



**October 16, 2015**

**Public Health Preparedness and Situational Awareness Report: #2015:40  
Reporting for the week ending 10/10/15 (MMWR Week #40)**

**CURRENT HOMELAND SECURITY THREAT LEVELS**

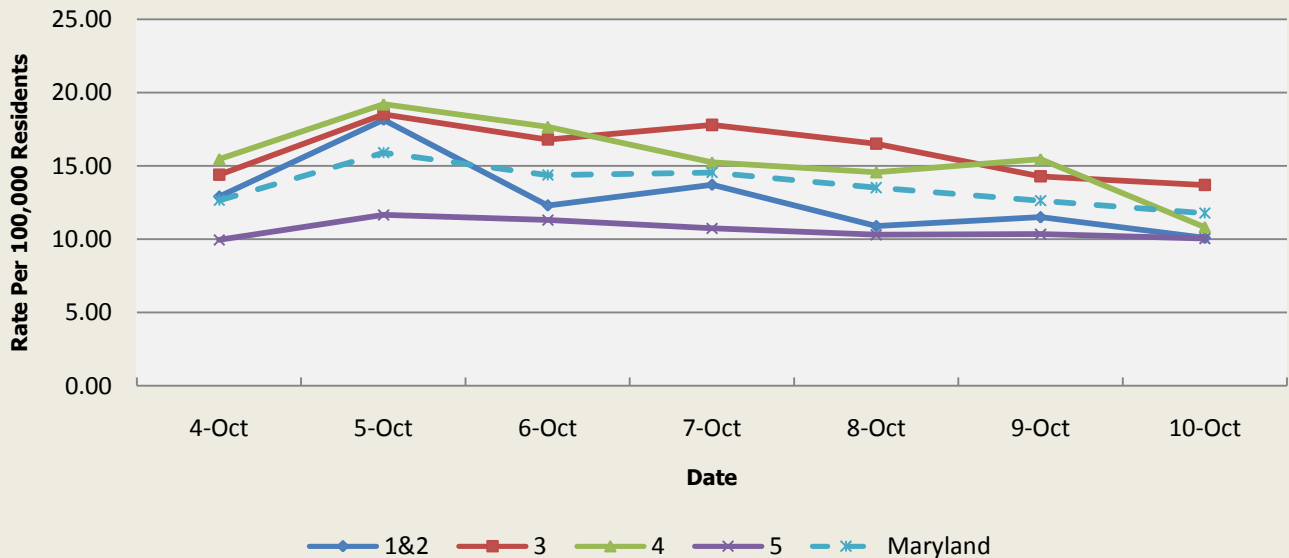
**National: No Active Alerts**  
**Maryland: Level Four (MEMA status)**

**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**



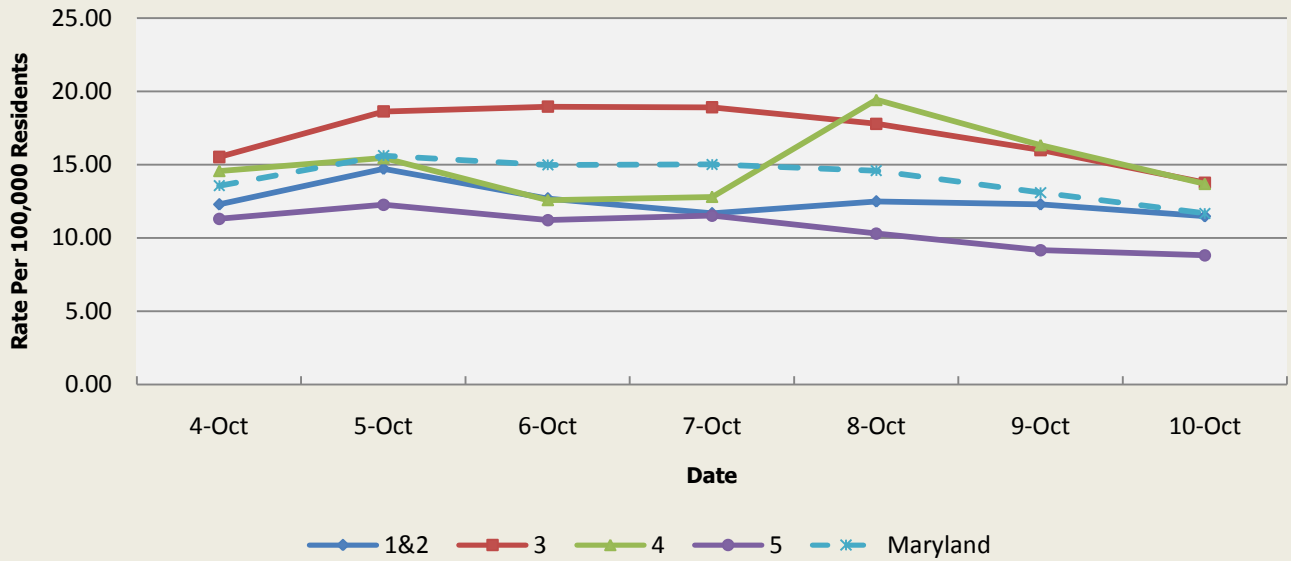
There were no gastrointestinal illness outbreaks reported this week.

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

Health Region	1&2	3	4	5	Maryland
Mean Rate*	12.91	14.38	15.28	10.13	12.70
Median Rate*	12.91	14.14	14.57	10.00	12.57

\* Per 100,000 Residents

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

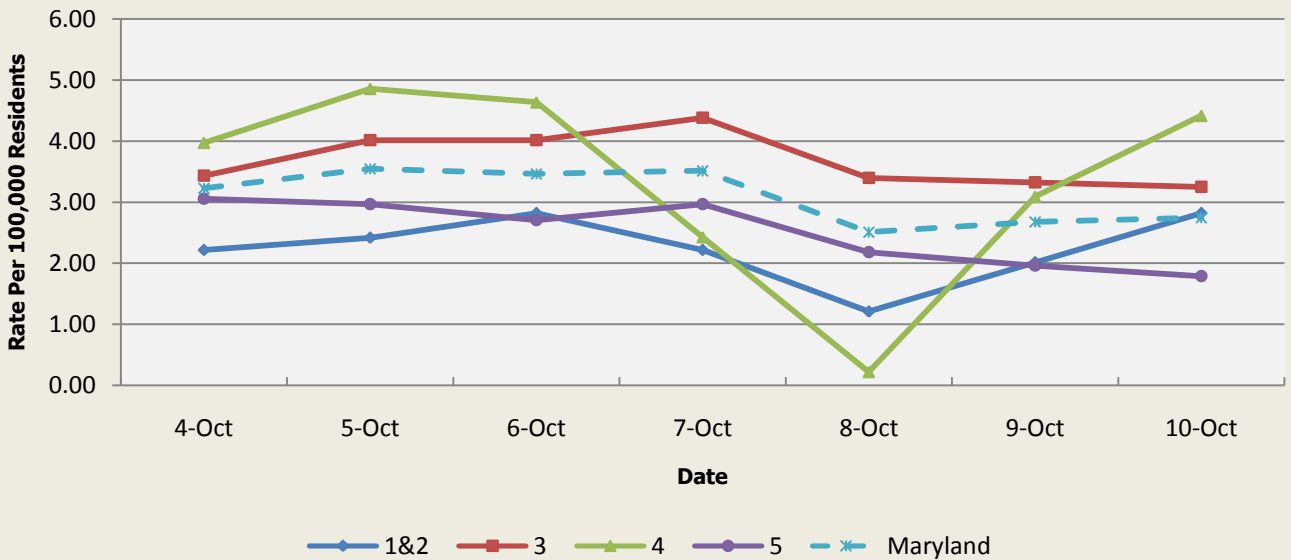


There was one respiratory outbreak reported this week: 1 outbreak of pneumonia in an assisted living facility (Region 5).

Respiratory Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	11.88	13.46	13.72	9.64	11.88
Median Rate*	11.49	13.01	13.25	9.30	11.50

\* Per 100,000 Residents

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

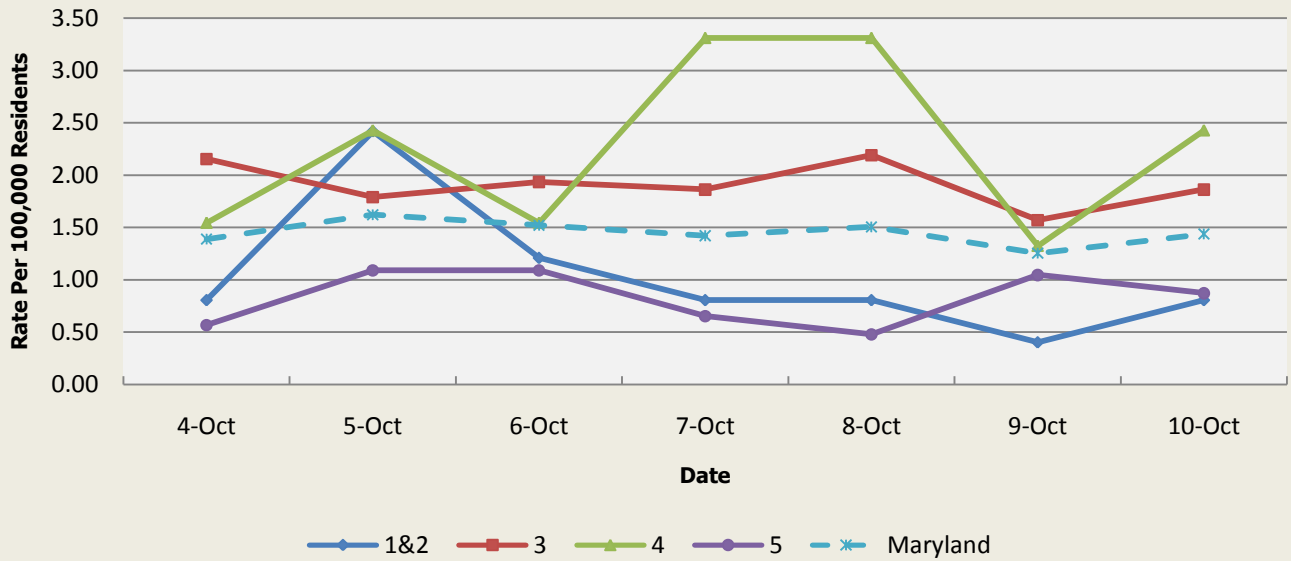


There were no fever outbreaks reported this week.

Fever Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.11	3.66	3.87	3.04	3.39
Median Rate*	3.02	3.53	3.75	2.92	3.28

Per 100,000 Residents

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

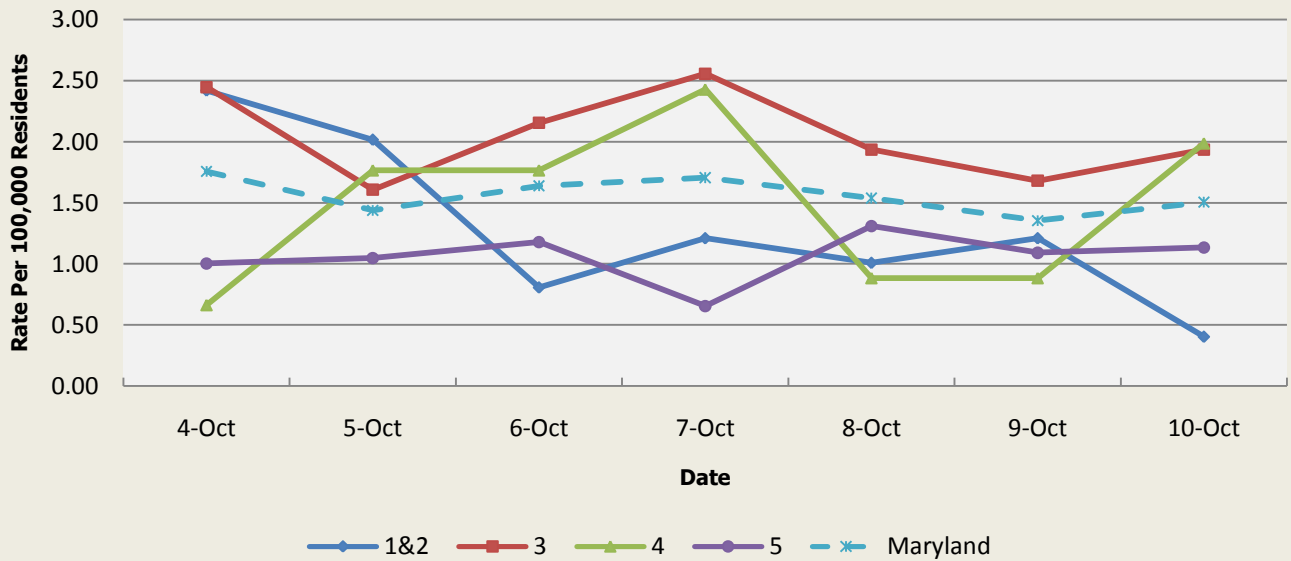


There were no localized lesion outbreaks reported this week.

Localized Lesion Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	1.10	1.93	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**

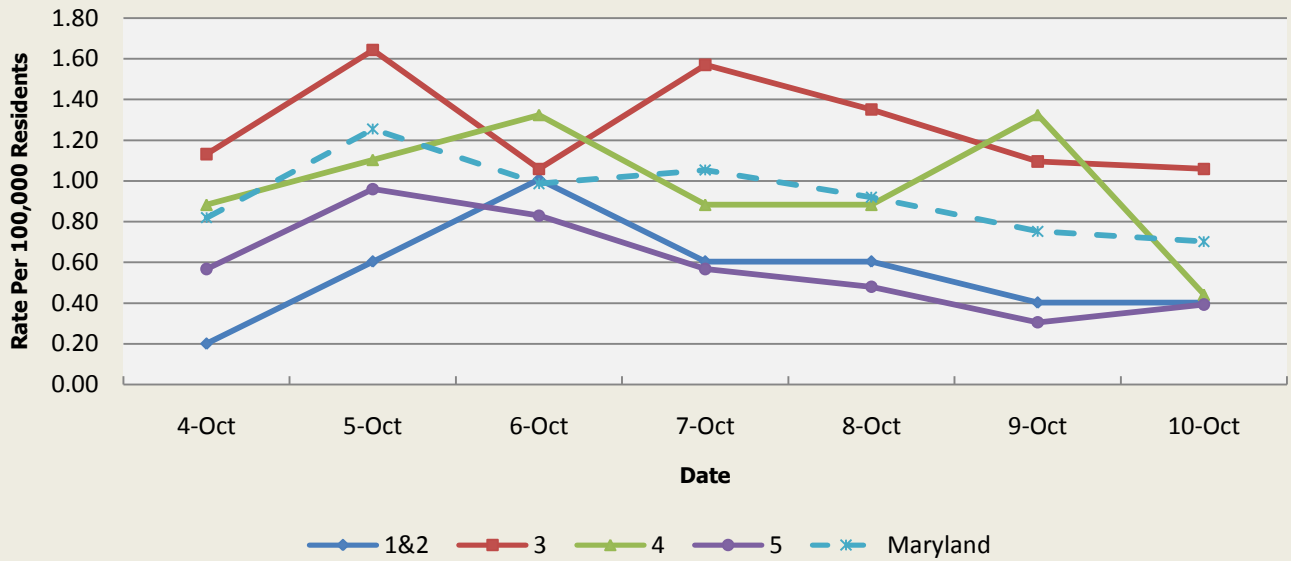


There was one rash illness outbreaks reported this week: 1 outbreak of ringworm associated with school (Region 4).

Rash Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	1.33	1.74	1.77	1.05	1.44
Median Rate*	1.21	1.68	1.77	1.00	1.41

\* Per 100,000 Residents

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

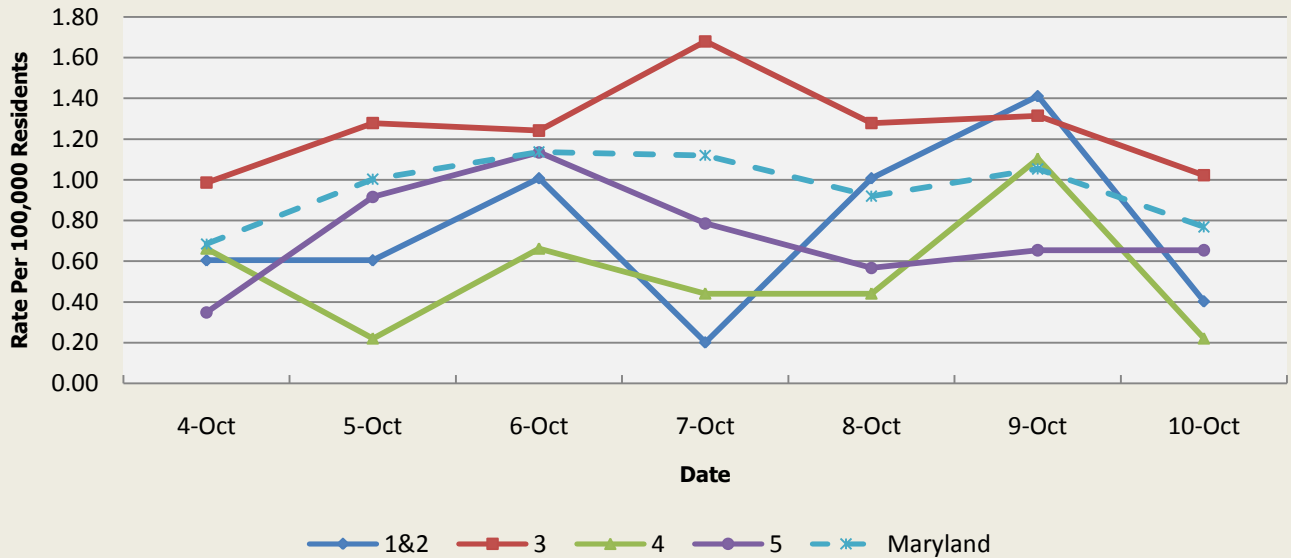


There were no neurological outbreaks reported this week.

Neurological Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.62	0.68	0.62	0.45	0.58
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**



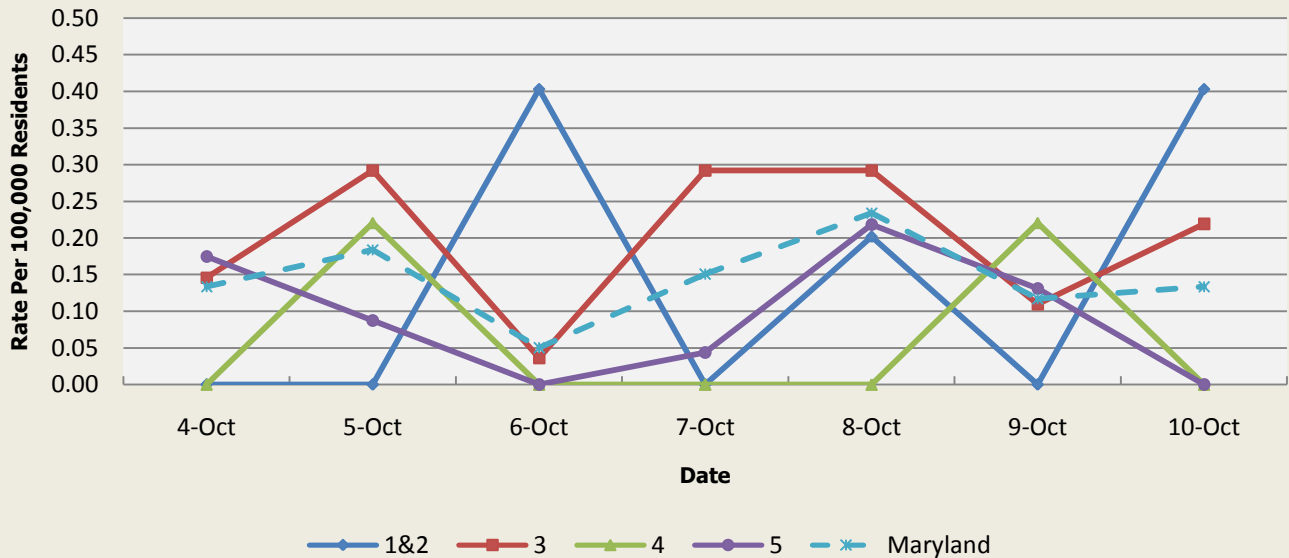
There were no severe illness or death outbreaks reported this week.

Severe Illness or Death Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.74	0.96	0.88	0.42	0.73
Median Rate*	0.60	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**

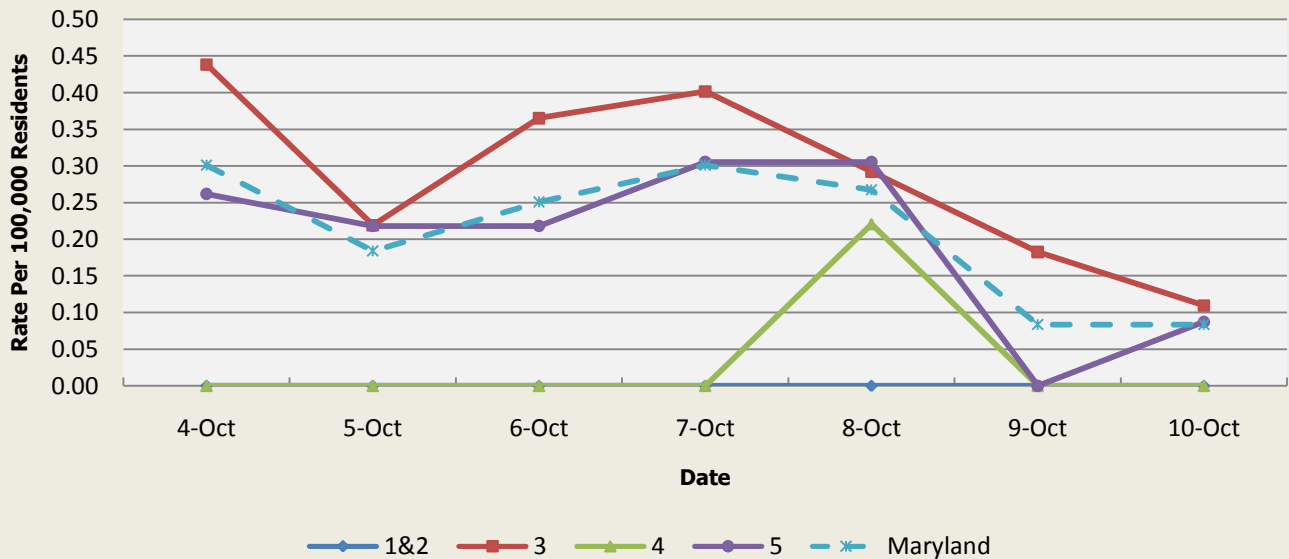


There was an appreciable increase above baseline in the rate of ED visits for Botulism-like Syndrome on 10/4 (Region 5), 10/5 (Regions 3,4), 10/6 (Regions 1&2), 10/7 (Region 3), 10/8 (Regions 1&2,3,5), 10/9 (Regions 4,5), 10/10 (Regions 1&2,3). These increases are not known to be associated with any outbreaks.

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

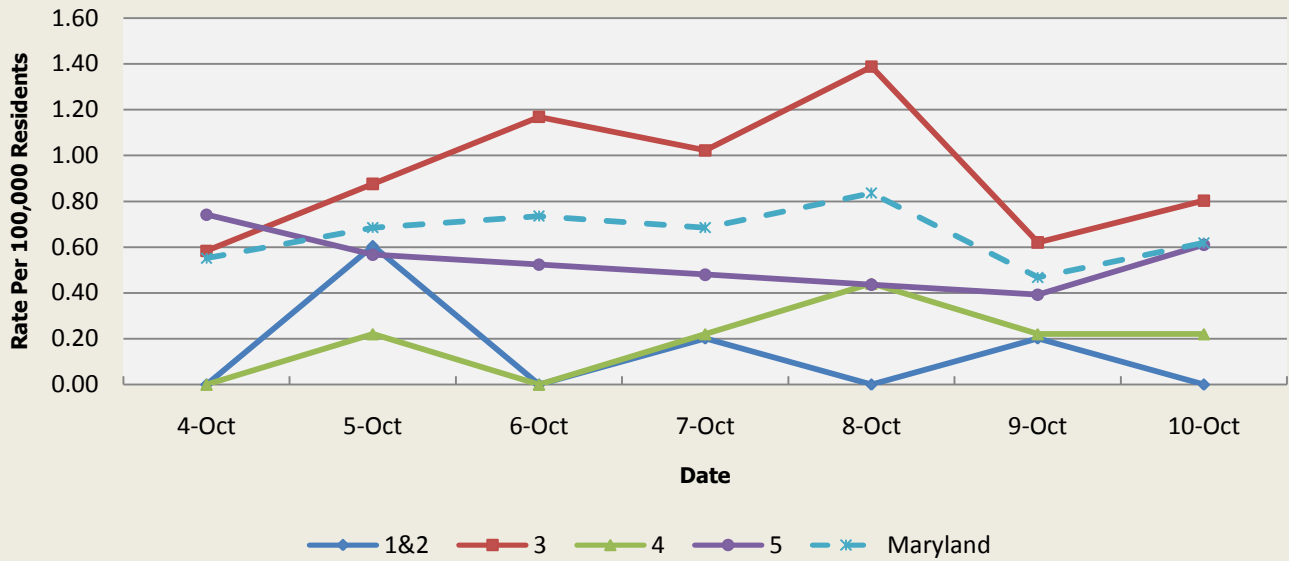


There was an appreciable increase above baseline in the rate of ED visits for Hemorrhagic Illness Syndrome on 10/4 (Regions 3,5), 10/5 (Regions 3,5), 10/6 (Regions 3,5), 10/7 (Regions 3,5), 10/8 (Regions 3,4,5), and 10/9 (Region 3). These increases are not known to be associated with any outbreaks.

Hemorrhagic Illness Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.03	0.06	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 10/4 (Region 5), 10/5 (Region 3), 10/6 (Region 3), 10/7 (Region 3), 10/8 (Region 3), and 10/10 (Regions 3,5). 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**

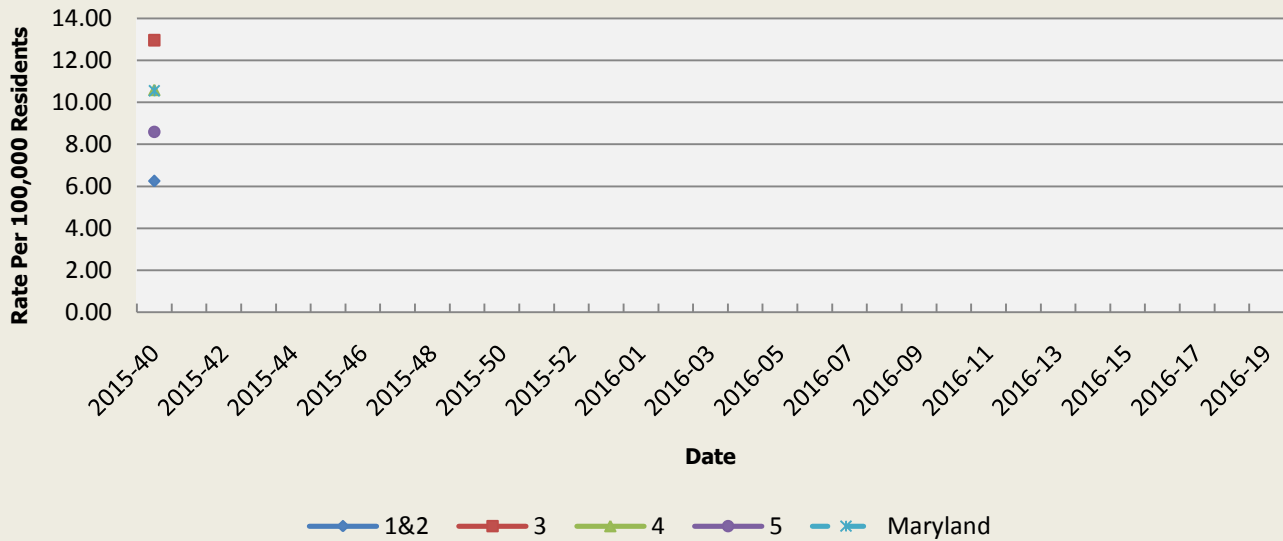
Condition	Counts of Reported Cases†					
	October			Cumulative (Year to Date)**		
Vaccine-Preventable Diseases	2015	Mean*	Median*	2015	Mean*	Median*
Aseptic meningitis	5	14.2	13	374	344.2	361
Meningococcal disease	0	0	0	2	5.8	5
Measles	0	0	0	0	0.6	0
Mumps	0	0.2	0	21	20.8	2
Rubella	0	0	0	1	1.2	1
Pertussis	0	5.4	3	74	158.4	161
Foodborne Diseases	2015	Mean*	Median*	2015	Mean*	Median*
Salmonellosis	7	32.6	31	673	780.4	804
Shigellosis	2	5.2	3	174	132.4	111
Campylobacteriosis	3	15.4	17	513	490	503
Shiga toxin-producing Escherichia coli (STEC)	0	3.4	2	71	56.8	57
Listeriosis	0	0.6	1	13	12.2	13
Arboviral Diseases	2015	Mean*	Median*	2015	Mean*	Median*
West Nile Fever	0	0.2	0	15	7	6
Lyme Disease	5	28.8	27	975	1053.4	1110
Emerging Infectious Diseases	2015	Mean*	Median*	2015	Mean*	Median*
Chikungunya	0	0.8	0	14	8.4	0
Dengue Fever	0	0.8	1	8	9	10
Other	2015	Mean*	Median*	2015	Mean*	Median*
Legionellosis	2	5	5	104	111.8	102

† Counts are subject to change    \*Timeframe of 2009-2014    \*\*Includes January through current month

**SYNDROMIC INFLUENZA SURVEILLANCE**

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

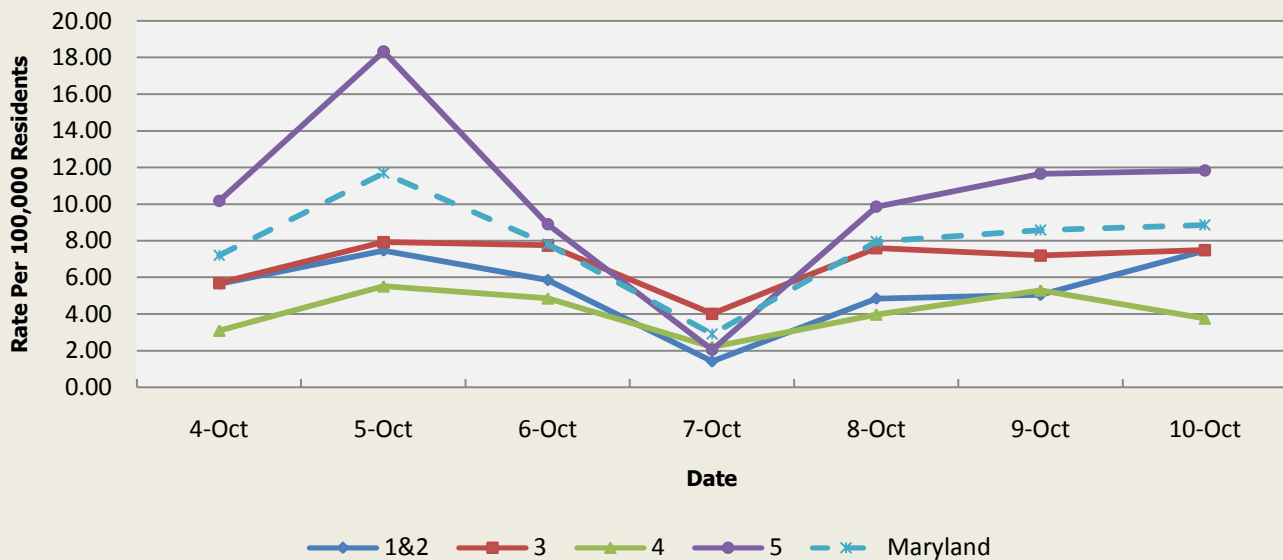
**Emergency Department Chief Complaints for Influenza-like Illness  
Rate Per 100,000 Residents**



Influenza-like Illness Baseline Data Week 1 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	9.33	10.61	10.67	9.76	10.18
Median Rate*	7.66	8.33	8.61	7.47	7.95

\* Per 100,000 Residents

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

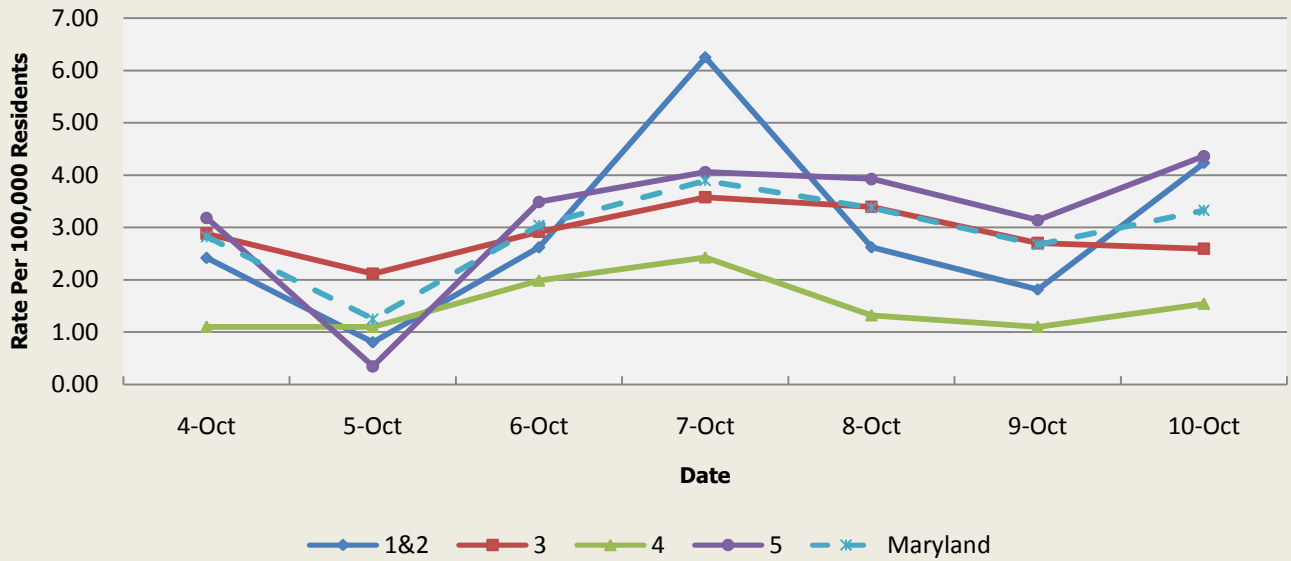


OTC Sales Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	5.37	6.05	3.07	13.75	8.72
Median Rate*	4.23	4.93	2.65	11.22	7.08

\* 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*	5.64	4.68	3.35	7.72	5.82
Median Rate*	5.04	4.31	3.09	7.12	5.35

\* 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 October 15, 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:**

**H7N9 (CHINA):** 09 OCT 2015 Taiwan has raised a travel advisory for China's Zhejiang Province by one level after an H7N9 avian flu case was reported there 2 Oct 2015, the Centers for Disease Control (CDC) said Wed [7 Oct 2015]. The patient, a 62-year-old woman, had been exposed to birds 2 weeks before developing symptoms and is currently under intensive care, the CDC said, citing Chinese health officials. Read More: <http://www.promedmail.org/direct.php?id=3703391>

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:**

No avian influenza in poultry reports this week.

## **NATIONAL DISEASE REPORTS**

**MYCOBACTERIUM ABSCESSUS (NORTH CAROLINA):** 12 OCT 2015 A *Mycobacterium abscessus* outbreak among lung transplant patients at a single hospital was traced to new building construction and its tainted water supply, researchers reported here. *M. abscessus* infections were confirmed in 39 recently hospitalized lung transplant patients, the source of which was traced to 12 tap water supply locations in the ward. Read More: <http://www.promedmail.org/direct.php?id=3708652>

**TICK-BORNE RELAPSING FEVER (ARIZONA):** 9 OCT 2015 A person who stayed in a cabin on the North Rim of the Grand Canyon National Park [Arizona] in mid-September 2015 contracted a rare tick-borne fever, the park announced on [Fri 2 Oct 2015]. The National Park Service and Coconino County Public Health Services District are now investigating the positive case of tick-borne relapsing fever (TBRF). Read More: <http://www.promedmail.org/direct.php?id=3703215>

## **INTERNATIONAL DISEASE REPORTS**

**TUBERCULOSIS (INDIA):** 14 OCT 2015 Campaigners and a former official overseeing Asia's largest tuberculosis [TB] hospital in Mumbai say staff deaths there are being under-reported, highlighting India's

growing struggle to contain multi-drug resistant [MDR] forms of the contagious, airborne disease [TB]. Read More: <http://www.promedmail.org/direct.php?id=3714117>

**EBOLA (MULTI-COUNTRY):** 14 OCT 2015 No confirmed cases of Ebola virus disease (EVD) were reported in the week to 11 Oct [2015]. This is the 2nd consecutive week with zero confirmed cases. However, 150 registered contacts remain under follow-up in Guinea, of which 118 are high risk, and an additional 259 contacts remain untraced. Read More: <http://www.promedmail.org/direct.php?id=3716783>

**MERS-COV (MULTI-COUNTRY):** As of 12 Oct 2015, there have been a total of: 1,254 laboratory confirmed cases of MERS-CoV infection, including 539 deaths, 703 recoveries, and 12 currently active cases. Read More: <http://www.promedmail.org/direct.php?id=3709062>

**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.dhmh.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.dhmh.maryland.gov/influenza/fluwatch/SitePages/Home.aspx>

Please participate in the Maryland Resident Influenza Tracking System (MRITS): <http://flusurvey.dhmh.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.

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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

