



**October 14, 2016**

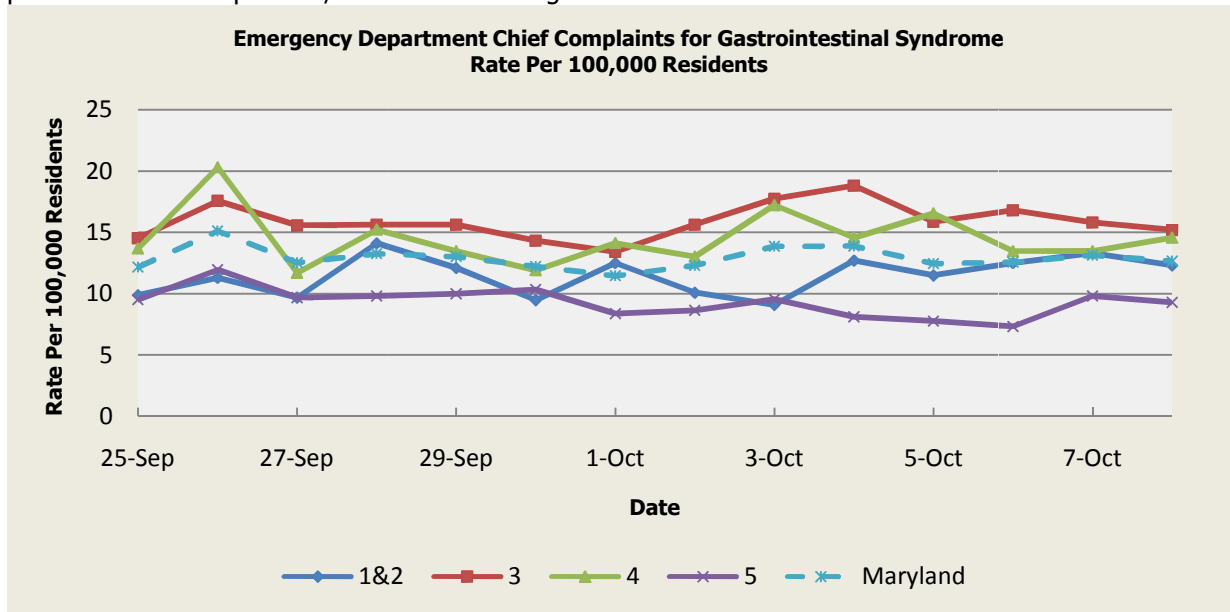
**Public Health Preparedness and Situational Awareness Report: #2016:40  
Reporting for the week ending 10/08/16 (MMWR Week #40)**

**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):**

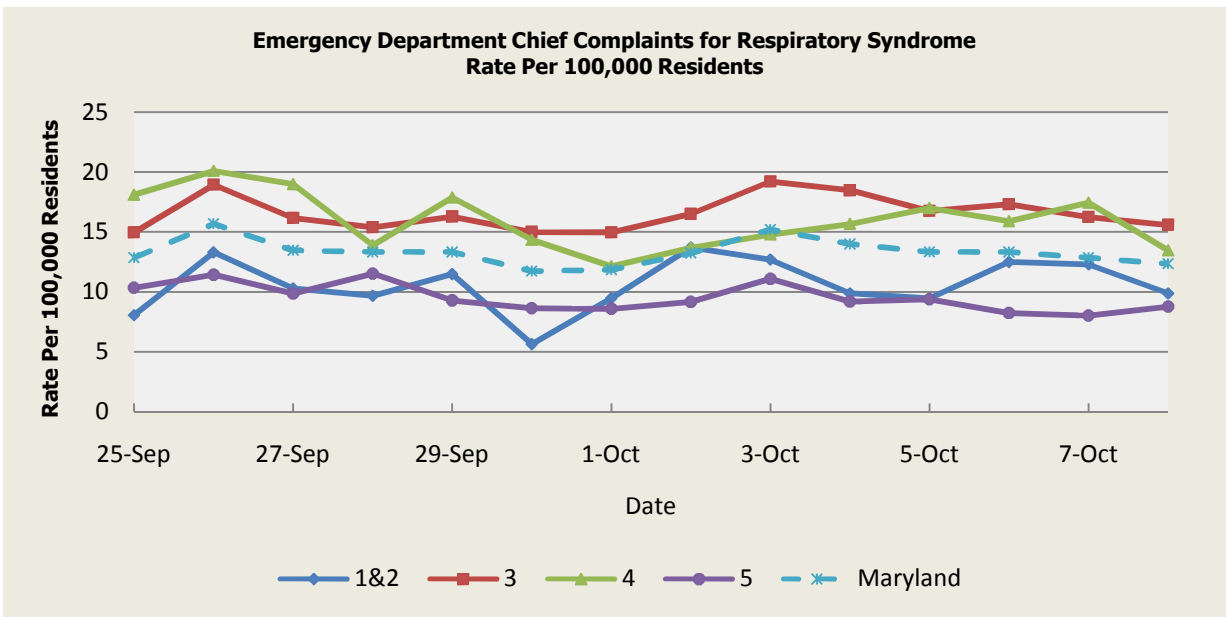
Graphical representation is provided for all syndromes (excluding the "Other" category; see Appendix 1) by Health and Medical Regions (See Appendix 2). Emergency department chief complaint data is presented as rates per 100,000 residents using data from the 2010 census.



There was one outbreak of gastroenteritis/foodborne illness reported this week: 1 outbreak of Gastroenteritis/Foodborne associated with an Event Venue (Region 3).

<b>Gastrointestinal Syndrome Baseline Data January 1, 2010 - Present</b>					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	12.94	14.88	15.42	10.31	13.01
Median Rate*	12.70	14.47	14.80	10.17	12.75

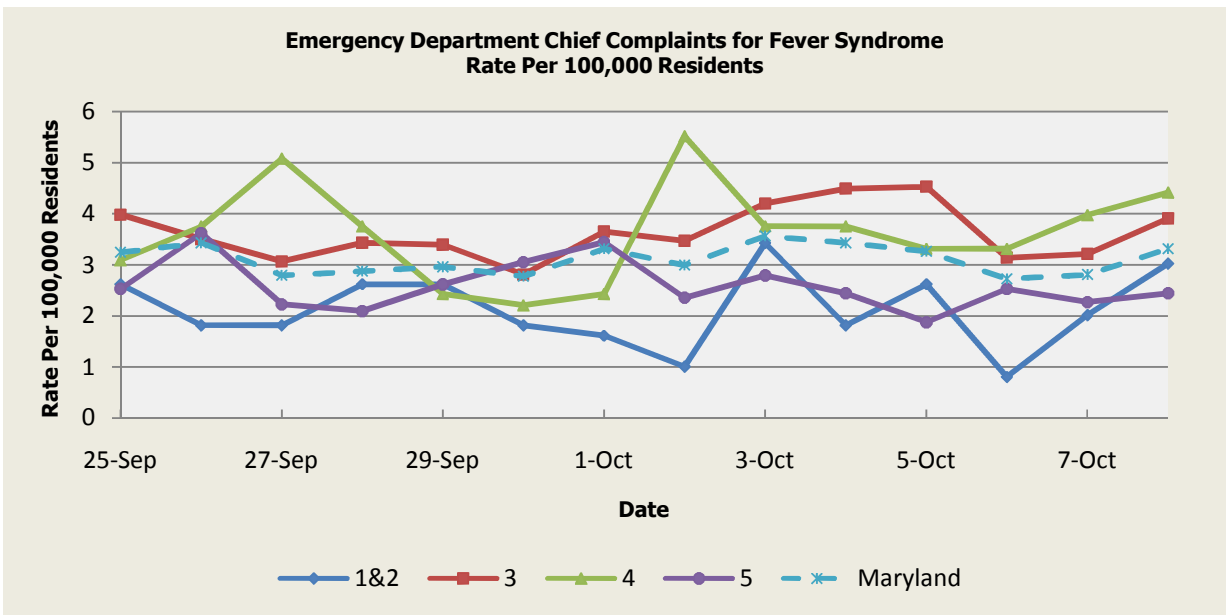
\* Per 100,000 Residents



There were no respiratory illness outbreaks reported this week.

Respiratory Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	11.99	14.12	14.04	9.94	12.34
Median Rate*	11.70	13.37	13.69	9.52	11.79

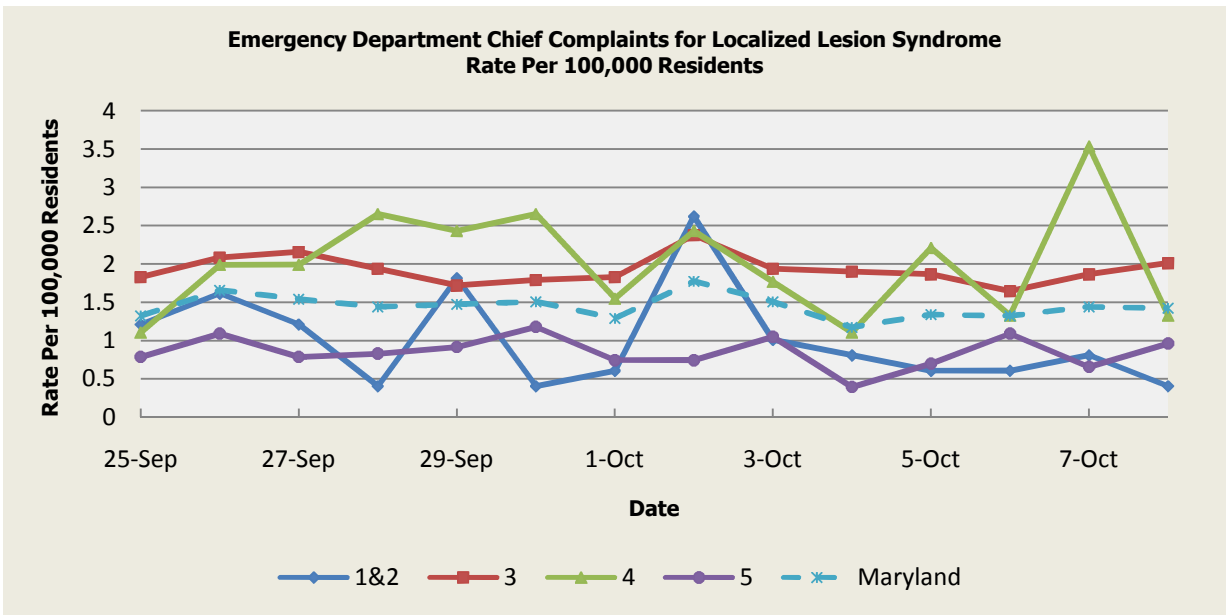
\* Per 100,000 Residents



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*	3.07	3.80	3.93	3.09	3.48
Median Rate*	3.02	3.62	3.75	2.97	3.35

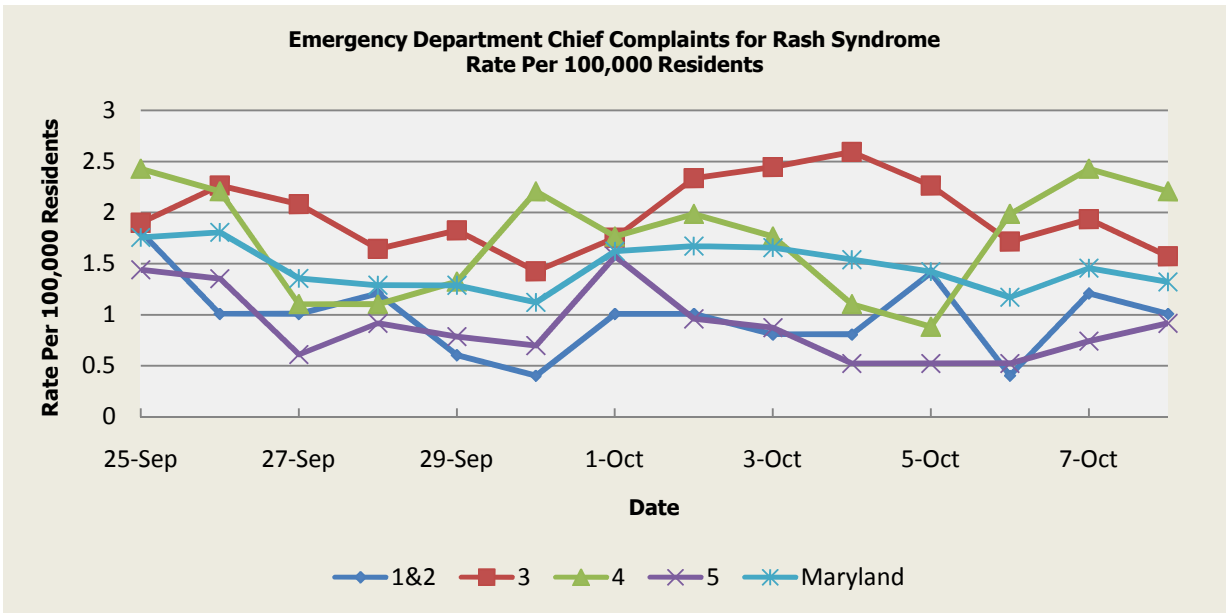
Per 100,000 Residents



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*	1.07	1.91	2.03	0.98	1.49
Median Rate*	1.01	1.86	1.99	0.92	1.44

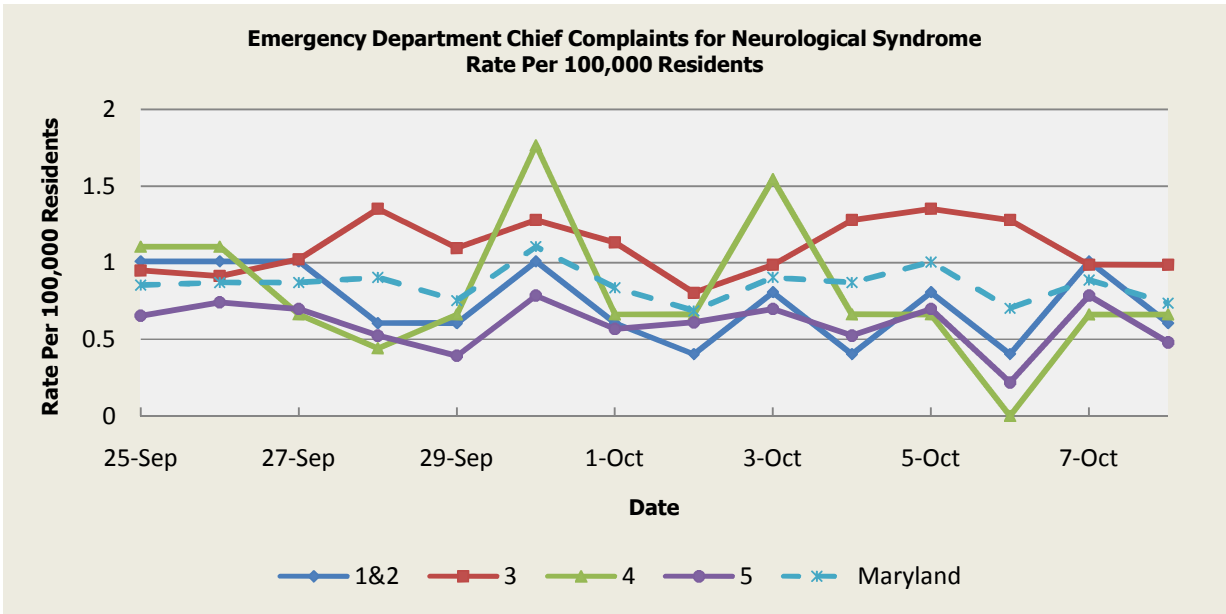
\* Per 100,000 Residents



There were two rash illness outbreaks reported this week: 2 outbreaks of HAND, FOOT, AND MOUTH DISEASE associated with Daycare Centers (Region 4).

Rash Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	1.30	1.75	1.75	1.04	1.44
Median Rate*	1.21	1.68	1.77	1.00	1.39

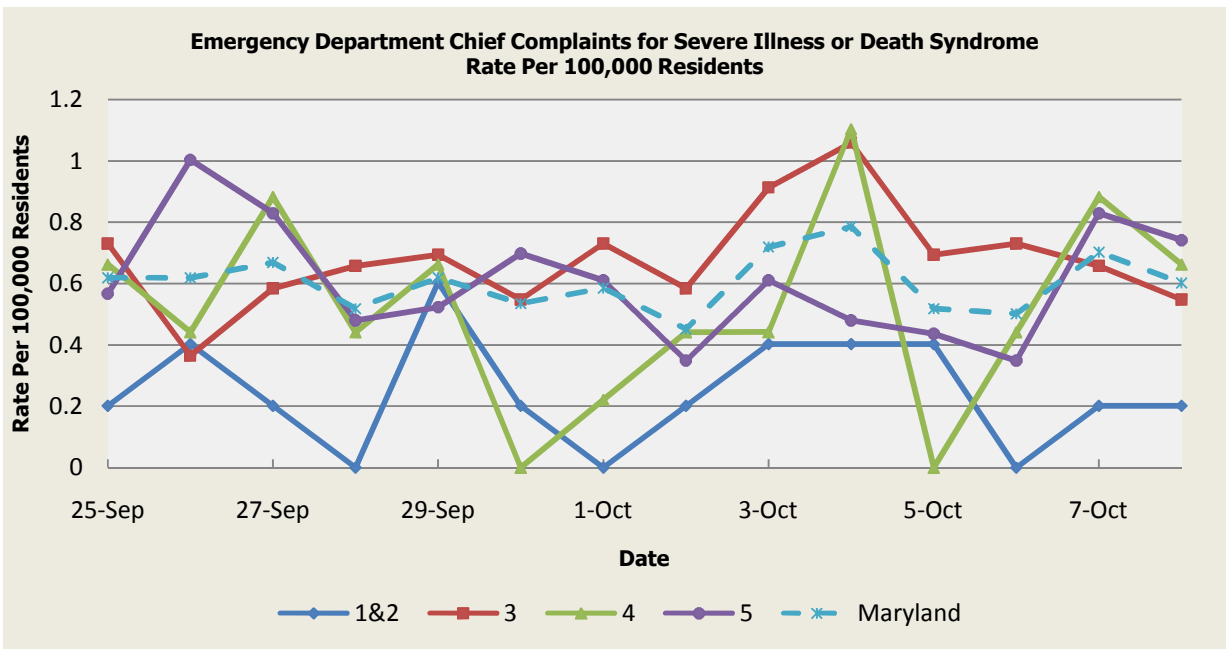
\* Per 100,000 Residents



There were no neurological syndrome outbreaks reported this week.

Neurological Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.63	0.73	0.65	0.48	0.62
Median Rate*	0.60	0.66	0.66	0.44	0.57

\* Per 100,000 Residents

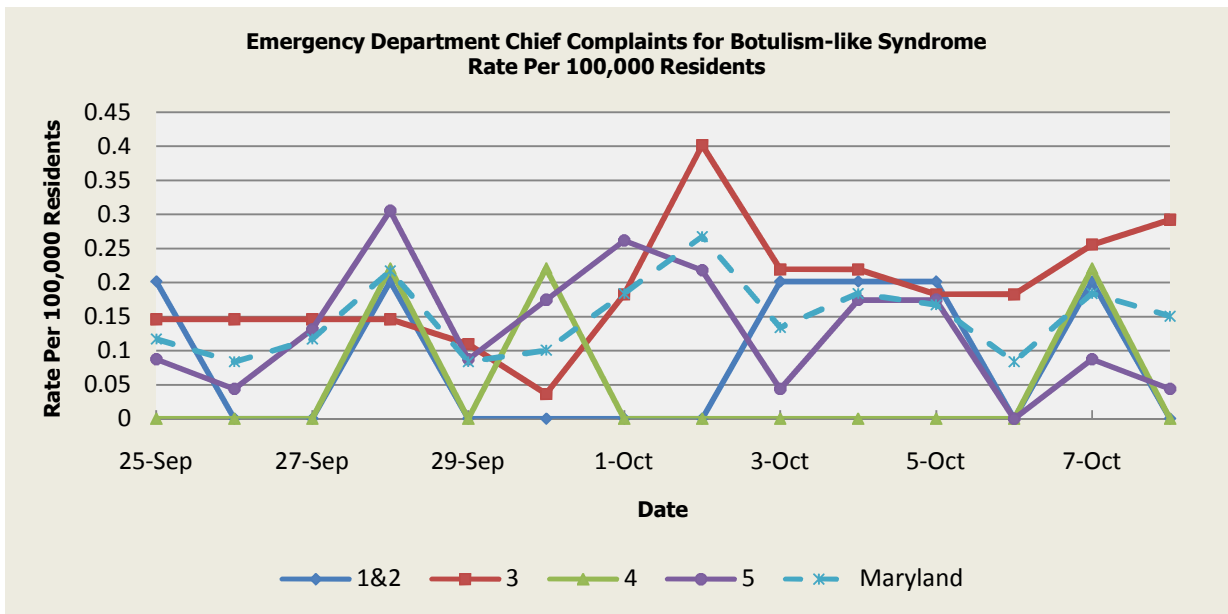


There were no severe illness or death outbreaks reported this week.

Severe Illness or Death Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.70	0.95	0.84	0.44	0.73
Median Rate*	0.60	0.91	0.88	0.44	0.72

\* Per 100,000 Residents

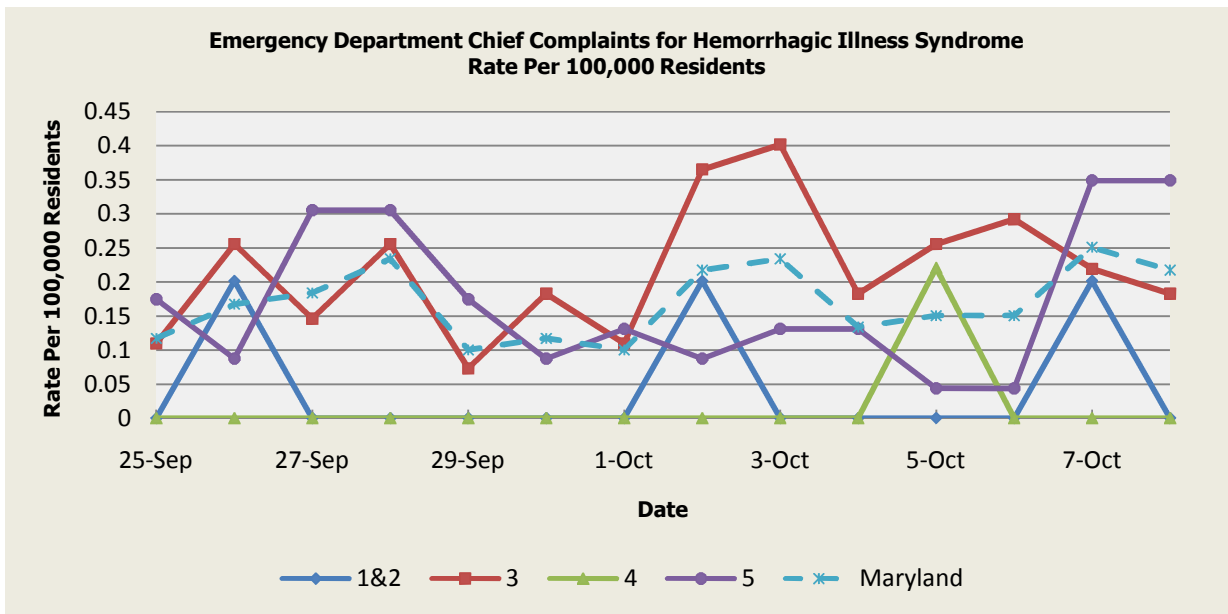
## SYNDROMES RELATED TO CATEGORY A AGENTS



There was an appreciable increase above baseline in the rate of ED visits for Botulism-like Syndrome on 9/25 (Regions 1&2,5), 9/27 (Region 5), 9/28 (Regions 1&2,3,5), 9/29 (Regions 5), 9/30 (Regions 4,5), 10/1 (Regions 3,5), 10/2 (Regions 3,5), 10/3 (Regions 1&2,3), 10/4 (Regions 1&2,3,5), 10/5 (Regions 1&2,3,5), 10/6 (Region 3), 10/7 (Regions 1&2,3,4,5) and 10/8 (Region 3). These increases are not known to be associated with any outbreaks.

<b>Botulism-like Syndrome Baseline Data January 1, 2010 - Present</b>					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.06	0.08	0.04	0.05	0.06
Median Rate*	0.00	0.04	0.00	0.04	0.05

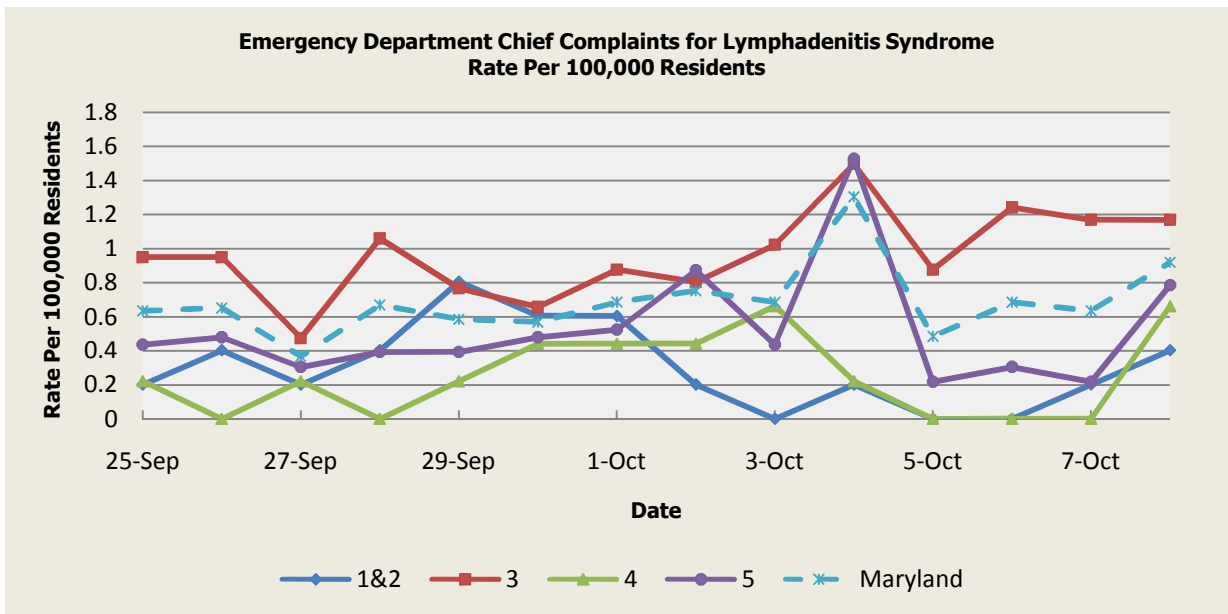
\* Per 100,000 Residents



There was an appreciable increase above baseline in the rate of ED visits for Hemorrhagic Illness Syndrome on 9/25 (Regions 5), 9/26 (Regions 1&2,3), 9/27 (Regions 5), 9/28 (Regions 3,5), 9/29 (Regions 5), 10/1 (Regions 5), 10/2 (Regions 1&2,3), 10/3 (Region 3), 10/5 (Regions 3,4), 10/6 (Region 3), 10/7 (Regions 1&2,5) and 10/8 (Region 5). These increases are not known to be associated with any outbreaks.

<b>Hemorrhagic Illness Syndrome Baseline Data January 1, 2010 - Present</b>					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.03	0.11	0.03	0.08	0.08
Median Rate*	0.00	0.04	0.00	0.04	0.03

\* Per 100,000 Residents



There was an appreciable increase above baseline in the rate of ED visits for Lymphadenitis Syndrome on 9/28 (Regions 3), 9/29 (Region 1&2), 10/3 (Region 3), 10/4 (Regions 3,5), 10/6 (Region 3), 10/7 (Region 3) and 10/8 (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*	0.31	0.50	0.34	0.51	0.38
Median Rate*	0.20	0.37	0.22	0.26	0.32

\* Per 100,000 Residents

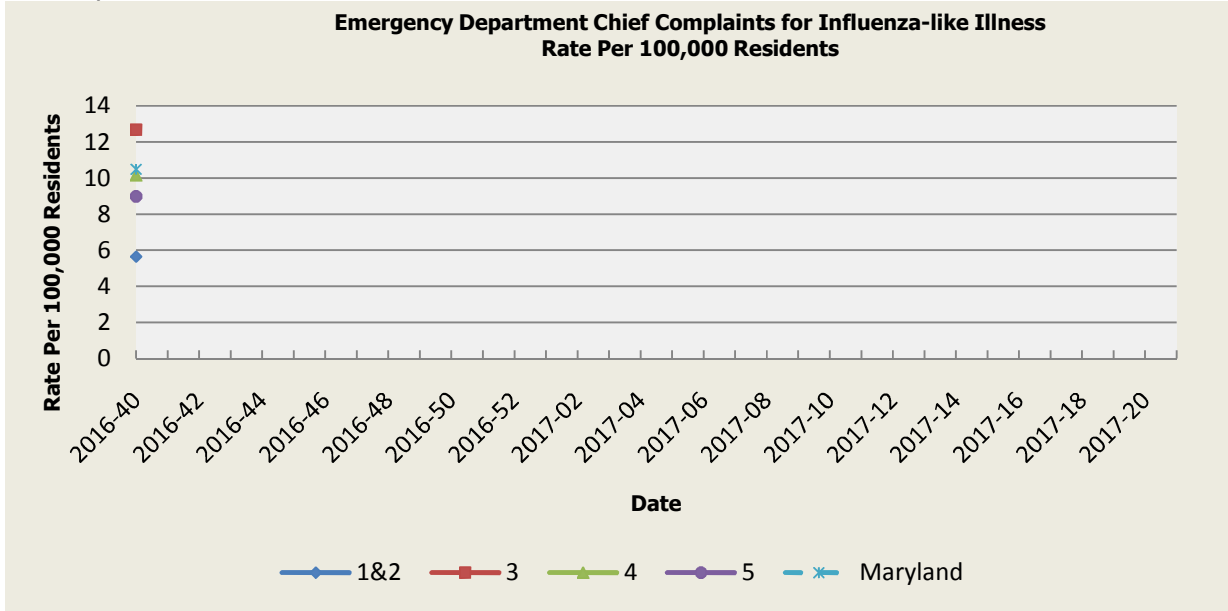
## MARYLAND REPORTABLE DISEASE SURVEILLANCE

Condition	Counts of Reported Cases†					
	October			Cumulative (Year to Date)**		
	2016	Mean*	Median*	2016	Mean*	Median*
<b>Vaccine-Preventable Diseases</b>						
Aseptic meningitis	4	1.6	2	256	348.6	351
Meningococcal disease	0	0	0	3	6	4
Measles	0	0	0	4	4	3
Mumps	0	0	0	16	36	10
Rubella	0	0	0	1	2.4	2
Pertussis	1	2.2	2	155	226.8	278
<b>Foodborne Diseases</b>						
Salmonellosis	6	4.6	5	636	743.8	752
Shigellosis	2	0.6	0	104	144	176
Campylobacteriosis	7	3.6	3	550	549.4	547
Shiga toxin-producing Escherichia coli (STEC)	3	1.4	1	132	98.8	91
Listeriosis	1	0.2	0	17	12.8	14
<b>Arboviral Diseases</b>						
West Nile Fever	0	0	0	2	11.4	10
Lyme Disease	10	10.4	11	1472	1252.8	1343
<b>Emerging Infectious Diseases</b>						
Chikungunya	0	0	0	5	11.8	0
Dengue Fever	0	0	0	30	12.8	12
Zika Virus***	0	0	0	108	0.2	0
<b>Other</b>						
Legionellosis	1	0.6	0	114	129.2	127

† Counts are subject to change \*Timeframe of 2011-2015 \*\*Includes January through current month  
 \*\*\* As of October 12, 2016, the total Maryland Confirmed Zika Virus Infections is 103.

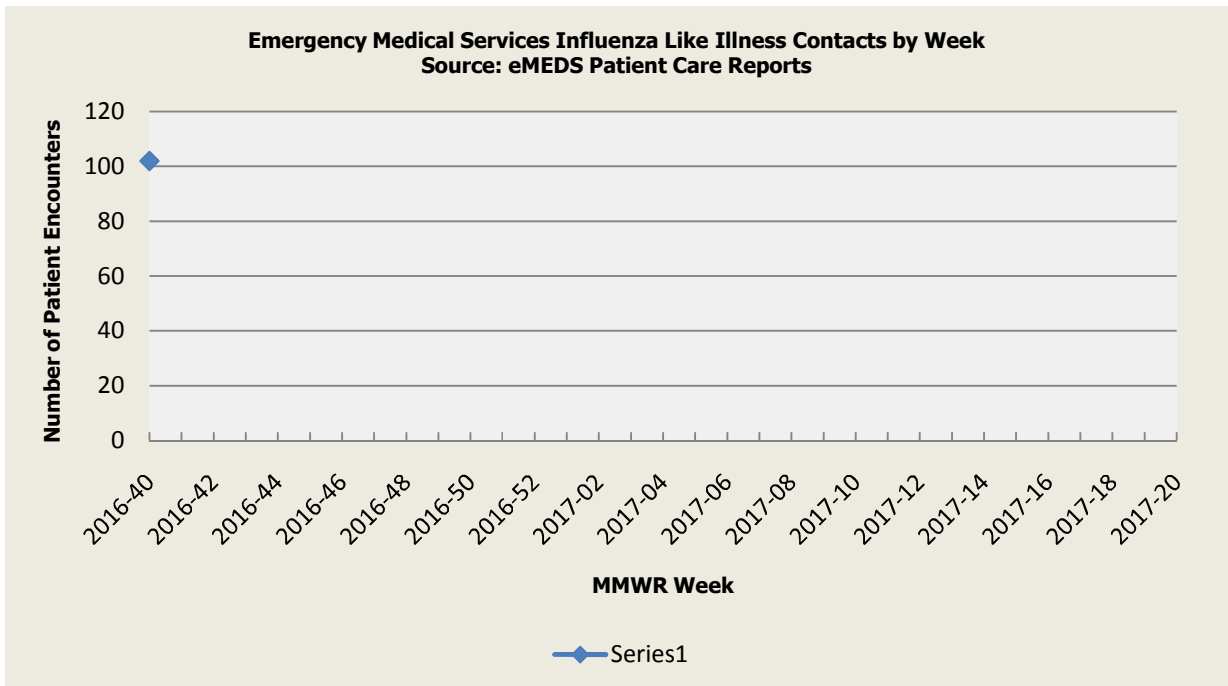
## SYNDROMIC INFLUENZA SURVEILLANCE

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

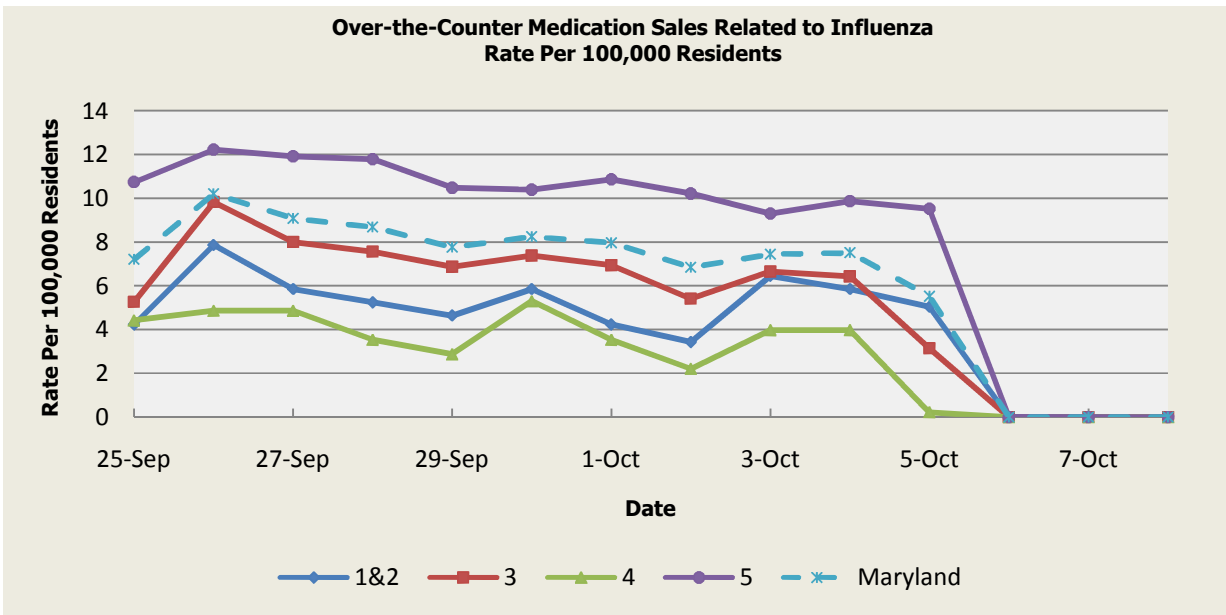


Influenza-like Illness Baseline Data Week 1 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	9.26	11.58	10.78	10.43	10.88
Median Rate*	7.66	8.99	9.05	8.03	8.72

\* Per 100,000 Residents



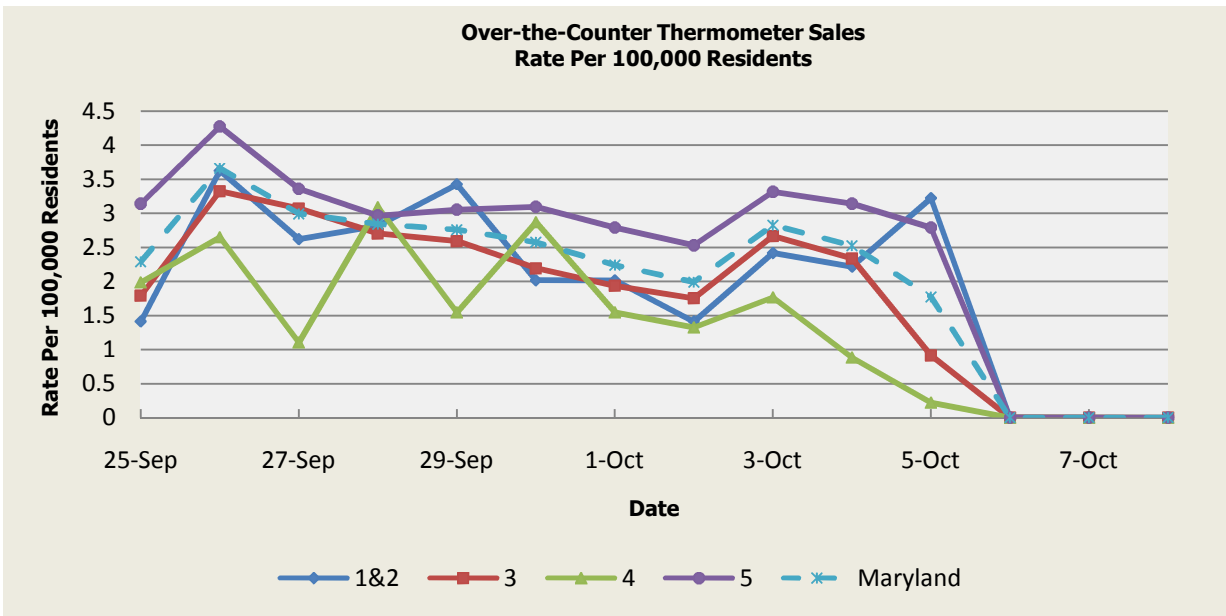
**Disclaimer on eMEDS flu related data:** This data is based on EMS Pre-hospital care reports where the EMS provider has selected "flu like illness" as a primary or secondary impression of a patient's illness. This impression is solely based on the signs and symptoms seen by the provider, not on any diagnostic tests. Since these numbers do not include all primary or secondary impressions that may be seen with influenza the actual numbers may be low. This data is reported for trending purposes only.



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

Health Region	OTC Sales Baseline Data January 1, 2010 - Present				
	1&2	3	4	5	Maryland
Mean Rate*	3.86	4.69	2.60	8.21	5.79
Median Rate*	2.82	3.98	2.21	7.60	5.19

\* Per 100,000 Residents



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

Health Region	Thermometer Sales Baseline Data January 1, 2010 - Present				
	1&2	3	4	5	Maryland
Mean Rate*	3.48	3.30	2.54	4.50	3.72
Median Rate*	3.23	3.07	2.43	4.10	3.46

\* 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 3, 2016, the WHO-confirmed global total (2003-2016) of human cases of H5N1 avian influenza virus infection stands at 856, of which 452 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 53%.

### **Avian Influenza:**

**H5N8 (RUSSIA):** 11 Oct 2016, The Food and Agriculture Organization of the United Nations [FAO] is advising countries to be on high alert for possible spread of the highly pathogenic H5N8 virus subtype detected recently in wild birds at Lake Ubsu-Nur in the Tuva Republic of the Russian Federation. Read More: <http://www.promedmail.org/post/4551755>

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

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

**H5N1 (EGYPT):** 13 Oct 2016, Egypt has reported 356 human cases of avian influenza A(H5N1) since March 2006, including 121 deaths, according to the World Health Organization (WHO) Eastern Mediterranean Region Office (EMRO). During the 1st 9 months of 2016, 10 cases have been reported. 4 of the patients died from the dangerous viral disease. Read More: <http://www.promedmail.org/post/4554039>

## **NATIONAL DISEASE REPORTS**

**BURKHOLDERIA CEPACIA (USA):** 12 Oct 2016, An investigation into a multistate outbreak [in the United States] has identified the bacteria, *Burkholderia cepacia*, in more than 10 lots of oral liquid docusate sodium linked directly to a contract manufacturing organization's (CMO) Florida-based site. PharmaTech in August [2016] voluntarily recalled all of its liquid drug formulations made at the Davie, Florida facility after being linked to the outbreak. Read more: <http://www.promedmail.org/post/4558827>

**LEGIONELLOSIS (MINNESOTA):** 14 Oct 2016, Minnesota Department of Health (MDH) officials announced they have identified the likely source of the legionnaires' disease outbreak in Hopkins [Hennepin County]. According to the MDH, the likely source is a set of cooling towers at Citrus Systems, Inc, located in the 400 block of 11th Ave South. Citrus Systems is a [beverage and juice]

manufacturer that moved into its current 132 000 square foot [12 263 sq m] warehouse, manufacturing, and office space in 2013. Read more: <http://www.promedmail.org/post/4559196>

## **INTERNATIONAL DISEASE REPORTS**

**ACUTE RESPIRATORY DISEASE (COLOMBIA):** 14 Oct 2016, The National Institute of Health has reported that to date in the country, 468 deaths have been reported in children under 5 years old from an acute respiratory infection. According to the Institute, the highest number of deaths from this cause have been in Bogotá (95) and the departments of Antioquia (51), La Guajira (38), Chocó (36) and Cundinamarca (25). Read More: <http://www.promedmail.org/post/4558611>

**INVASIVE MOSQUITO (CANADA):** 13 Oct 2016, The Windsor-Essex County Health Unit says 2 additional *Aedes albopictus* mosquitoes have been found in a Windsor trap. That brings the total trapped in Windsor-Essex to 6. The *Aedes albopictus* mosquito, also known as the Asian tiger mosquito, is known to transmit the Zika virus [as well as chikungunya and dengue viruses]. Read more: <http://www.promedmail.org/post/4558392>

**CHOLERA, DIARRHEA & DYSENTERY (HAITI):** 12 Oct 2016, Cholera outbreaks have killed at least 13 people in south west Haiti in the wake of Hurricane Matthew, government officials told Reuters on Sat [8 Oct 2016], voicing concern that the disease was spreading. A total of 6 people died of cholera in a hospital in the southern town of Randel, while another 7 died in the western coastal town of Anse-d'Ainault, the officials said, likely as flood waters mixed with sewage. Read more: <http://www.promedmail.org/post/4555242>

## **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/Pages/Home.aspx>

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

