



**September 9, 2016**

**Public Health Preparedness and Situational Awareness Report: #2016:35  
Reporting for the week ending 9/03/16 (MMWR Week #35)**

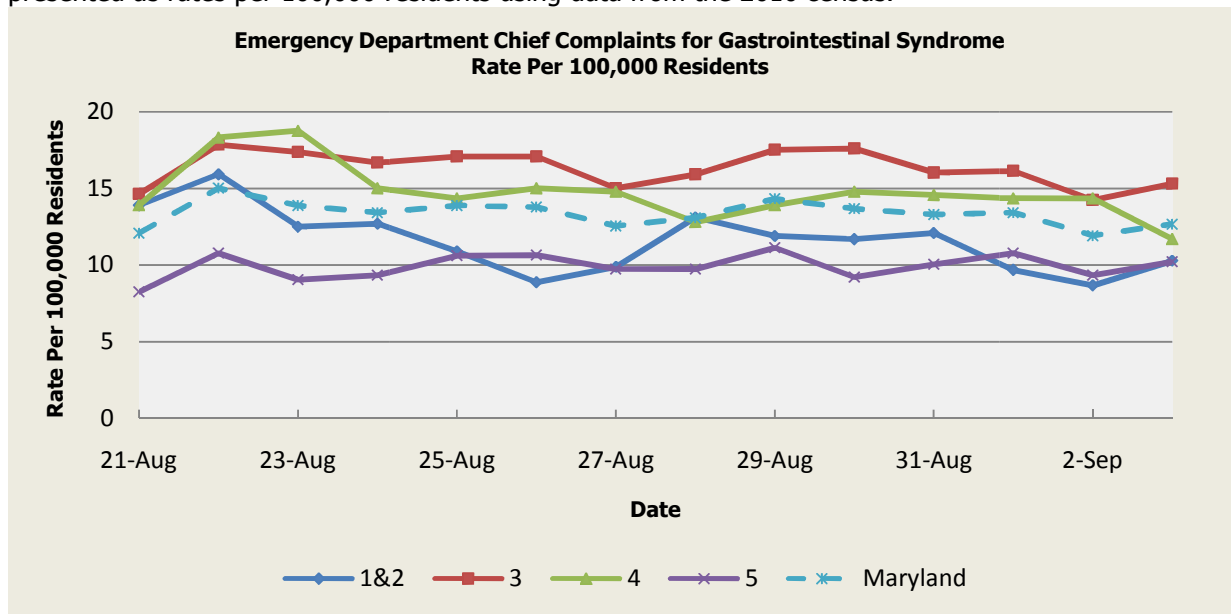
**CURRENT HOMELAND SECURITY THREAT LEVELS**

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

**SYNDROMIC SURVEILLANCE REPORTS**

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

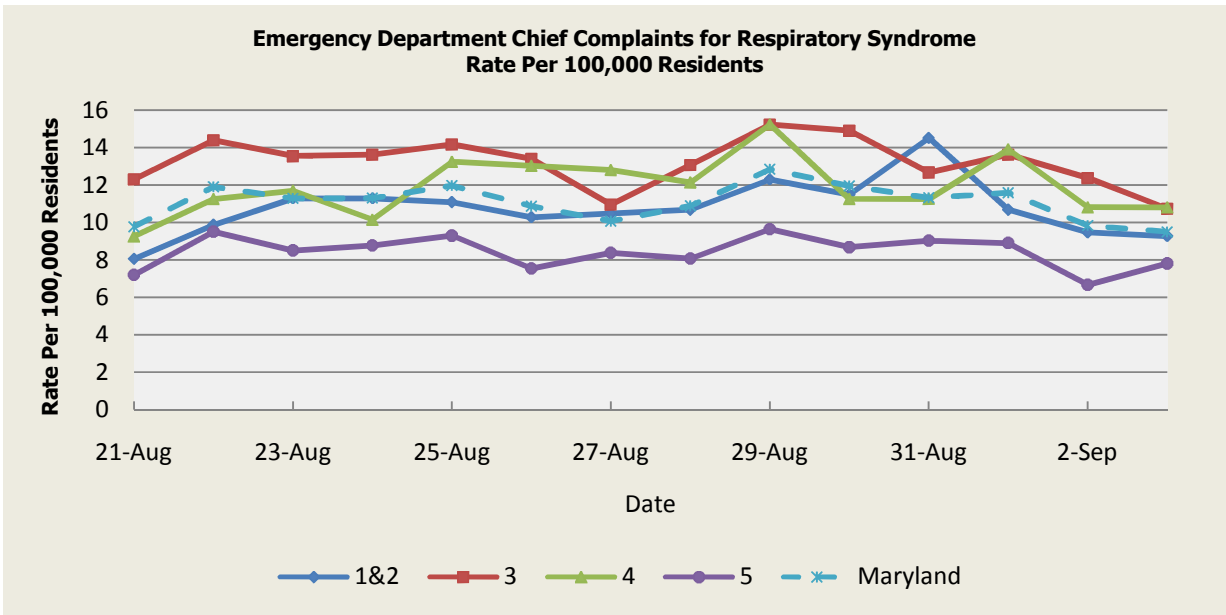
Graphical representation is provided for all syndromes (excluding the "Other" category; see Appendix 1) by Health and Medical Regions (See Appendix 2). Emergency department chief complaint data is presented as rates per 100,000 residents using data from the 2010 census.



There were two (2) gastroenteritis/foodborne outbreaks reported this week: 1 outbreak of gastroenteritis associated with a Nursing Home (Region 5); 1 outbreak of gastroenteritis associated with an Assisted Living Facility (Region 5).

Gastrointestinal Syndrome Baseline Data January 1, 2010 - Present					
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

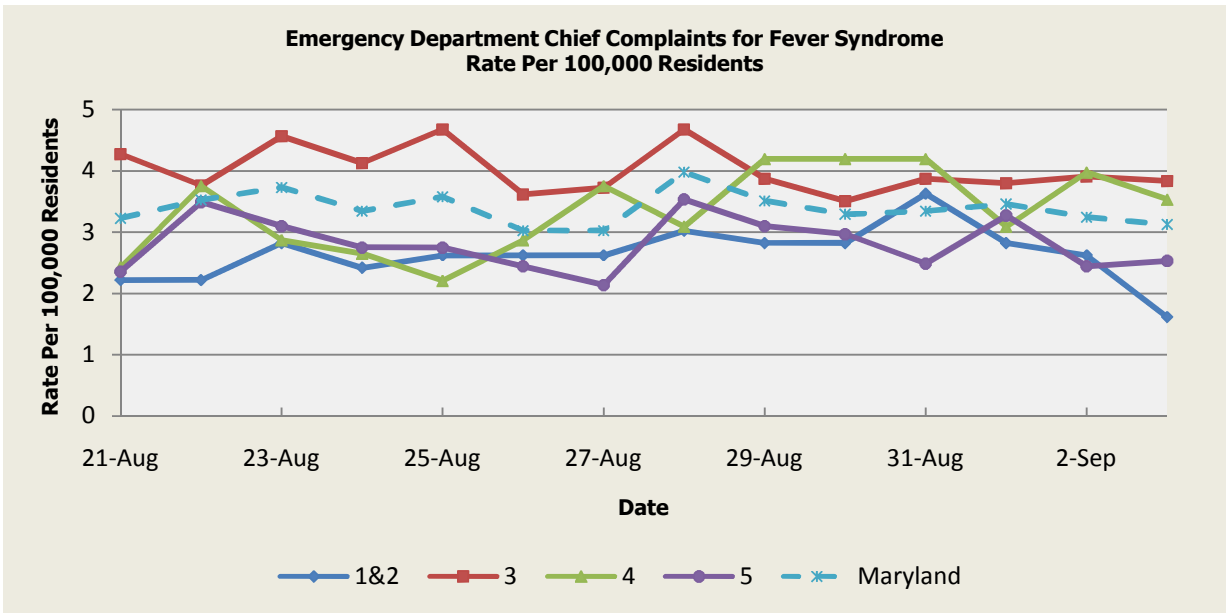
\* Per 100,000 Residents



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

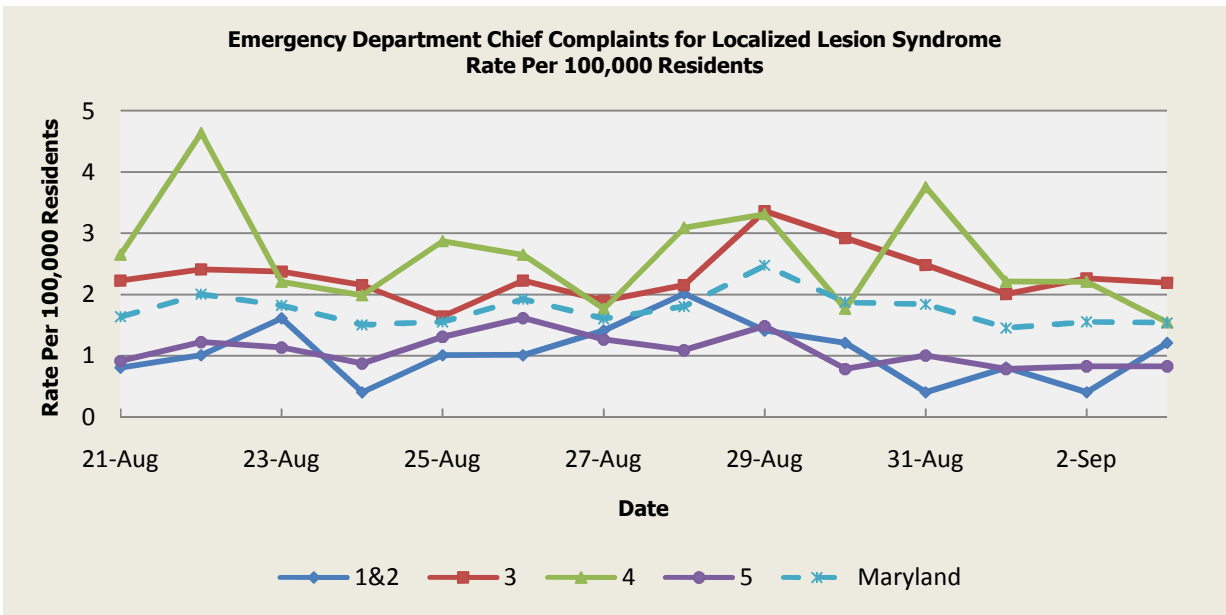
\* Per 100,000 Residents



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

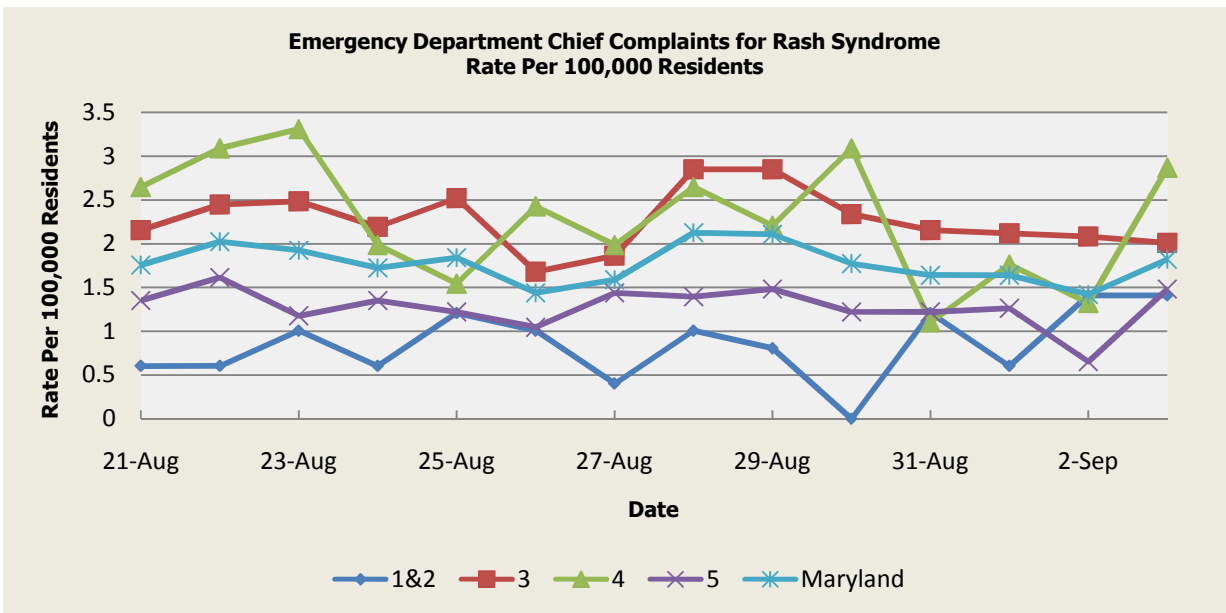
Per 100,000 Residents



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

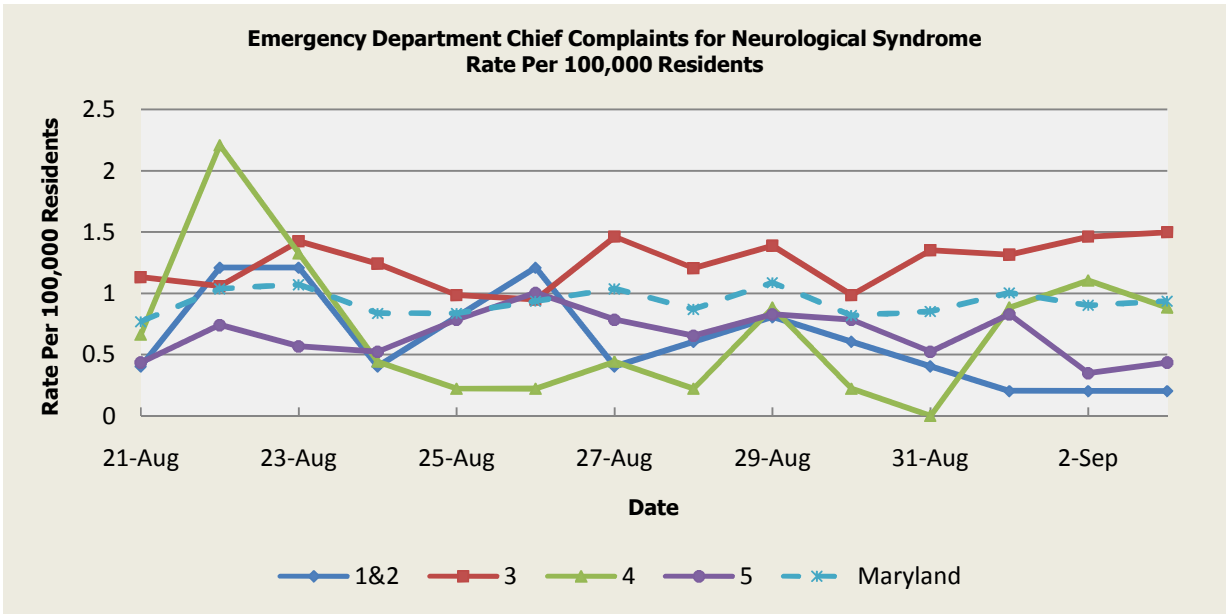
\* Per 100,000 Residents



There were three (3) rash illness outbreaks reported this week: 1 outbreak of hand, foot and mouth disease associated with a School (Region 3); 1 outbreak of hand, foot and mouth disease associated with a Daycare Center (Region 3); 1 outbreak of rash associated with a School (Region 3).

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

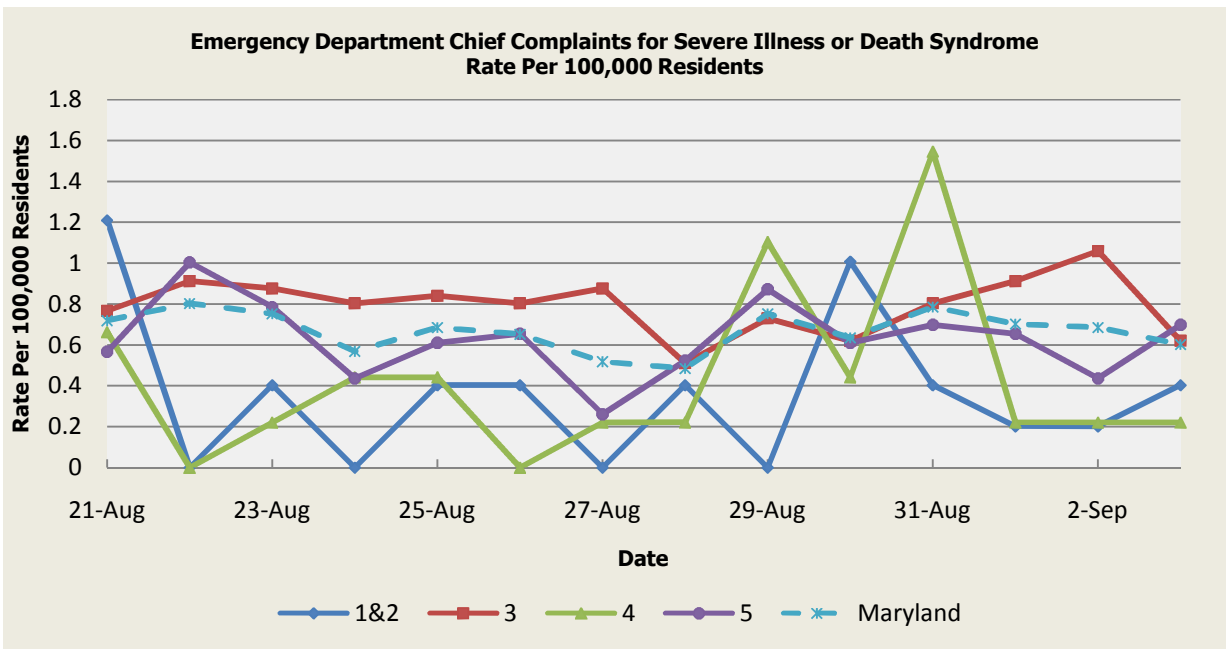
\* Per 100,000 Residents



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

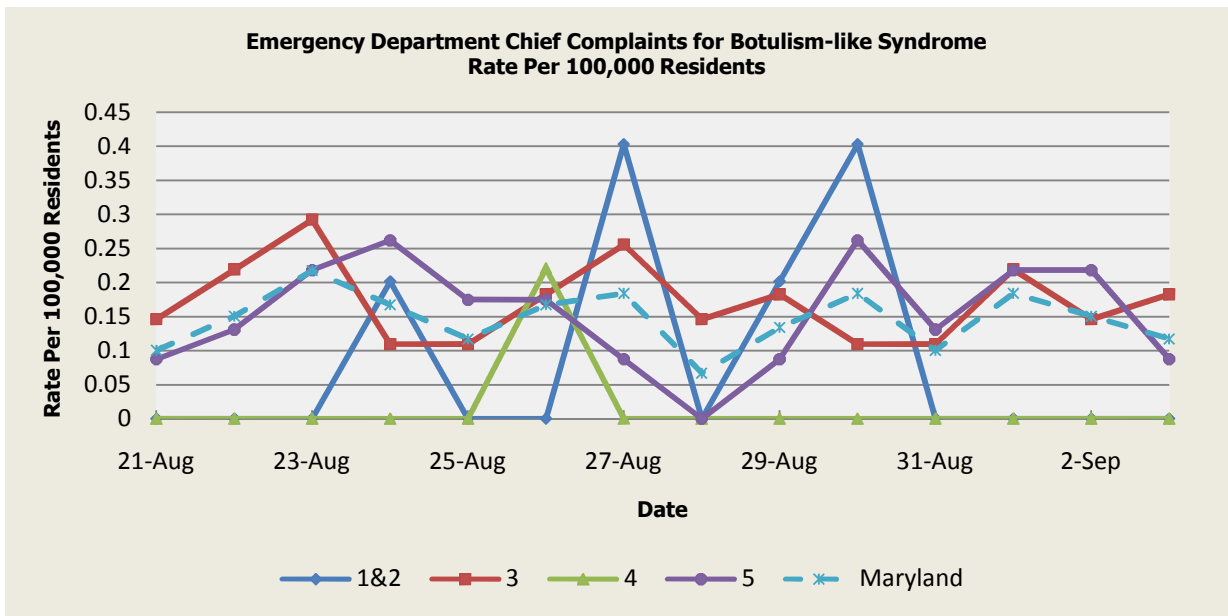


There were no severe illness or death outbreaks reported this week.

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

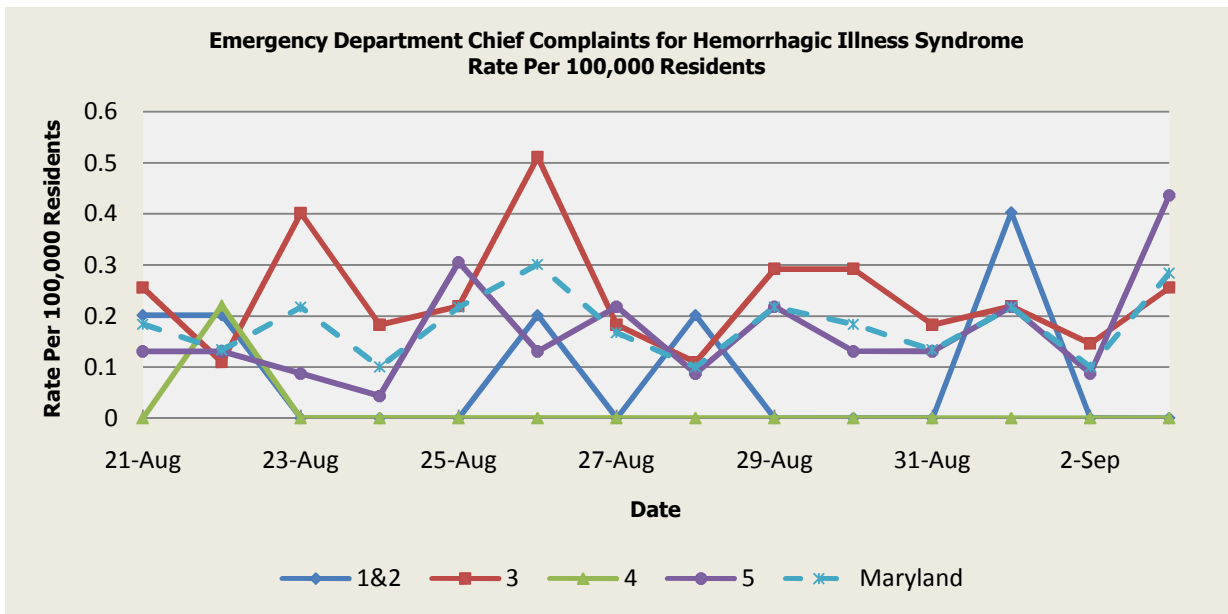
## SYNDROMES RELATED TO CATEGORY A AGENTS



There was an appreciable increase above baseline in the rate of ED visits for Botulism-like Syndrome on 8/22 (Region 3, 5), 8/23 (Regions 3, 5), 8/24 (Region 1&2, 5), 8/25 (Regions 5), 8/26 (Regions 4, 5), 8/27 (Regions 1&2, 3), 8/29 (Regions 1&2, 3), 8/30 (Regions 1&2, 5), 8/31 (Region 5), 9/1 (Regions 3, 5), 9/2 (Regions 5), and 9/3 (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

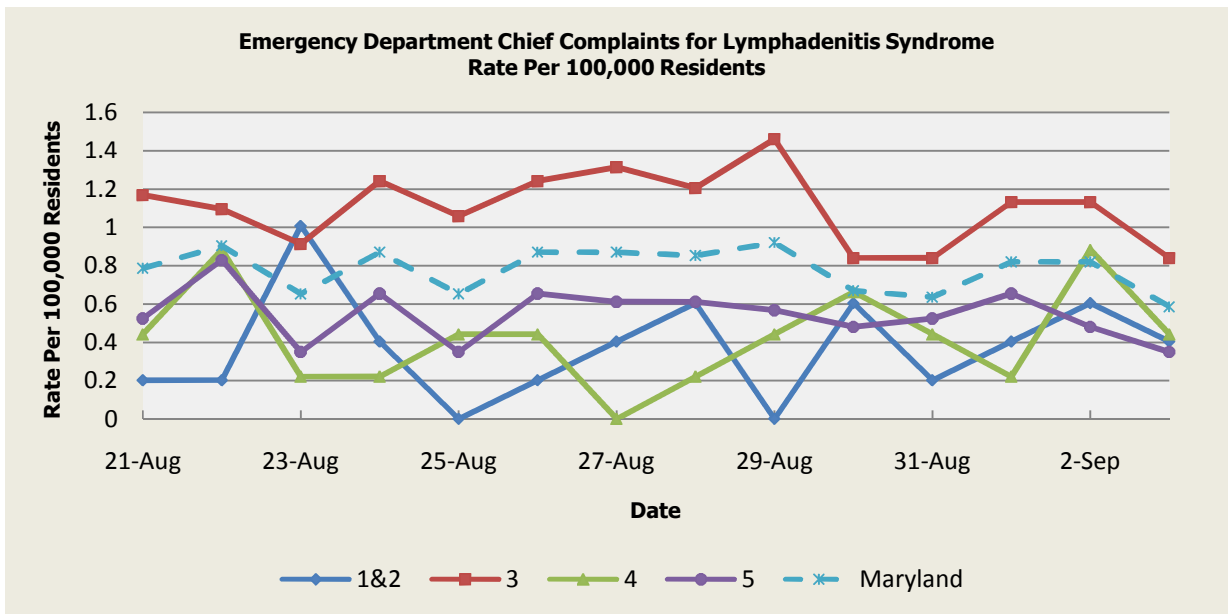
\* Per 100,000 Residents



There was an appreciable increase above baseline in the rate of ED visits for Hemorrhagic Illness Syndrome on 8/21 (Region 1&2, 3, 5), 8/22 (Region 1&2, 4, 5), 8/23 (Region 3), 8/25 (Region 3, 5), 8/26 (Regions 1&2, 3), 8/27 (Region 5), 8/28 (Regions 1&2), 8/29 (Region 3), 8/30 (Region 1&2, 3, 5), 9/1 (Regions 3, 5) and 9/3 (Region 3, 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	0.10	0.03	0.07	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 8/21 (Regions 3), 8/22 (Regions 3,4, 5), 8/23 (Region 1&2), 8/24 (Region 3, 5), 8/25 (Region 3), 8/26 (Region 3, 5), 8/27 (Region 3,5), 8/28 (Region 3, 5), 8/29 (Region 3), 9/1 (Region 3, 5), 9/2 (Region 3, 4) and 9/3 (Regions 3). These increases are not known to be associated with any outbreaks.

<b>Lymphadenitis Syndrome Baseline Data January 1, 2010 - Present</b>					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.31	0.47	0.34	0.29	0.38
Median Rate*	0.20	0.37	0.22	0.26	0.32

\* Per 100,000 Residents

## MARYLAND REPORTABLE DISEASE SURVEILLANCE

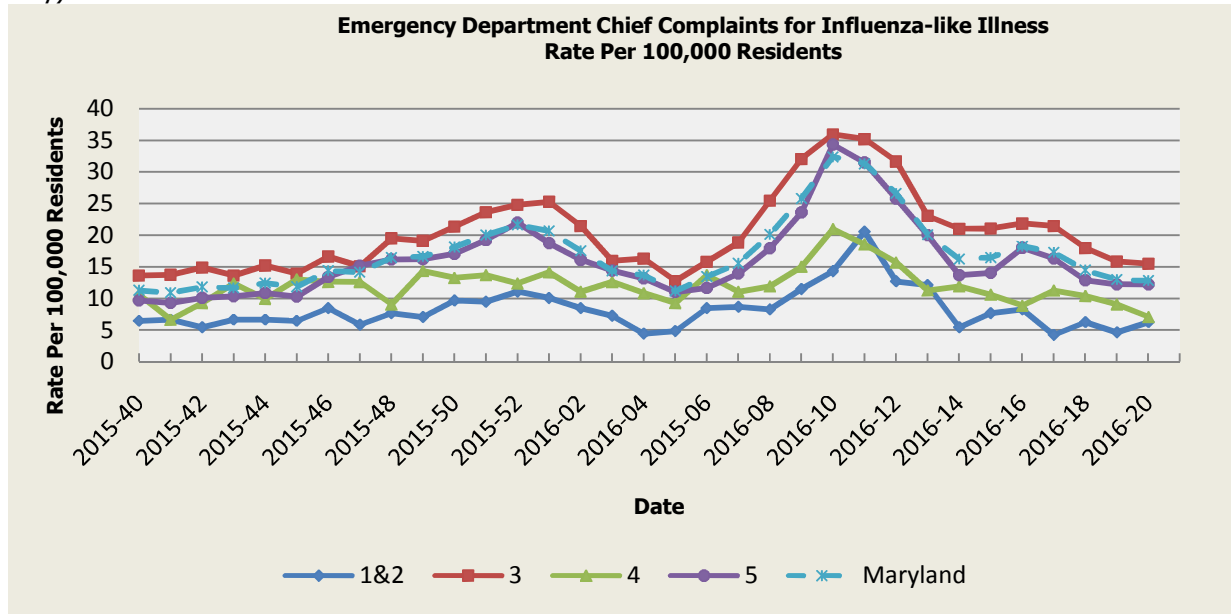
Condition	Counts of Reported Cases‡					
	September			Cumulative (Year to Date)**		
	2016	Mean*	Median*	2016	Mean*	Median*
<b>Vaccine-Preventable Diseases</b>						
Aseptic meningitis	2	6.6	7	219	298.4	315
Meningococcal disease	0	0	0	2	5.4	4
Measles	0	0.2	0	4	3.8	3
Mumps	0	0.4	0	12	34.8	10
Rubella	0	0	0	1	2.2	2
Pertussis	1	3.6	4	125	188.2	230
<b>Foodborne Diseases</b>						
Salmonellosis	1	14.4	14	509	640	641
Shigellosis	0	2	1	90	127	155
Campylobacteriosis	1	7.8	8	473	491.4	487
Shiga toxin-producing Escherichia coli (STEC)	1	1.8	2	108	87.4	79
Listeriosis	0	0	0	13	11.6	11
<b>Arboviral Diseases</b>						
West Nile Fever	0	0.6	0	0	8.4	8
Lyme Disease	6	24	23	1251	1111	1221
<b>Emerging Infectious Diseases</b>						
Chikungunya	0	0.2	0	5	9.8	0
Dengue Fever	0	0.4	0	27	11	12
Zika Virus***	0	0	0	91	0.2	0
<b>Other</b>						
Legionellosis	0	1.2	1	99	107.4	111

‡ Counts are subject to change    \*Timeframe of 2011-2015    \*\*Includes January through current month

\*\*\* As of September 7, 2016, the total Maryland Confirmed Zika Virus Infections is 89.

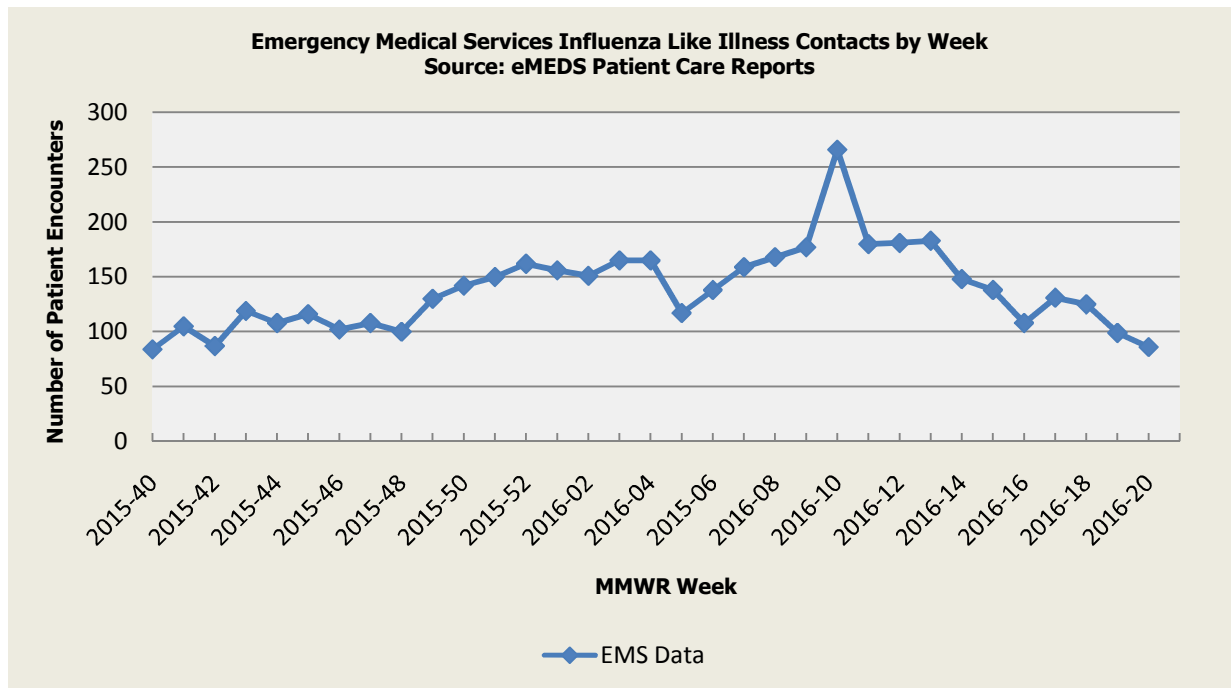
## SYNDROMIC INFLUENZA SURVEILLANCE

Seasonal Influenza reporting occurs from MMWR Week 40 through MMWR Week 20 (October through May).



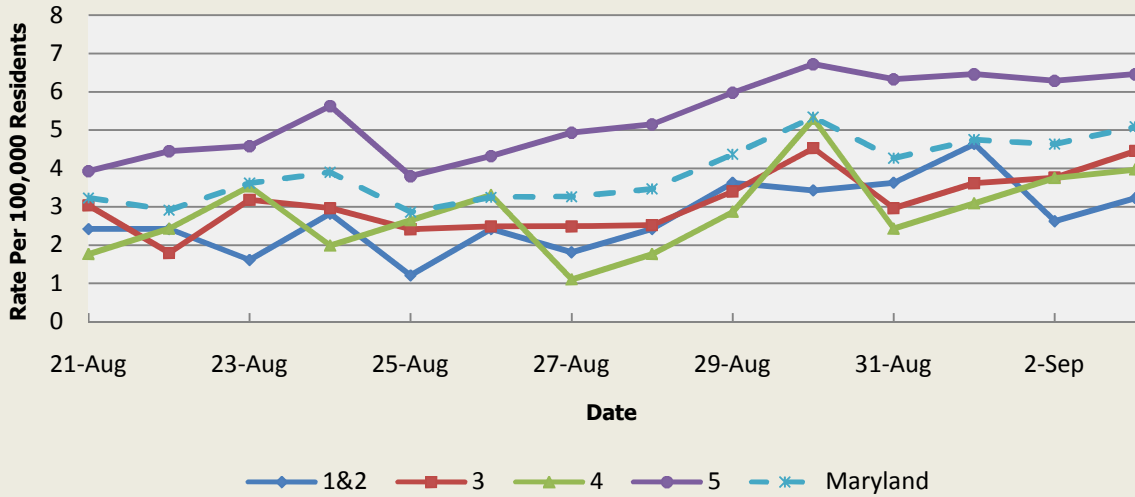
<b>Influenza-like Illness Baseline Data Week 1 2010 - Present</b>					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	9.26	11.58	10.78	10.43	10.88
Median Rate*	7.66	8.99	9.05	8.03	8.72

\* 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.

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

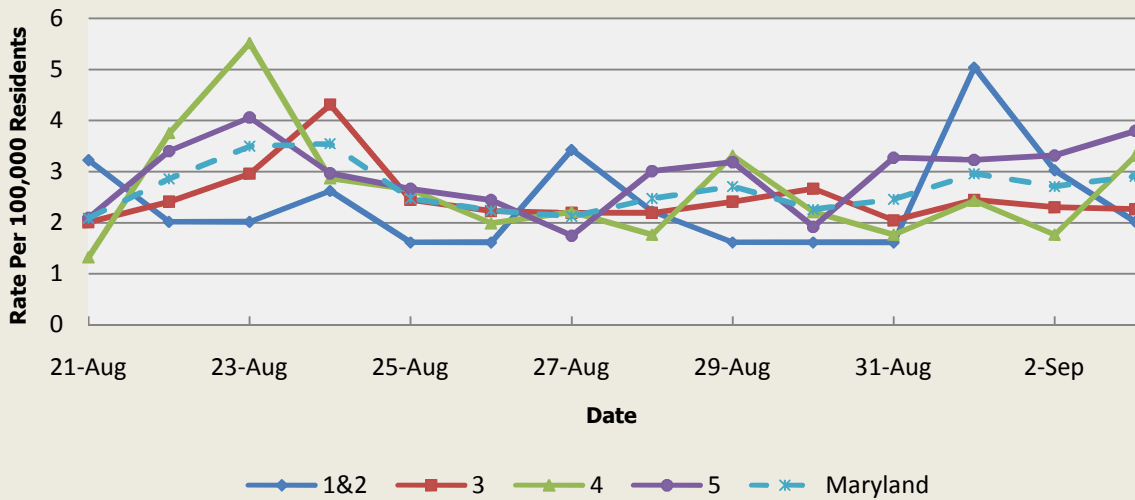


There was not an appreciable increase above baseline in the rate of OTC medication sales this week.

OTC Sales Baseline Data January 1, 2010 - Present					
Health Region	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

**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*	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 July 19, 2016, the WHO-confirmed global total (2003-2016) of human cases of H5N1 avian influenza virus infection stands at 851, of which 450 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 53%.

### **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.*

**H9N2 (CHINA):** 01 Sept 2016, On Tues 30 Aug, The Yunnan Provincial Health and Family Planning Commission announced that a sample tested positive for H9N2 AIV [avian influenza virus]. The National CDC confirmed the result on. The patient, a 10 month old boy infant, lived in Mengzi city, now has been discharged from the hospital cured. All close contacts of the patient show no symptoms. Read More: <http://www.promedmail.org/post/4451359>

## **NATIONAL DISEASE REPORTS**

**HEPATITIS A (USA):** 03 Sept 2016, On Fri 2 Sept, 70 cases of hepatitis A in 7 states have been linked to tainted frozen strawberries shipped to the United States from Egypt and served by a popular smoothie restaurant chain. Virginia contains the bulk of the outbreak with 55 confirmed cases. Most of the cases are reportedly located in the Mid-Atlantic area with six more cases confirmed in Maryland, 5 in West Virginia, and one in North Carolina, Wisconsin, New York and Oregon. As of now, 32 people have been hospitalized, but no deaths have been reported. The strawberries appear to have been served in Tropical Smoothie Cafe, a company that began in Tallahassee [Florida] in 1997. It now boasts more than 500 locations across the United States, including a cluster in Northern Virginia. These particular strawberries appear to have been consumed at locations in Maryland, North Carolina, Virginia and West Virginia, CDC reported on Thursday [1 Sep 2016]. The cases in other states also appear to be linked to these locations. Read more: <http://www.promedmail.org/post/4461205>

**FOODBORNE ILLNESS (OHIO):** 05 Sept 2016, On Fri 2 Sept, Public Health Officials reported approximately 40 middle school students were treated after ingesting suspected ghost peppers at school. In total, 5 students were taken to local hospitals, and approximately 40 students -- ages 11 to 14 -- had ingested the peppers. Superintendent, Ritchey, stated that symptoms ranged from blotchy skin, hives, tearing of eyes, sweating and general discomfort. Read more: <http://www.promedmail.org/post/4467115>

**CRYPTOSPORIDIOSIS (OHIO):** 02 Sept 2016, On Wed 31 Aug, Public Health Officials report that the number of people infected with a contagious diarrheal disease [cryptosporidiosis] continues to grow

in central Ohio. This year's [2016] cases of diagnosed cryptosporidiosis spiked to 423 [Mon 31 Aug 2016], up from 250 last week, marking a nearly 70 per cent increase in just a few days. The two-county outbreak is the largest one that health departments in Columbus and Franklin and Delaware counties have seen in 15 years. On average, the entire state typically logs about 400 cases of cryptosporidiosis in a year. Of this year's [2016] 423 central Ohio cases, 249 are in Columbus, 130 are in Franklin County, and 44 are in Delaware County. About 60 per cent of the patients are younger than 18 years old. Read more: <http://www.promedmail.org/post/4460084>

**PLAGUE (NEW MEXICO):** 03 Sept 2016, On Thursday 1 Sept, Santa Fe Health Officials reported that Public Health Officials reported one (1) man has been diagnosed with New Mexico's third case of plague in 2016. The man most likely contracted from the bite from a wild prairie dog in Santa Fe County, health officials announced. The man had been hospitalized but is now recovering at home. Read more: <http://www.promedmail.org/post/4463426>

**E. COLI EHEC (MISSOURI):** 08 Sept 2016, On Wed 7 Sept, the Columbia / Boone County Department of Health and Human Services reported that four (4) cases of Shiga toxin-producing *E.coli* had been confirmed in elementary students located Boone County [Missouri]. Sturgeon Superintendent Shultz stated that there is no evidence the sicknesses are related to the school environment itself. The source is yet to be determined. Read more: <http://www.promedmail.org/post/4472898>

### **INTERNATIONAL DISEASE REPORTS**

**HEPATITIS A (NOVA SCOTIA):** 08 Sept 2016, On Mon 5 Sept, Public health officials in Nova Scotia reported an investigation of a hepatitis A outbreak linked to two (2) child care centers in the Halifax area. The agency said the source of the infection has yet to be determined. Efforts are currently underway to identify potential additional cases in children, staff, and families who may have been exposed to the viral disease. The province is offering free hepatitis A vaccines to people who may have come in contact with the virus to help prevent them from getting sick. Read more: <http://www.promedmail.org/post/4469104>

**E. COLI EHEC (UK):** 07 Sept 2016, On Mon 5 Sept, A child has died after an *E. coli* outbreak in Scotland being linked to a brand of blue cheese. A multi-agency incident management team (IMT) chaired by Health Protection Scotland was investigating an outbreak of the same strain of *E. coli* 0157 in which 20 people were infected. At least two (2) of those are known to be in England. The investigation found those affected had consumed Dunsyre Blue, made by Lanarkshire-based Errington Cheese, before they became unwell. A total of 11 of those infected were treated in hospital. The outbreak initially affected 16 people, who developed symptoms between 2 and 15 Jul 2016. Read more: <http://www.promedmail.org/post/4469162>

**LEPTOSPIROSIS (DENMARK):** 24 Aug 2016, The period from January 2011 to June 2016 saw a total of 60 recorded cases of leptospirosis [in Denmark] overall that is, notified and/or laboratory-confirmed cases; 10 (17per cent) women and 50 (83 per cent) men aged 13-70 years with a median age of 44 yearS. Among the recorded cases, 38 patients aged 13-69 were notified clinically. For a total of 25 people (42 per cent), information was provided about infection in Denmark. Eight of these had occupational exposure, including 4 following contact with sewage where rats were present, and in a total of 3 cases after direct contact to rats or rat urine, one at a fish farm and 2 at farms, table 1. The 8th person worked putting up animal fencing outdoors and came into contact with stagnant water. For 9 people, cerebral symptoms were reported. Two of the 60 patients (one man and one woman) died due to their leptospira infections. Read more: <http://www.promedmail.org/post/4459452>

**CHOLERA, DIARRHEA & DYSENTERY (SOUTH KOREA):** 25 Aug 2016, A Gwangju man has tested positive for cholera, health authorities said Tue 23 Aug 2016. It is the first outbreak of the deadly disease on Korean soil in 15 years. The man, 59, was hospitalized early this month [Aug 2016] with the disease's typical symptoms of diarrhea and abdominal pain and confirmed to have cholera. He was discharged from hospital after receiving antibiotics at an isolation facility. He is now in a stable condition, according to the Korea Centers for Disease Control and Prevention (KCDC). His family has no cholera symptoms, it said. Read more: <http://www.promedmail.org/post/4441081>

## **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

