



STATE OF MARYLAND

DHMMH

Maryland Department of Health and Mental Hygiene

Larry Hogan, Governor - Boyd Rutherford, Lt. Governor - Van Mitchell, Secretary

October 2, 2015

**Public Health Preparedness and Situational Awareness Report: #2015:38  
Reporting for the week ending 09/26/15 (MMWR Week #38)**

**CURRENT HOMELAND SECURITY THREAT LEVELS**

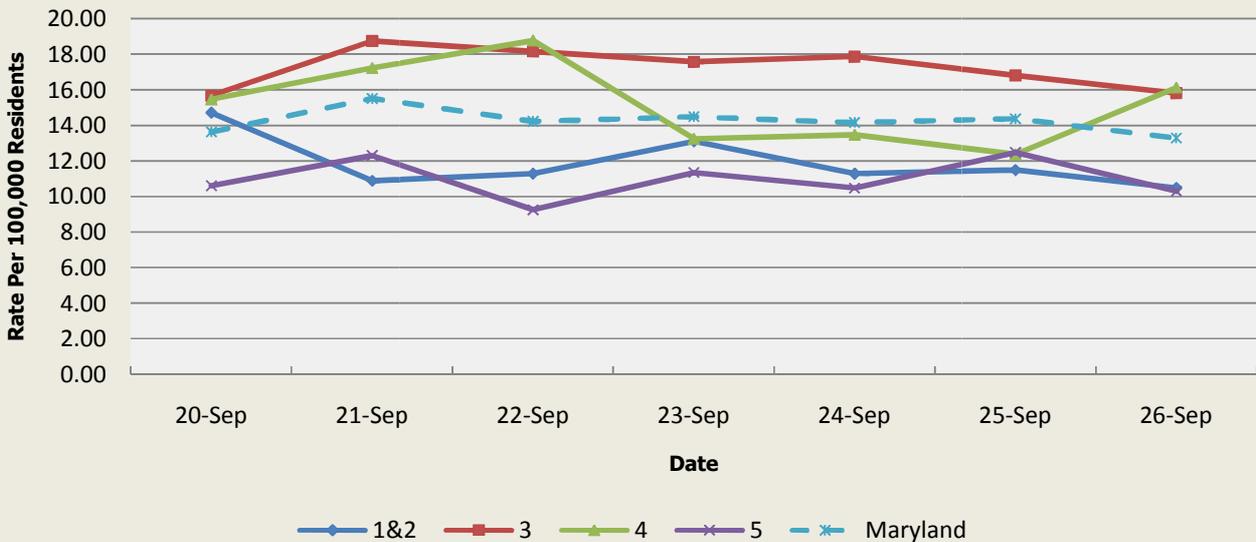
**National: No Active Alerts**  
**Maryland: Level Four (MEMA status)**

**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**



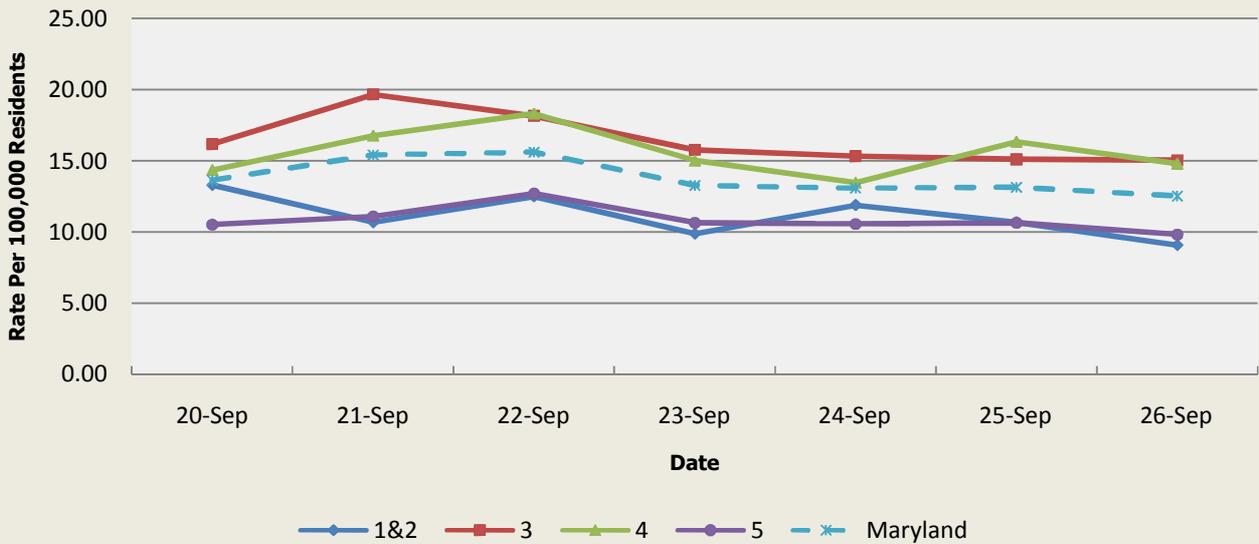
There were three gastrointestinal illness outbreaks reported this week: 1 outbreak of gastroenteritis in a nursing home (Regions 1&2), 1 outbreak of gastroenteritis associated with a day program (Region 3), and 1 outbreak of gastroenteritis associated with a school (Region 3).

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

Health Region	1&2	3	4	5	Maryland
Mean Rate*	12.92	14.37	15.28	10.12	12.69
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**

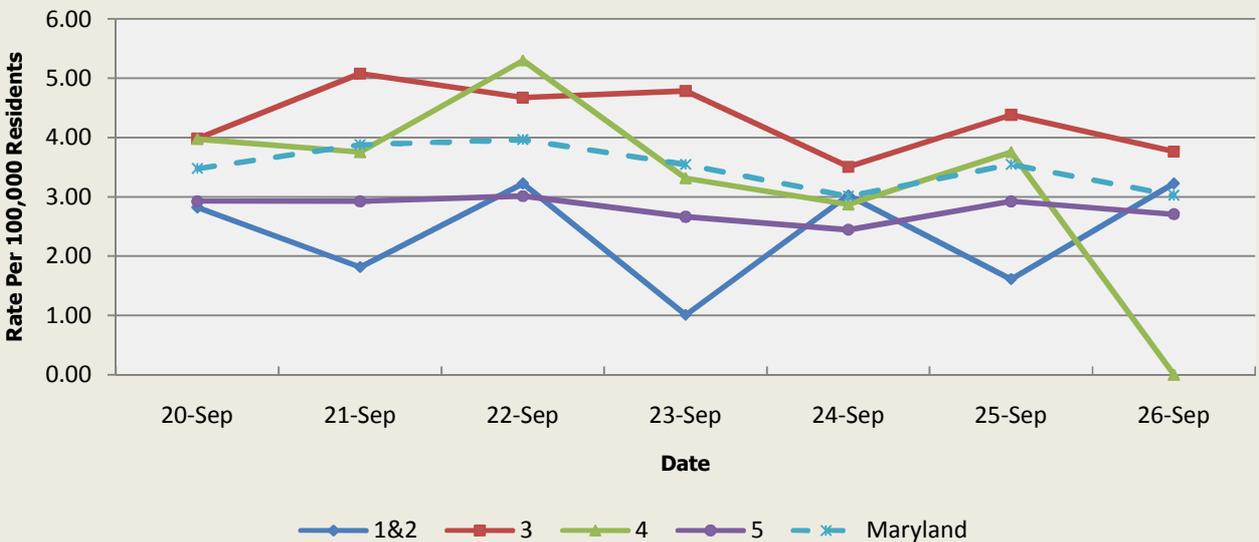


There were three respiratory outbreaks reported this week: 1 outbreak of pneumonia in a nursing home (Region 5), 1 outbreak of pneumonia associated with a day program (Region 3), and 1 outbreak of pertussis associated with a school (Region 3).

Respiratory Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	11.88	13.44	13.71	9.63	11.87
Median Rate*	11.49	12.97	13.25	9.30	11.48

\* Per 100,000 Residents

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

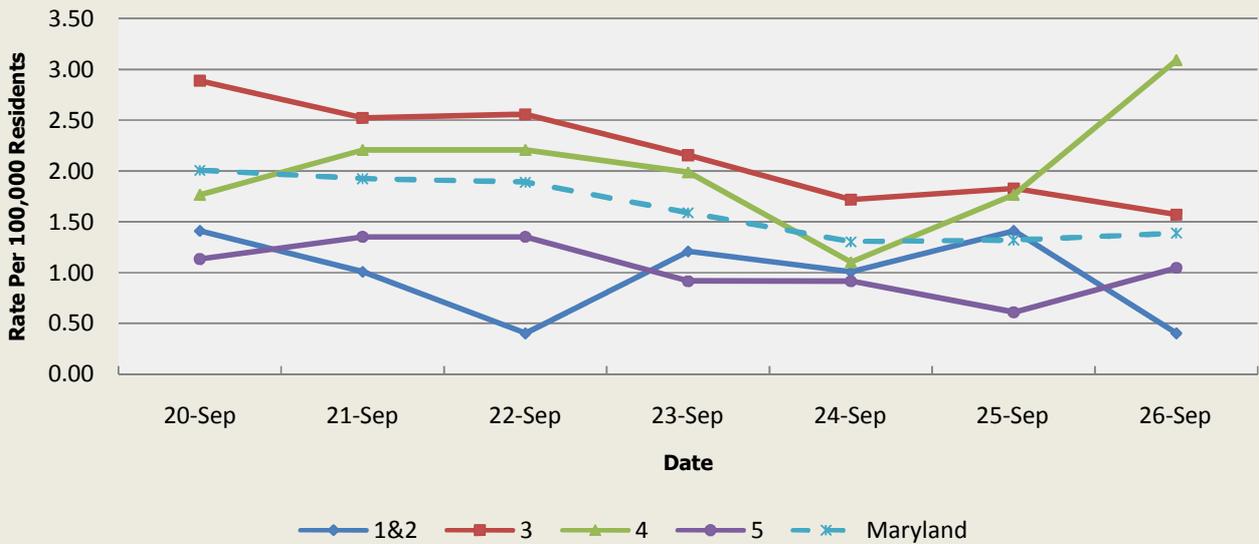


There were no fever outbreaks reported this week.

Fever Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.12	3.66	3.87	3.04	3.39
Median Rate*	3.02	3.51	3.75	2.92	3.28

Per 100,000 Residents

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

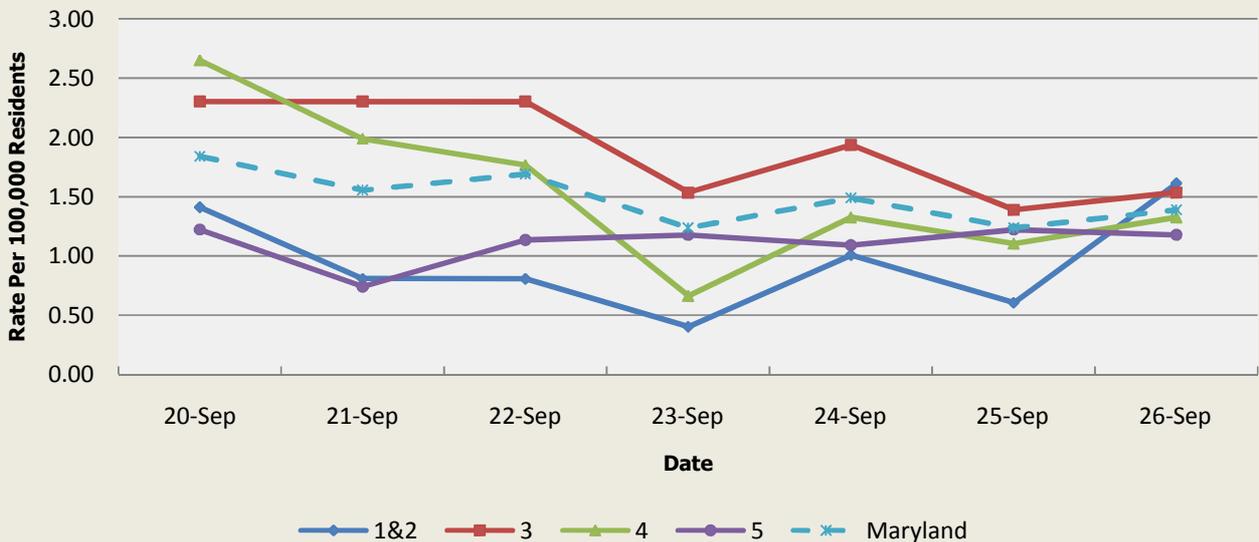


There were no localized lesion outbreaks reported this week.

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**

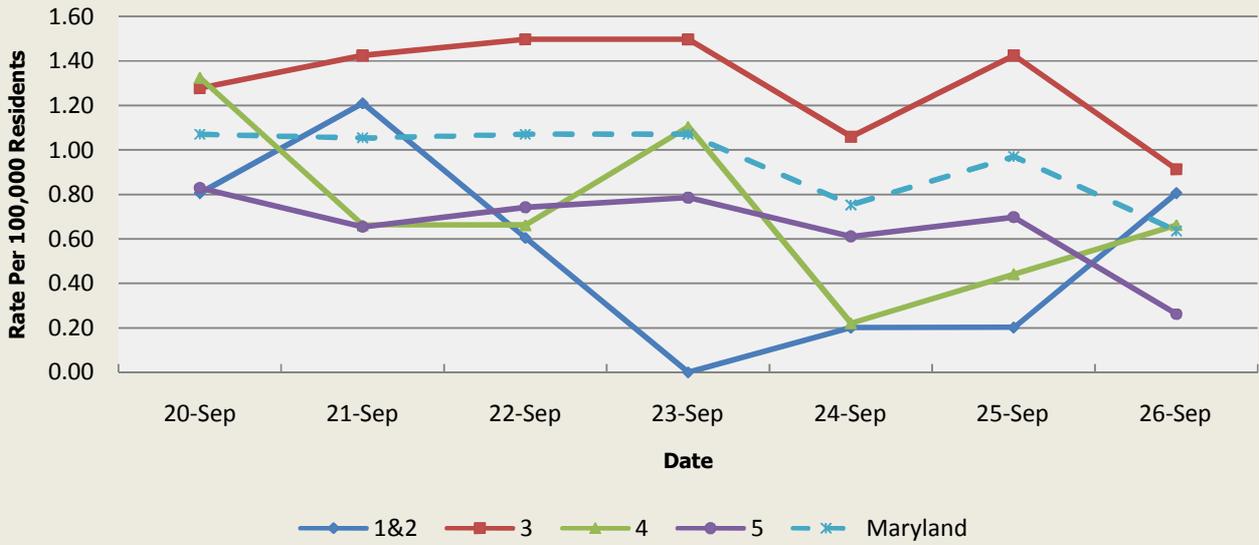


There was one rash illness outbreaks reported this week: 1 outbreak of hand, foot, and mouth disease associated with a daycare (Region 3).

Rash Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	1.33	1.74	1.78	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**

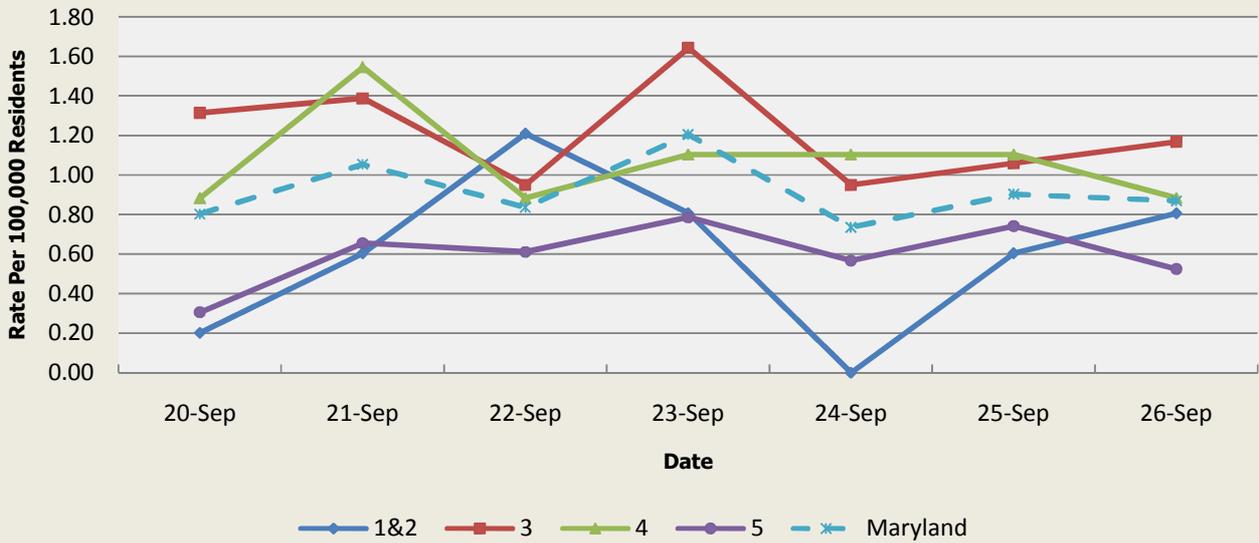


There were no neurological outbreaks reported this week.

Neurological Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.62	0.67	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**



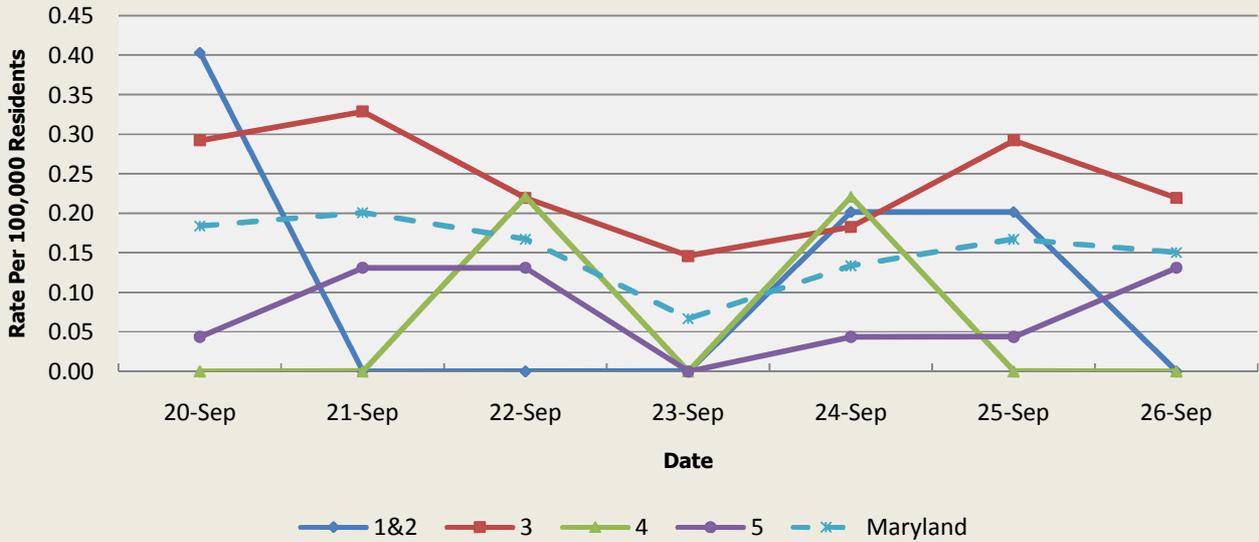
There were no severe illness or death outbreaks reported this week.

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**

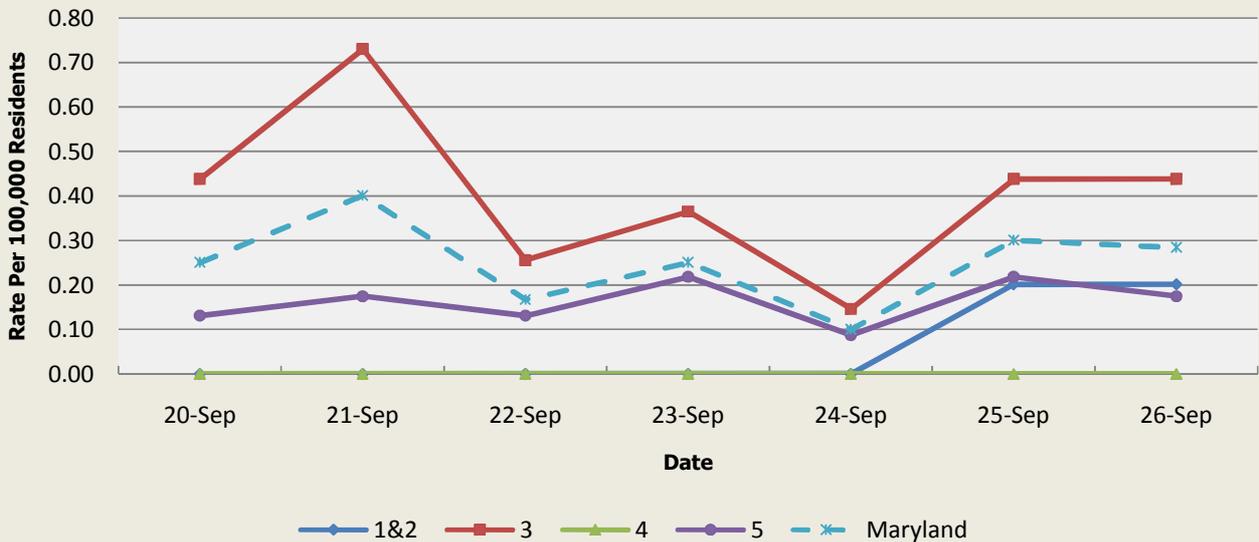


There was an appreciable increase above baseline in the rate of ED visits for Botulism-like Syndrome on 9/20 (Regions 1&2,3), 9/21 (Regions 3,5), 9/22 (Regions 3,4,5), 9/23 (Region 3), 9/24 (Regions 1&2,3,4), 9/25 (Regions 1&2,3) and 9/26 (Regions 3,5). These increases are not known to be associated 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**

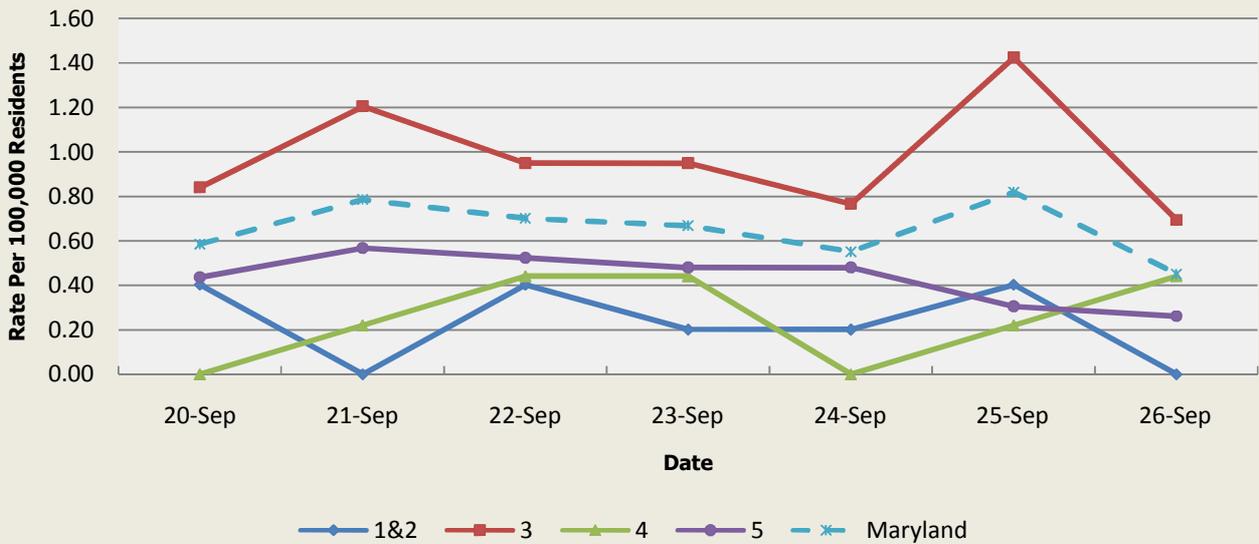


There was an appreciable increase above baseline in the rate of ED visits for Hemorrhagic Illness Syndrome on 9/20 (Regions 3,5), 9/21 (Regions 3,5), 9/22 (Regions 3,5), 9/23 (Regions 3,5), 9/24 (Regions 3,5), 9/25 (Regions 1&2,3,5) and 9/26 (Regions 1&2,3,5). These increases are not known to be associated 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 9/20 (Region 3), 9/21 (Regions 3,5), 9/22 (Regions 3,5), 9/23 (Region 3), 9/24 (Region 3), 9/25 (Region 3) and 9/26 (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	0.37	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‡					
	September			Cumulative (Year to Date)**		
Vaccine-Preventable Diseases	2015	Mean*	Median*	2015	Mean*	Median*
Aseptic meningitis	14	21	20	315	302.4	322
Meningococcal disease	0	0.4	0	2	5.6	5
Measles	0	0	0	0	0.6	0
Mumps	2	0	0	20	20.4	2
Rubella	0	0	0	1	1.2	1
Pertussis	2	9.8	12	65	139.8	138
Foodborne Diseases	2015	Mean*	Median*	2015	Mean*	Median*
Salmonellosis	21	44.2	43	565	694.2	695
Shigellosis	2	5.6	4	148	117.4	98
Campylobacteriosis	8	23.4	24	467	444.2	460
Shiga toxin-producing Escherichia coli (STEC)	2	4	4	64	51.4	52
Listeriosis	0	0.4	0	13	10.8	12
Arboviral Diseases	2015	Mean*	Median*	2015	Mean*	Median*
West Nile Fever	1	0.8	0	9	5.4	2
Lyme Disease	11	45.2	44	845	971.2	994
Emerging Infectious Diseases	2015	Mean*	Median*	2015	Mean*	Median*
Chikungunya	0	0.8	0	14	6.4	0
Dengue Fever	0	1	1	6	7.6	8
Other	2015	Mean*	Median*	2015	Mean*	Median*
Legionellosis	2	7.2	8	89	95.6	91

‡ Counts are subject to change

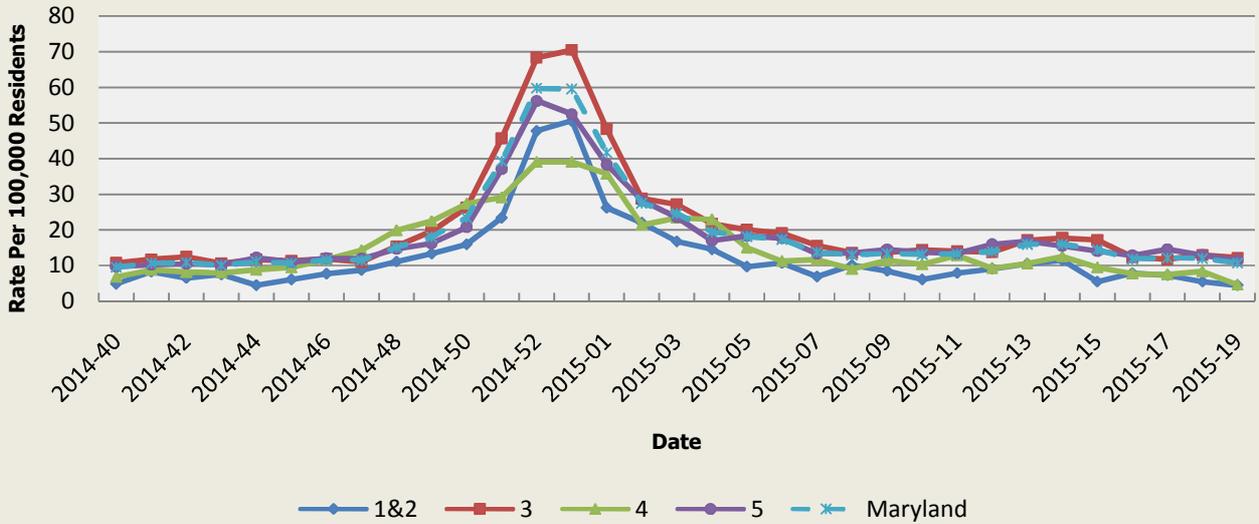
\*Timeframe of 2009-2014

\*\*Includes January through September

**SYNDROMIC INFLUENZA SURVEILLANCE**

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

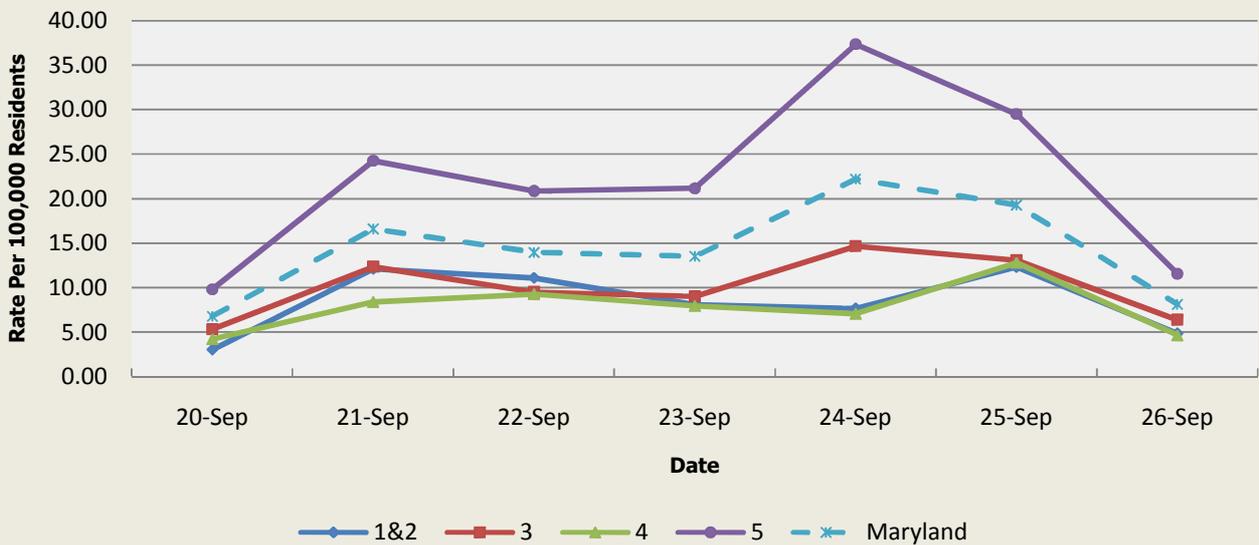
**Emergency Department Chief Complaints for Influenza-like Illness  
Rate Per 100,000 Residents**



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**

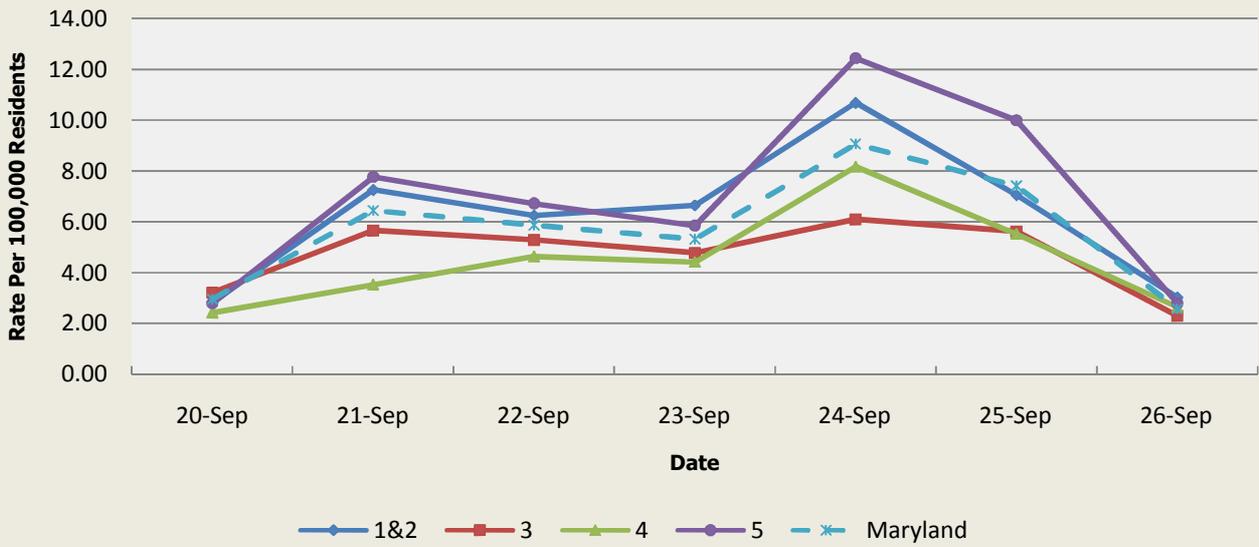


OTC Sales Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	5.37	6.04	3.06	13.78	8.72
Median Rate*	4.03	4.90	2.65	11.22	7.08

\* 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*	5.65	4.69	3.36	7.75	5.84
Median Rate*	5.04	4.35	3.09	7.12	5.37

\* 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 September 4, 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:**

**H9N2 (BANGLADESH):** 23 Sep 2015 Bangladeshi health officials reported to the World Health Organization (WHO) in September [2015] a human infection with an avian influenza A(H9N2) virus. The case, which occurred in a toddler in February [2015], is the 2nd known case in Bangladesh (1st case in 2011). The patient, a 3.5-year-old girl, developed mild illness on 1 Feb 2015 and recovered from her illness by 7 Feb 2015. Read More: <http://www.promedmail.org/direct.php?id=3666519>

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):** 02 Oct 2015 A new outbreak of avian influenza (bird flu) has been reported in 85 local government areas in 21 states and the Federal Capital Territory (FCT), the Federal Government [Nigeria] has said. Cases of bird flu were 1st reported in January [2015] by the government in over 11 states. Read More: <http://www.promedmail.org/direct.php?id=3684780>

## **NATIONAL DISEASE REPORTS**

**BLASTOMYCOSIS (WISCONSIN):** 02 Oct 2015 The latest update from state health officials shows 40 confirmed cases of blastomycosis in an outbreak associated with the Little Wolf River in Waupaca County. That's 2 more confirmed cases than a week ago. The number of suspected but probable cases remains at 37. Read More: <http://www.promedmail.org/direct.php?id=3686651>

**LEGIONELLOSIS (NEW YORK):** 02 Oct 2015 One person who contracted legionnaires' disease amid a cluster of cases in the Morris Park section of the Bronx has died, the authorities said on [Wed 30 Sep 2015], as health officials ordered cooling towers infected with the bacteria to be cleaned. 13 people in the area, all of whom had serious underlying medical conditions, began to experience symptoms in September [2015]. Read More: <http://www.promedmail.org/direct.php?id=3686650>

**SALMONELLOSIS (MICHIGAN):** 30 Sept 2015 In a medical mystery involving one of Detroit's largest hospitals, [14] patients, all in the same unit at Henry Ford Hospital, contracted salmonellosis last week [week

of 21 Sep 2015]. The hospital is working with state officials to try to figure out the source of the outbreak, but so far, no one knows where it came from. Read More: <http://www.promedmail.org/direct.php?id=3680871>

**INTERNATIONAL DISEASE REPORTS**

**MERS-COV (SAUDI-ARABIA):** 02 Oct 2015 Read More: <http://www.promedmail.org/direct.php?id=3680716>

**EBOLA (MULTI-COUNTRY):** 01 Oct 2015 Read More: <http://www.promedmail.org/direct.php?id=3681166>

CRIMEAN-CONGO HEMORRHAGIC Fever (PAKISTAN): 30 Sept 2015 One man was diagnosed with dengue plus Crimean-Congo virus [CCHFv] in Karachi. Provincial minister for health Jam Mehtab Hussain Dahar said: "The man from New Karachi, a butcher by profession, is diagnosed with dengue plus Crimean-Congo virus. He has been admitted to the isolation ward of the Civil Hospital Karachi and is now in stable condition." Read More: <http://www.promedmail.org/direct.php?id=3681358>

**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**

<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

