.Salim@maryland.gov](mailto:Anikah.Salim@maryland.gov)

**Appendix 1: ESSENCE Syndrome Definitions and Associated Category A Conditions**

<b>Syndrome</b>	<b>ESSENCE Definition</b>	<b>Category A Conditions</b>
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

