



**September 23, 2016**

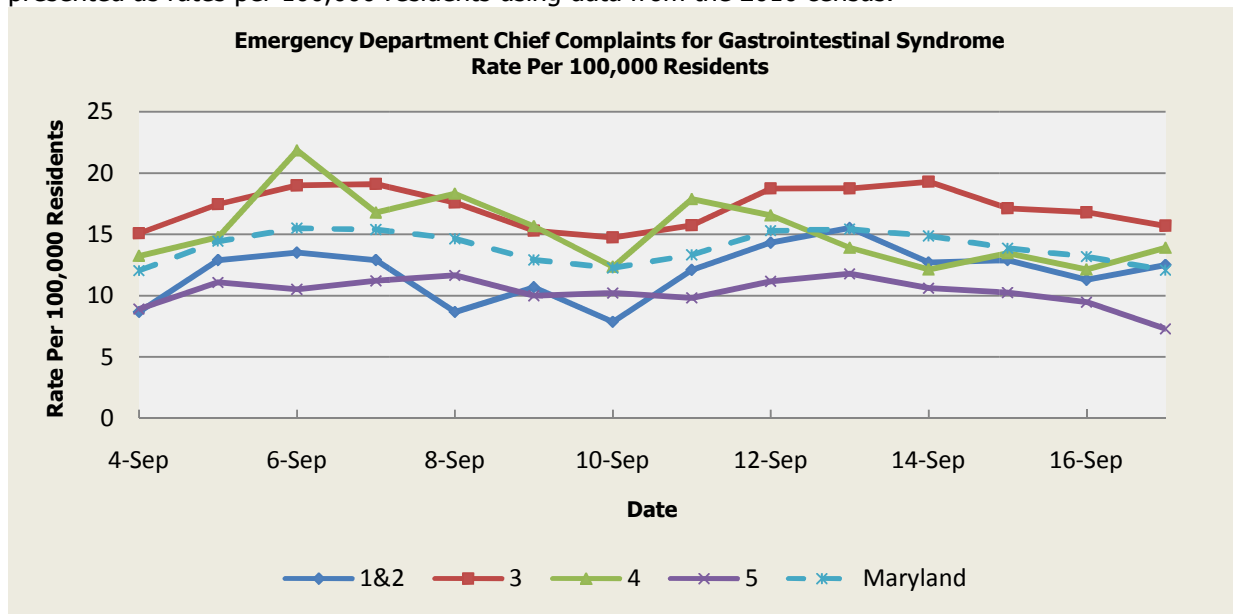
**Public Health Preparedness and Situational Awareness Report: #2016:37  
Reporting for the week ending 9/17/16 (MMWR Week #37)**

**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):**

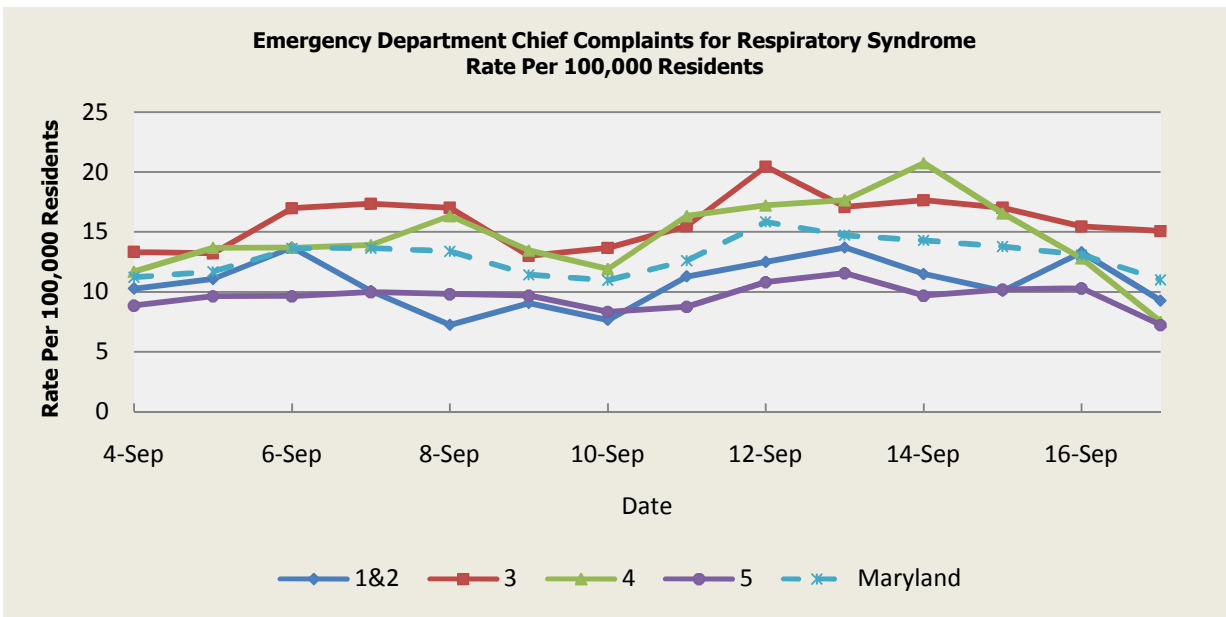
Graphical representation is provided for all syndromes (excluding the "Other" category; see Appendix 1) by Health and Medical Regions (See Appendix 2). Emergency department chief complaint data is presented as rates per 100,000 residents using data from the 2010 census.



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).

<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

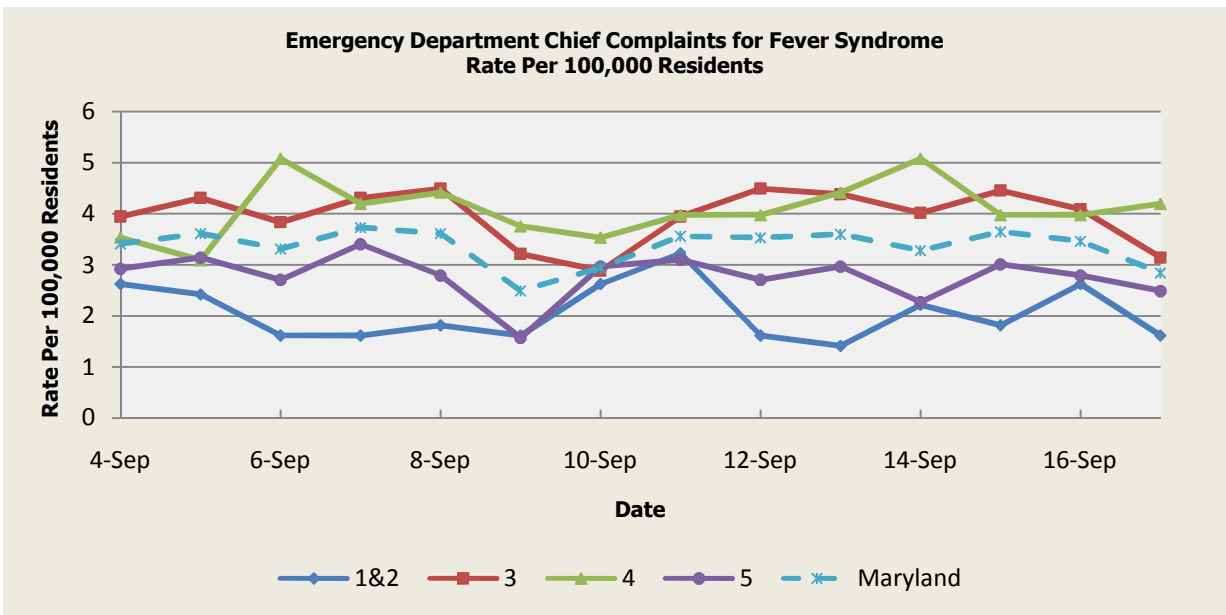
\* Per 100,000 Residents



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

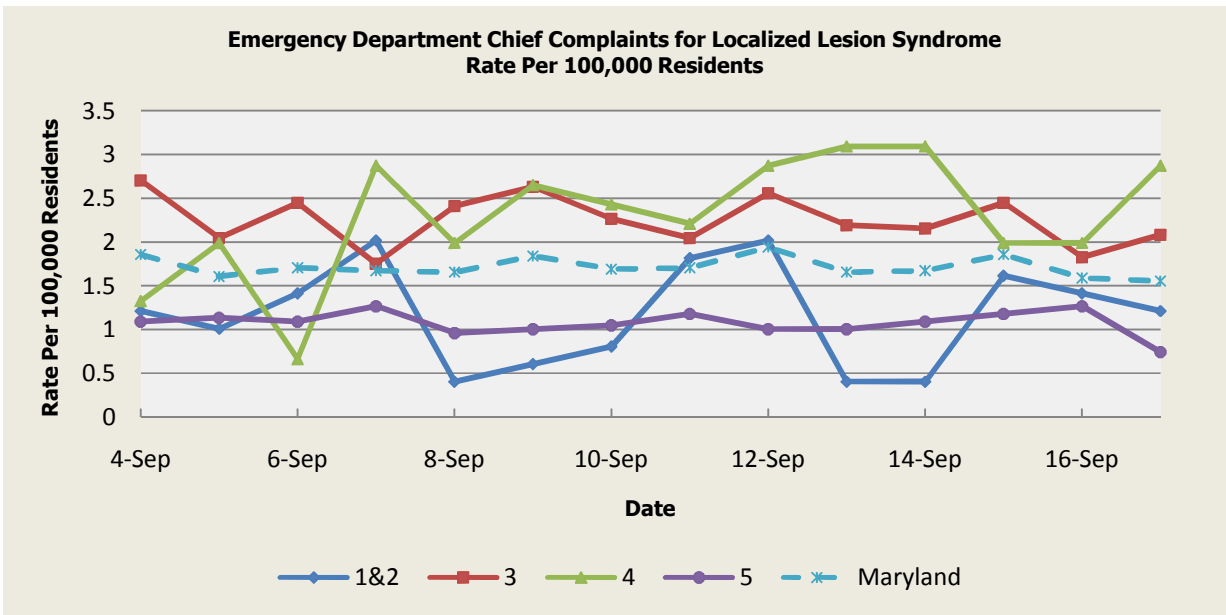
\* Per 100,000 Residents



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

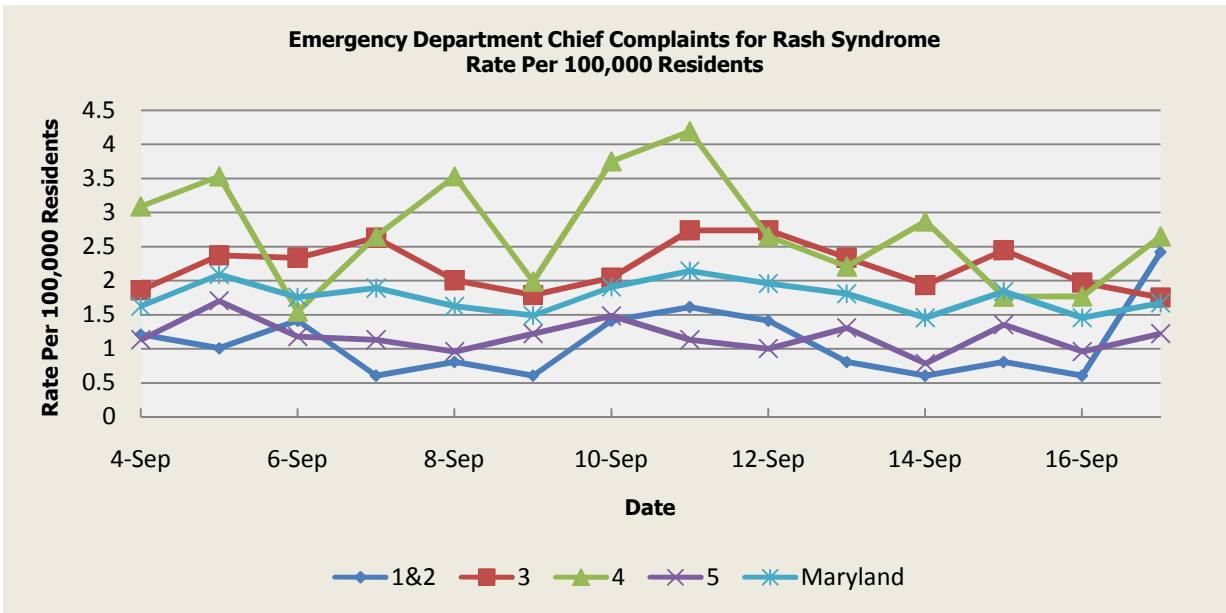
Per 100,000 Residents



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

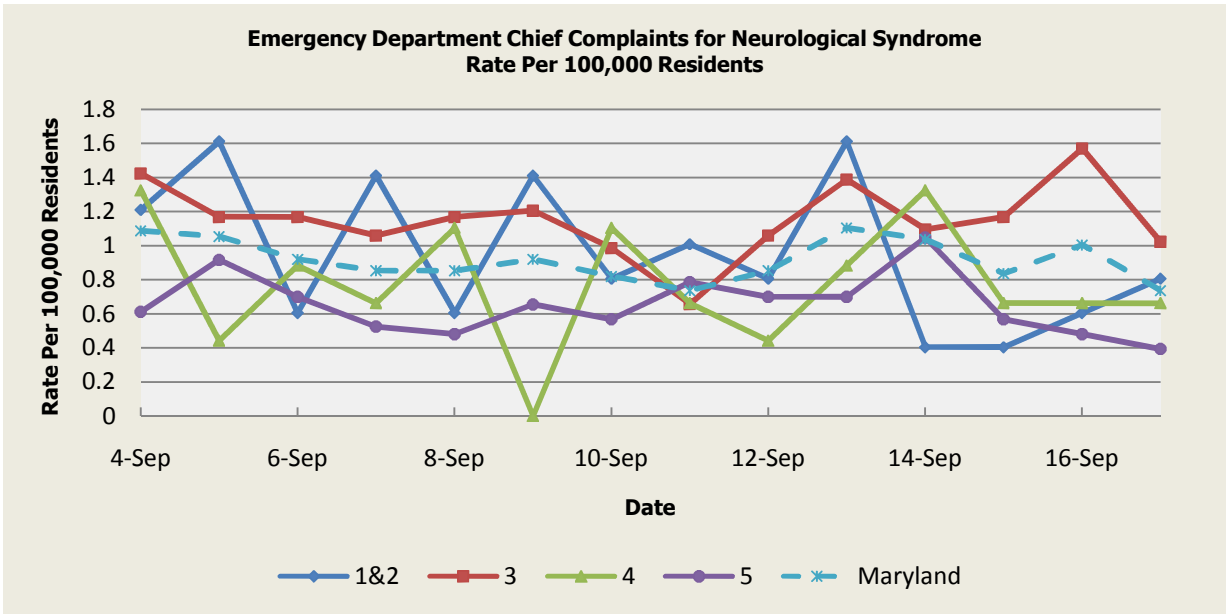
\* Per 100,000 Residents



There were 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

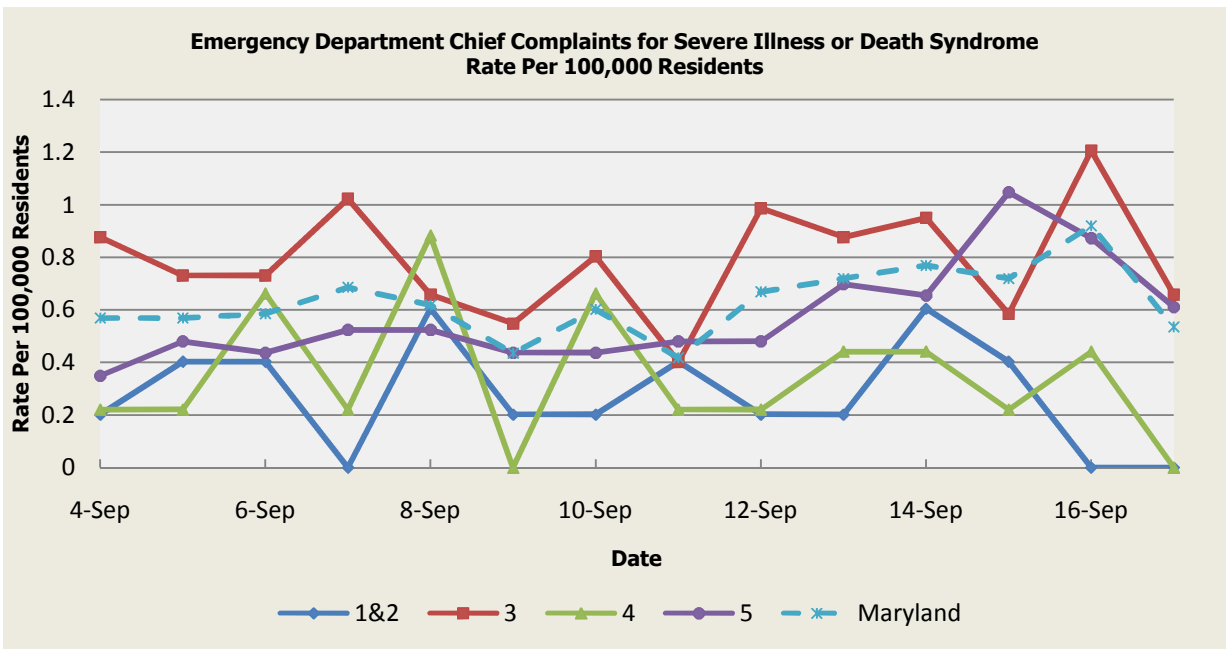
\* Per 100,000 Residents



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

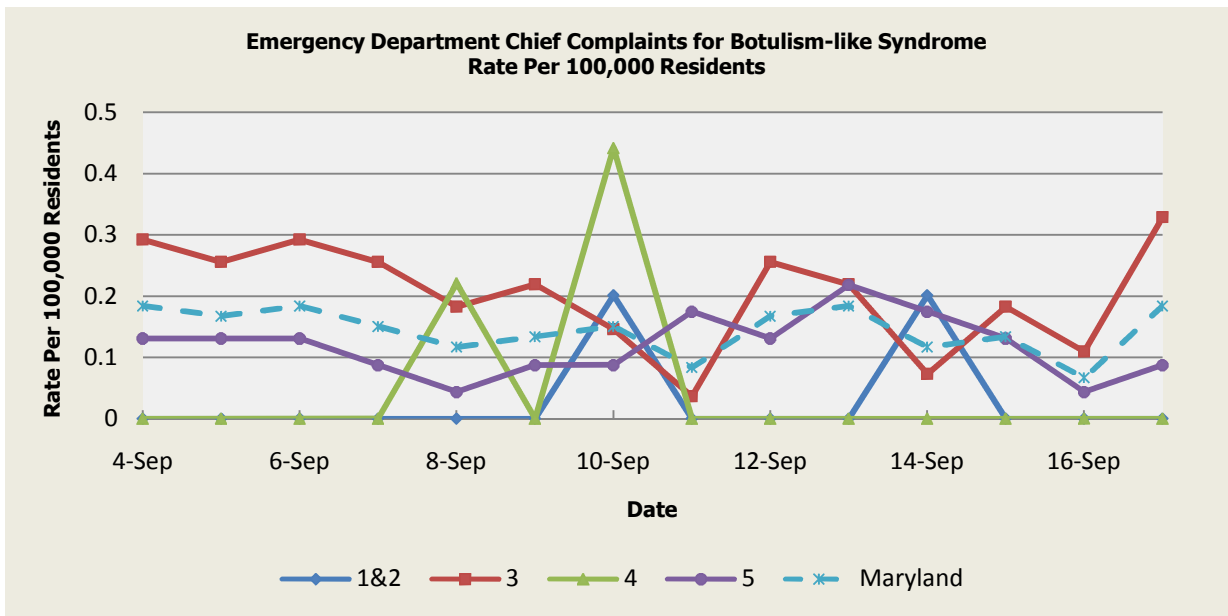


There were no severe illness or death outbreaks reported this week.

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

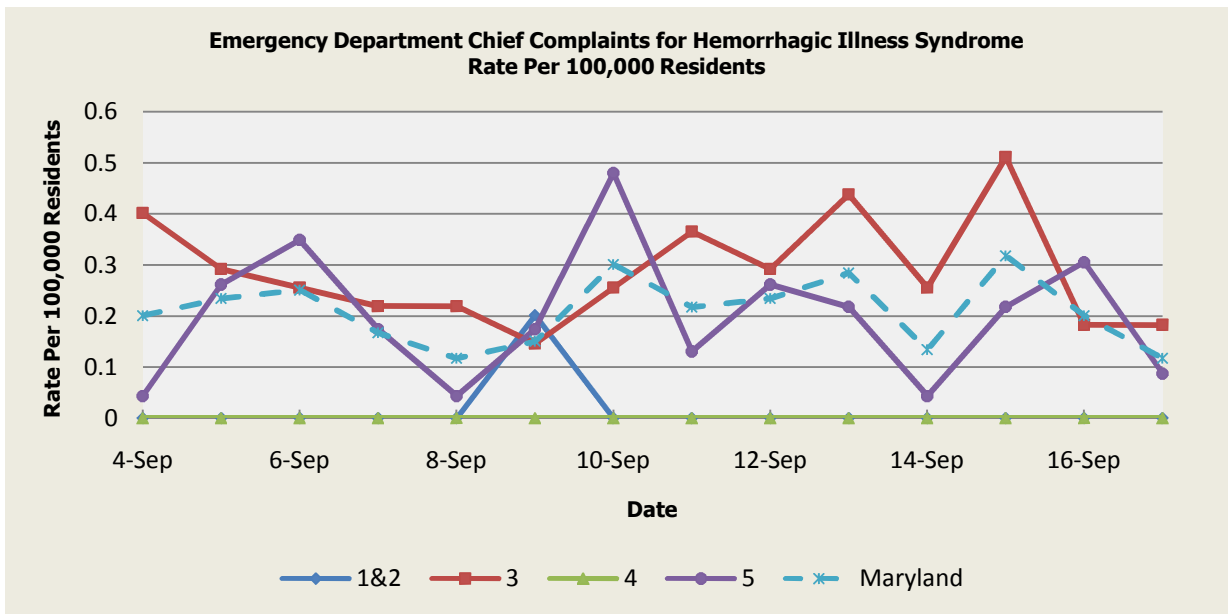
## SYNDROMES RELATED TO CATEGORY A AGENTS



There was an appreciable increase above baseline in the rate of ED visits for Botulism-like Syndrome on 9/4 (Region 3), 9/5 (Regions 3,5), 9/6 (Regions 3,5), 9/7 (Regions 3,5), 9/8 (Regions 3,4,5), 9/9 (Regions 3,5), 9/10 (Regions 1&2,4,5), 9/11 (Region 5), 9/12 (Regions 3,5), 9/13 (Regions 3,5), 9/14 (Regions 1&2,5), 9/15 (Regions 3,5) and 9/17 (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	0.08	0.04	0.05	0.06
Median Rate*	0.00	0.04	0.00	0.04	0.05

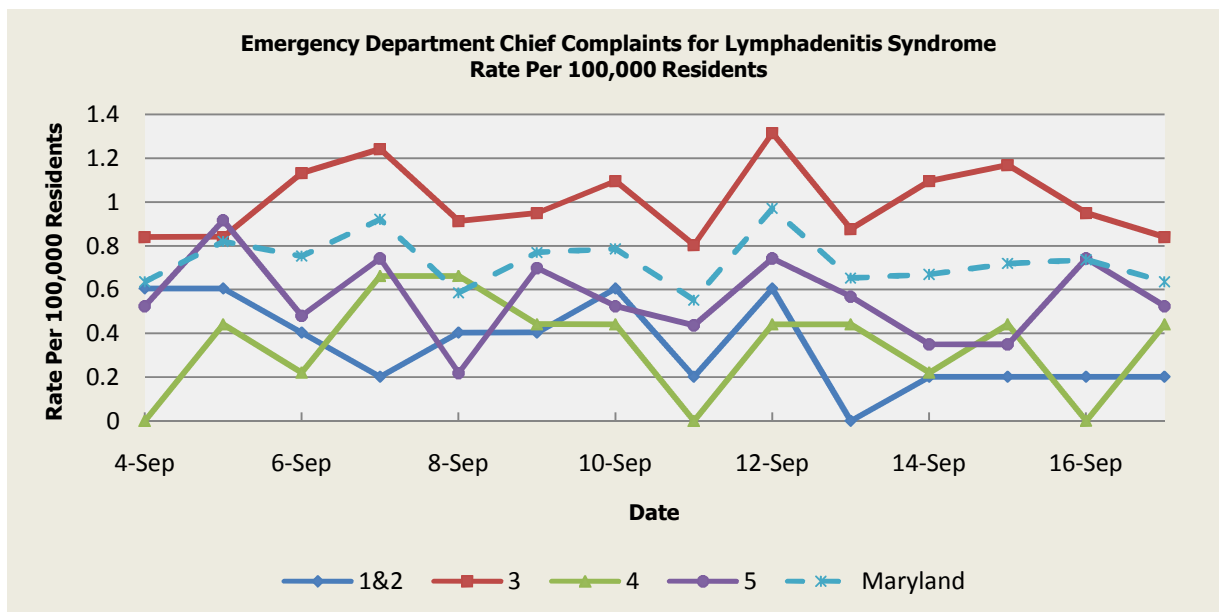
\* Per 100,000 Residents



There was an appreciable increase above baseline in the rate of ED visits for Hemorrhagic Illness Syndrome on 9/4 (Region 3), 9/5 (Regions 3,5), 9/6 (Regions 3,5), 9/7 (Regions 3,5), 9/8 (Region 3), 9/9 (Regions 1&2,5), 9/10 (Regions 3,5), 9/11 (Region 3), 9/12 (Regions 3,5), 9/13 (Regions 3,5), 9/14 (Region 3), 9/15 (Regions 3,5) and 9/16 (Region 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	0.11	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 9/5 (Region 5), 9/6 (Region 3), 9/7 (Regions 3,5), 9/9 (Region 5), 9/10 (Region 3), 9/12 (Region 3), 9/14 (Region 3) and 9/15 (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

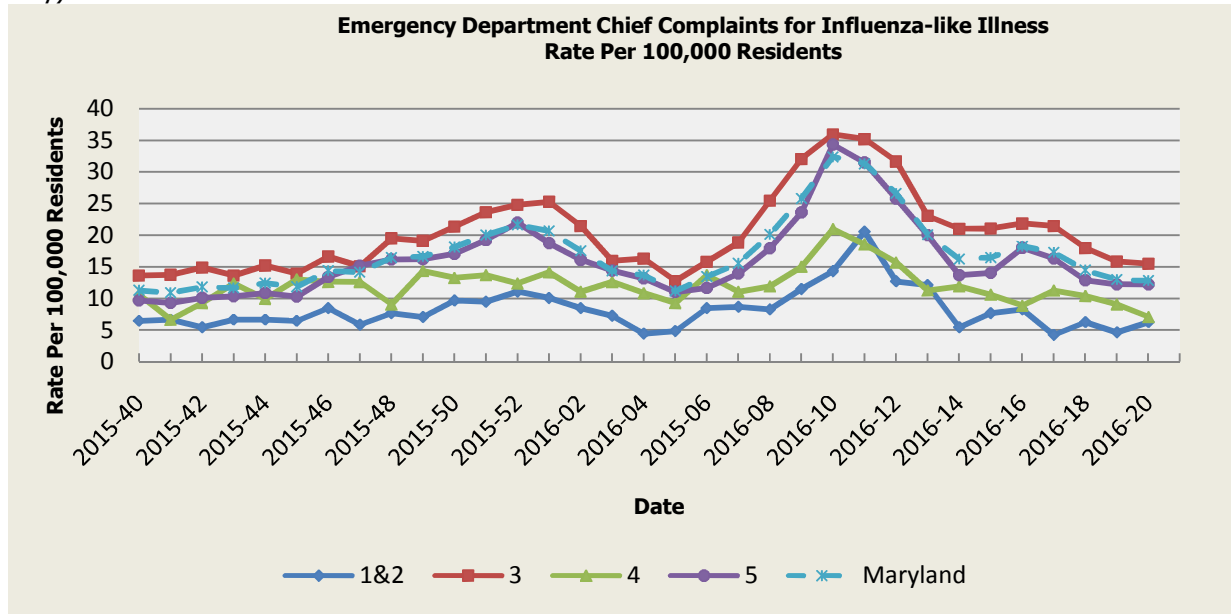
Condition	Counts of Reported Cases‡					
	September			Cumulative (Year to Date)**		
	2016	Mean*	Median*	2016	Mean*	Median*
<b>Vaccine-Preventable Diseases</b>						
Aseptic meningitis	12	29.8	29	234	321.6	330
Meningococcal disease	1	0.2	0	3	5.6	4
Measles	0	0.2	0	4	3.8	3
Mumps	2	0.6	0	15	35	10
Rubella	0	0	0	1	2.2	2
Pertussis	10	19.6	21	136	204.2	257
<b>Foodborne Diseases</b>						
Salmonellosis	30	60.8	66	566	686.2	692
Shigellosis	5	9.8	6	97	134.8	170
Campylobacteriosis	11	36	36	496	519.6	513
Shiga toxin-producing Escherichia coli (STEC)	3	7	7	120	92.6	84
Listeriosis	3	0.4	0	17	12	12
<b>Arboviral Diseases</b>						
West Nile Fever	0	2.4	2	1	10.2	8
Lyme Disease	46	79	72	1345	1166.2	1274
<b>Emerging Infectious Diseases</b>						
Chikungunya	0	1.2	0	5	10.8	0
Dengue Fever	0	1	1	28	11.6	12
Zika Virus***	4	0	0	100	0.2	0
<b>Other</b>						
Legionellosis	3	14.4	15	103	120.6	118

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

\*\*\* As of September 21, 2016, the total Maryland Confirmed Zika Virus Infections is 99.

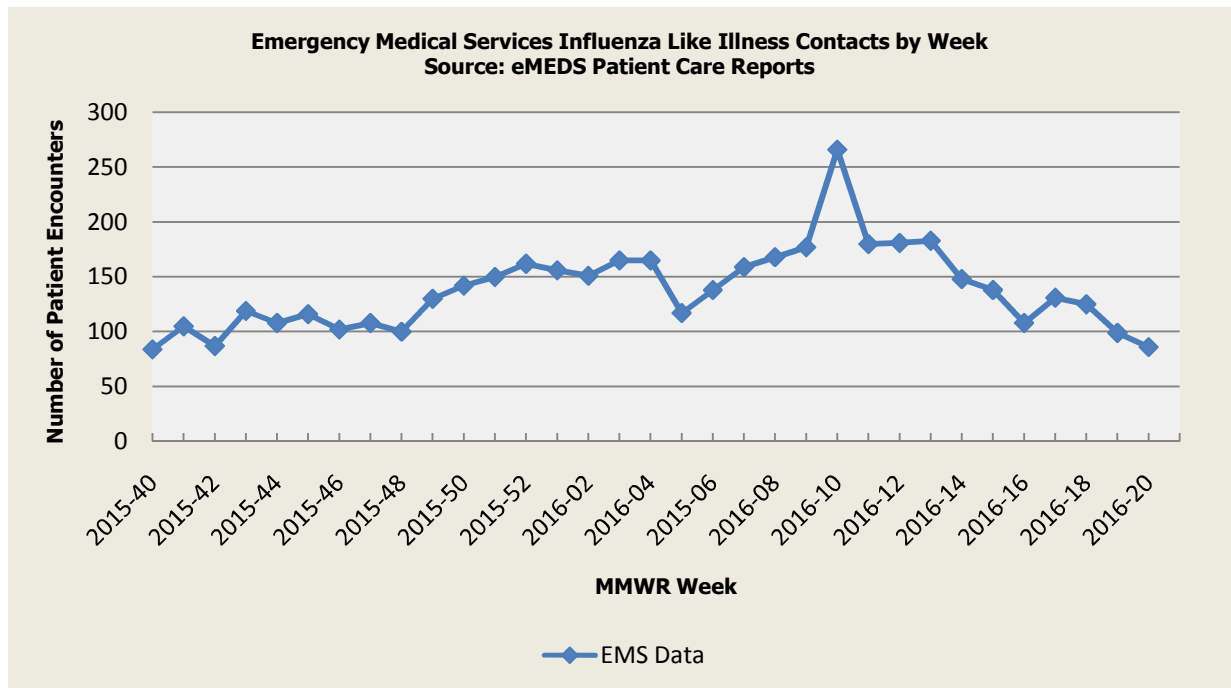
## SYNDROMIC INFLUENZA SURVEILLANCE

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



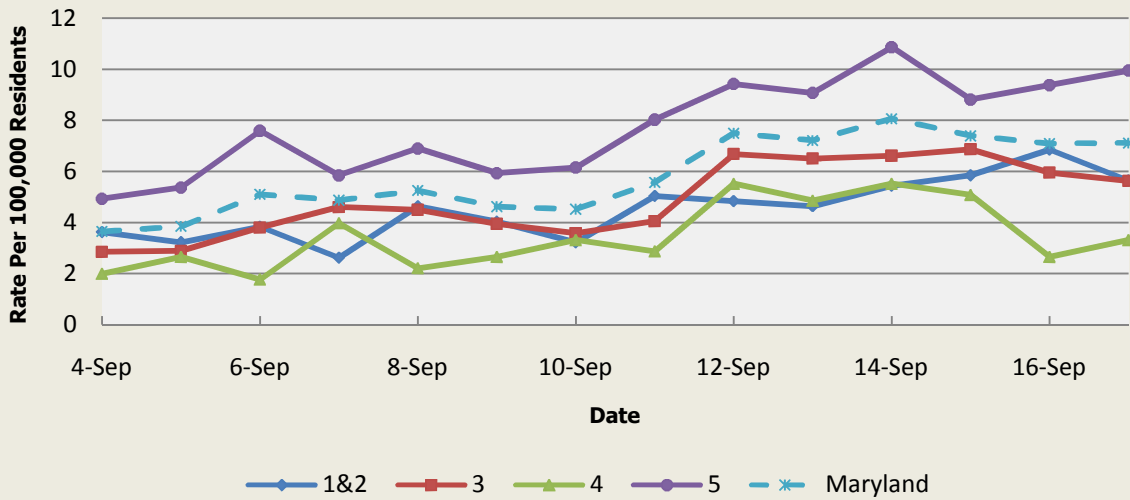
Influenza-like Illness Baseline Data Week 1 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	9.26	11.58	10.78	10.43	10.88
Median Rate*	7.66	8.99	9.05	8.03	8.72

\* 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.

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

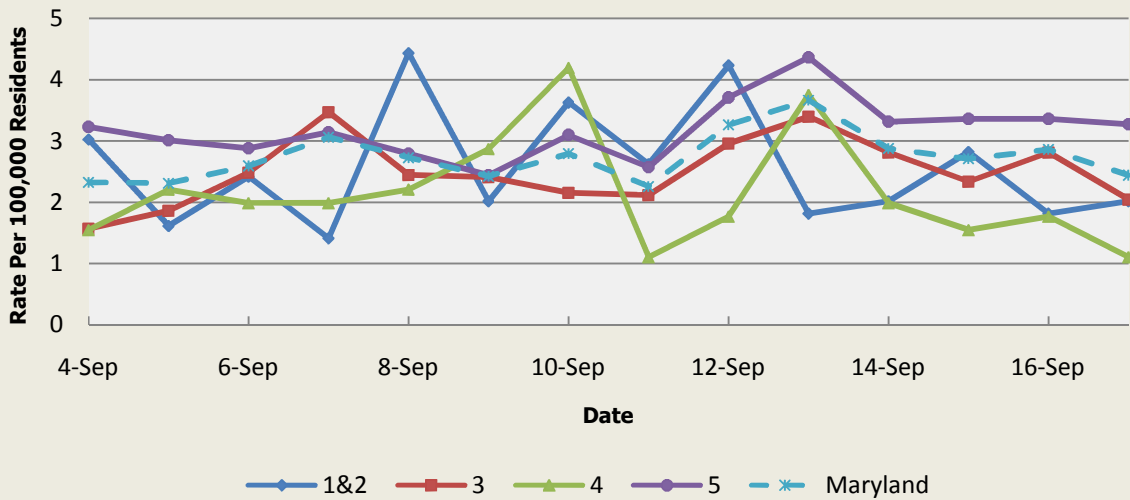


There was not an appreciable increase above baseline in the rate of OTC medication sales this week.

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):** 11 Sept 2016, On Tues 30 Aug, The Health and Family Planning Commission of Jiangxi Province has reported a human H9N2 case during routine influenza-like illness surveillance. The patient, a 4 year old girl, who lives in Pingxiang city [Jiangxi province], has now fully recovered. The patient was diagnosed as human H9N2 case on [19 Aug 2016] by expert committee based on clinical symptoms, lab result, together with epidemiology investigation. Read More: <http://www.promedmail.org/post/4481431>

### **Avian Influenza in Wild Birds:**

**H5N8 (RUSSIA):** 20 Sept 2016, H5N8 highly pathogenic avian influenza (HPAI) of clade 2.3.4.4 detected through surveillance of wild migratory birds in the Tyva Republic [Tuva], the Russian Federation - potential for international spread. Read More: <http://www.promedmail.org/post/4501532>

## **NATIONAL DISEASE REPORTS**

**BOTULISM (USA):** 11 Sept 2016, Island Soups Company, Inc. of Saint Albans, NY is recalling several soup varieties because they have the potential to be contaminated with *Clostridium botulinum* or botulism, a bacterium which can cause life-threatening illness or death. Read more: <http://www.promedmail.org/post/4480731>

**E. COLI EHEC (WASHINGTON):** 15 Sept 2016, For the 2nd time in a week, King County health officials are investigating an outbreak of potentially dangerous *Escherichia coli* food poisoning linked to a Mexican-style restaurant, but they say the incidents don't appear related. An outbreak of Shiga-toxin producing *E. coli* O157:H7 (EHEC) sickened 2 people who ate at Memo's Mexican Food in Seattle's University District in August 2016, officials with Public Health Read more: <http://www.promedmail.org/post/4490622>

**BRUCELLOSIS (TEXAS):** 16 Sept 2016, A record number of people in Dallas County [Texas] have been sickened from an infection caused by consuming unpasteurized cheese, health officials said. There have been 13 brucellosis infections in residents so far in 2016, affecting patients between 6 and 80 years old, according to a health advisory notice released on Thursday, 15 Sep 2016. Read more: <http://www.promedmail.org/post/4493806>

**LEGIONELLOSIS (WASHINGTON):** 20 Sept 2016, Three heater-cooler units -- equipment used to heat and cool patients during heart surgery -- tested positive for *Legionella* bacteria at the University of Washington [UW] Medical Center in Seattle, according to a statement from UW Medicine. The news comes after the bacteria infected 4 patients at the hospital, causing a type of pneumonia known as Legionnaires' disease. Two of the infected patients have died. Read more: <http://www.promedmail.org/post/4506105>

**TULAREMIA (COLORADO):** 20 Sept 2016, Health officials in Mesa County, Colorado announced today, 20 Sep 2016, the 1st human tularemia case of 2016 in the county. The patient was likely exposed to the disease, often referred to as rabbit fever, in the Redlands area. The Mesa County Health Department says rabbits from the east side of the Redlands and southwest of Fruita have tested positive for tularemia this summer [2016]. Read more: <http://www.promedmail.org/post/4505993>

### **INTERNATIONAL DISEASE REPORTS**

**LASSA FEVER (NIGER):** 12 Sept 2016, Nigeria may be battling the worst outbreak of Lassa fever in history. The fever which has afflicted over 284 has killed about 154 Nigerians from different parts of the country from August 2015 to date. Fresh cases are recorded every day in some states like Ondo and Bauchi, where the outbreak had earlier stopped, signaling that the disease could spread further. Read More: <http://www.promedmail.org/post/4482648>

**E. COLI EHEC (SCOTLAND):** 14 Sept 2016, A Food Alert For Action has been issued by Food Standards Scotland [FSS] to immediately withdraw a batch of 'Lanark White' ewe milk cheese from sale. Packs from the batch, made from unpasteurized sheep milk by Errington Cheese Ltd, would have been purchased by consumers between 22 Aug 2016 and 10 Sep 2016, and are under suspicion of containing *Escherichia coli* O157, and therefore of potential risk to consumers' health. The product is mainly provided to specialist cheese shops, delicatessens, hotels and restaurants. Read more: <http://www.promedmail.org/post/4488415>

**BOTULISM (CANADA):** 16 Sept 2016, Imperial Caviar & Seafood and the Canadian Food Inspection Agency are recalling salmon roe because it may be contaminated with *Clostridium botulinum*. This bacterium produces a toxin that can be deadly in very small quantities. No illnesses have been reported in connection with the consumption of these products. Read more: <http://www.promedmail.org/post/4495997>

**SCOMBROID FISH POISONING (SINGAPORE):** 19 Sept 2016, The Singapore AgriFood and Veterinary Authority (AVA) issued a recall of Farmland brand canned "Tuna Chunks in Polyunsaturated Oil" imported from Thailand after testing revealed high levels of histamine. The histamine levels raised the risk of scombroid fish poisoning. Read more: <http://www.promedmail.org/post/4503707>

**DIPHTHERIA (PAKISTAN):** 21 Sept 2016, During the past 2 weeks, 5 children including 2 siblings, died of reported diphtheria in an outbreak in village Kul [Kasur district, Lahore Division, Punjab], while 12 more are fighting for their lives in Children Hospital Lahore. Read more: <http://www.promedmail.org/post/4503802>

## **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.

### **Prepared By:**

Office of Preparedness and Response  
Maryland Department of Health & Mental Hygiene  
300 W. Preston Street, Suite 202  
Baltimore, MD 21201  
Fax: 410-333-5000

Anikah H. Salim, MPH, CPH  
Biosurveillance Epidemiologist  
Office: 410-767-2074  
Email: [Anikah.Salim@maryland.gov](mailto:Anikah.Salim@maryland.gov)

Jessica Goodell, MPH  
Temporary Epidemiology Field Assignee, CDC  
Office: 410-767-6745  
Email: [Jessica.Goodell@maryland.gov](mailto:Jessica.Goodell@maryland.gov)

## 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

