



January 16, 2015

**Public Health Preparedness and Situational Awareness Report: # 2015:01  
Reporting for the week ending 01/10/15 (MMWR Week #1)**

**CURRENT HOMELAND SECURITY THREAT LEVELS**

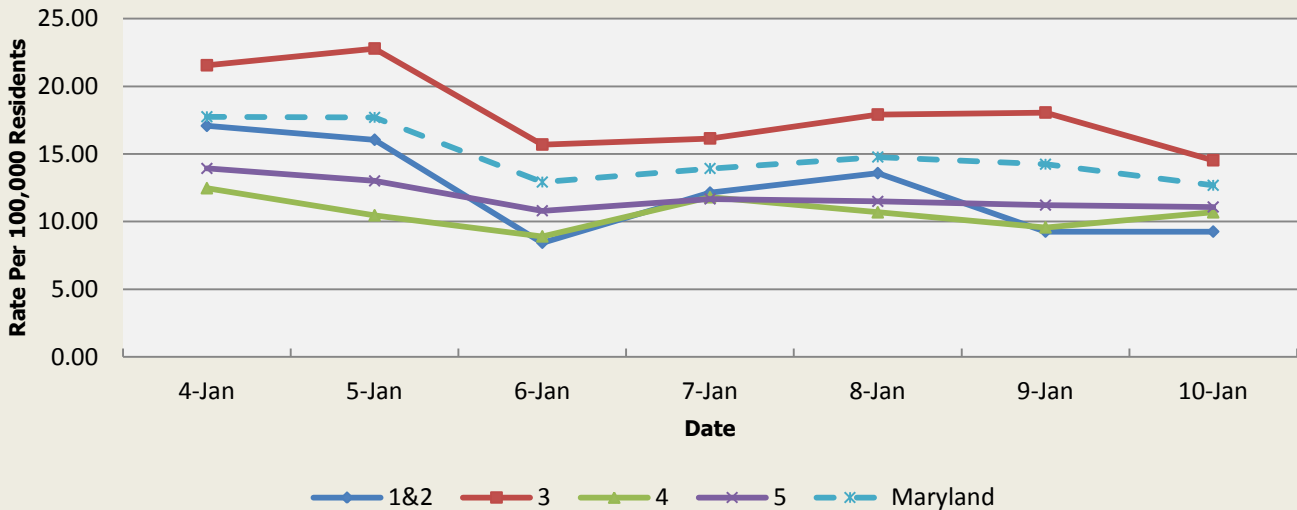
**National: No Active Alerts**  
**Maryland: Level Four (MEMA status)**

**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**

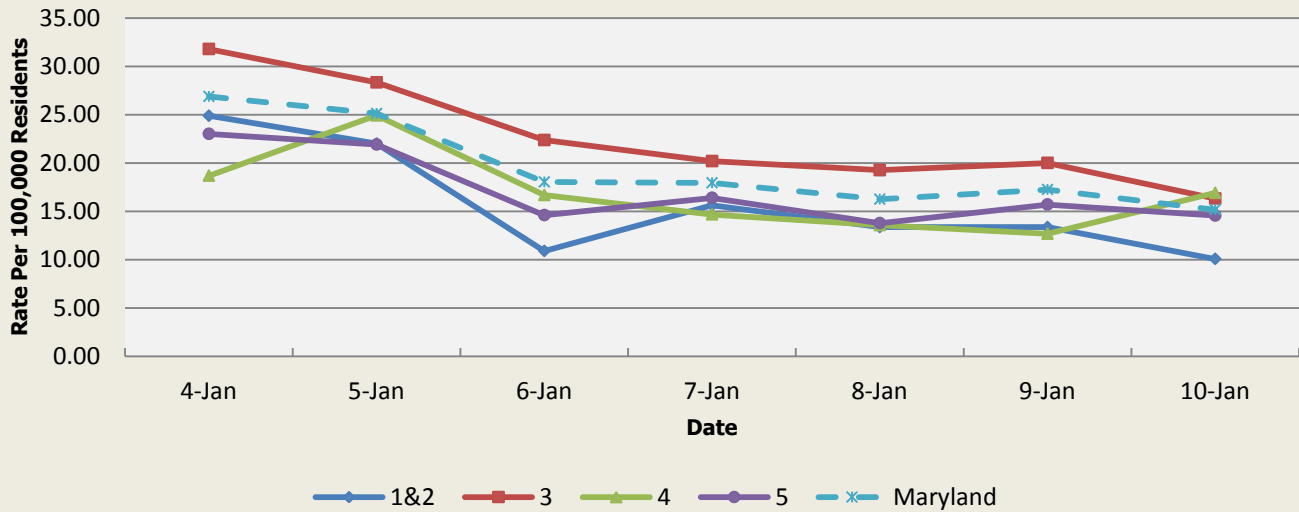


There were 12 gastrointestinal illness outbreaks reported this week: 4 outbreaks of gastroenteritis in nursing homes (Regions 1&2, 3, and 4) and 8 outbreaks of gastroenteritis in assisted living facilities (Regions 1&2, 3, 4, and 5).

Gastrointestinal Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	13.19	14.33	15.31	10.42	12.84
Median Rate*	13.17	14.20	14.69	10.30	12.73

\* Per 100,000 Residents

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



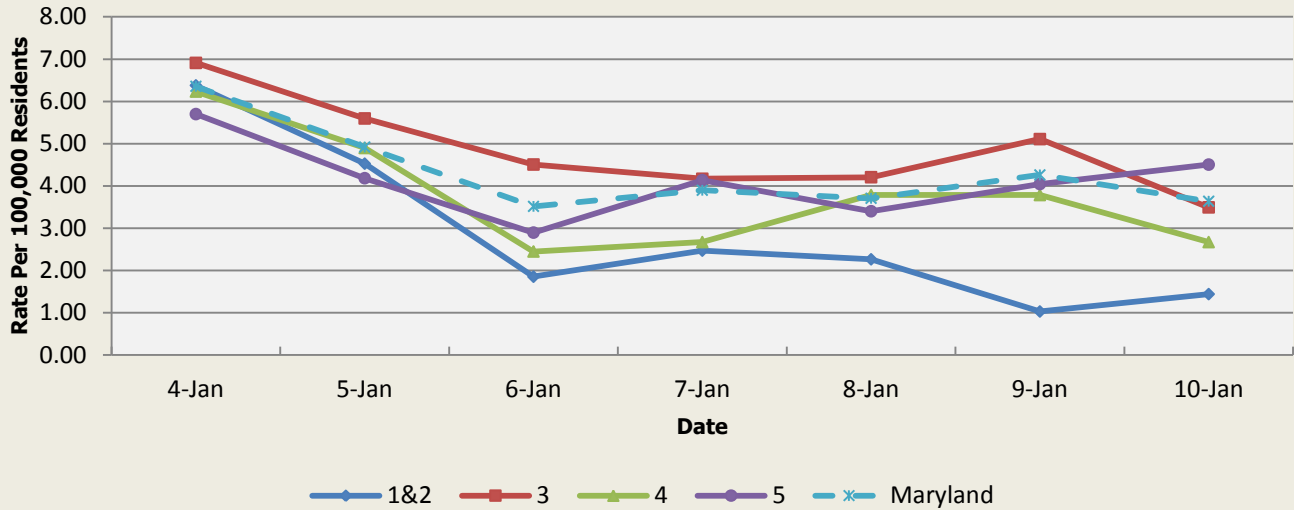
There were 31 respiratory illness outbreaks reported this week:

- 12 outbreaks of influenza in a nursing home (Regions 1&2, 3, 4, 5)
- 8 outbreaks of influenza in assisted living facilities (Regions 1&2, 3, 5)
- 1 outbreak of influenza in a school (Region 4)
- 3 outbreaks of influenza/pneumonia in nursing homes (Regions 1&2 and 5)
- 2 outbreaks of influenza/pneumonia in assisted living facilities (Region 3)
- 1 outbreak of influenza/pneumonia in a hospital (Regions 1&2)
- 1 outbreak of ILI in an assisted living facility (Region 5)
- 3 outbreaks of ILI/pneumonia in nursing homes (Regions 1&2 and 3)

<b>Respiratory Syndrome Baseline Data January 1, 2010 - Present</b>					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	12.21	13.50	13.81	9.94	12.07
Median Rate*	11.73	12.99	13.36	9.56	11.67

\* Per 100,000 Residents

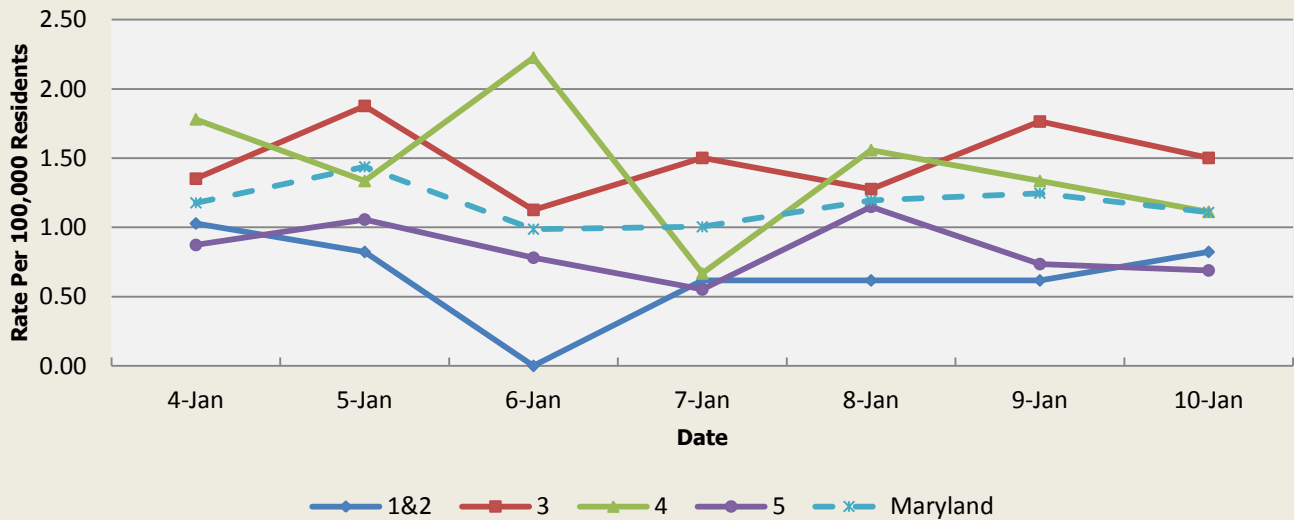
**Emergency Department Chief Complaints for Fever Syndrome  
Rate Per 100,000 Residents**



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*	3.25	3.67	3.89	3.17	3.46
Median Rate*	3.09	3.49	3.78	3.03	3.31
* Per 100,000 Residents					

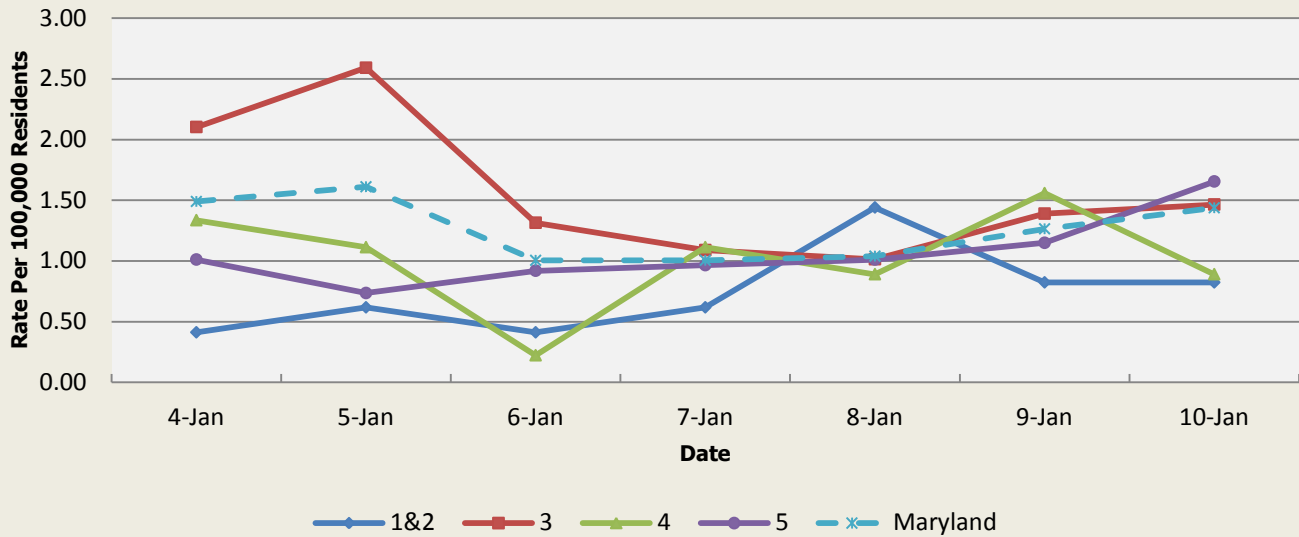
**Emergency Department Chief Complaints for Localized Lesion Syndrome  
Rate Per 100,000 Residents**



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*	1.17	1.97	2.06	1.04	1.56
Median Rate*	1.03	1.92	2.00	1.01	1.51
* Per 100,000 Residents					

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

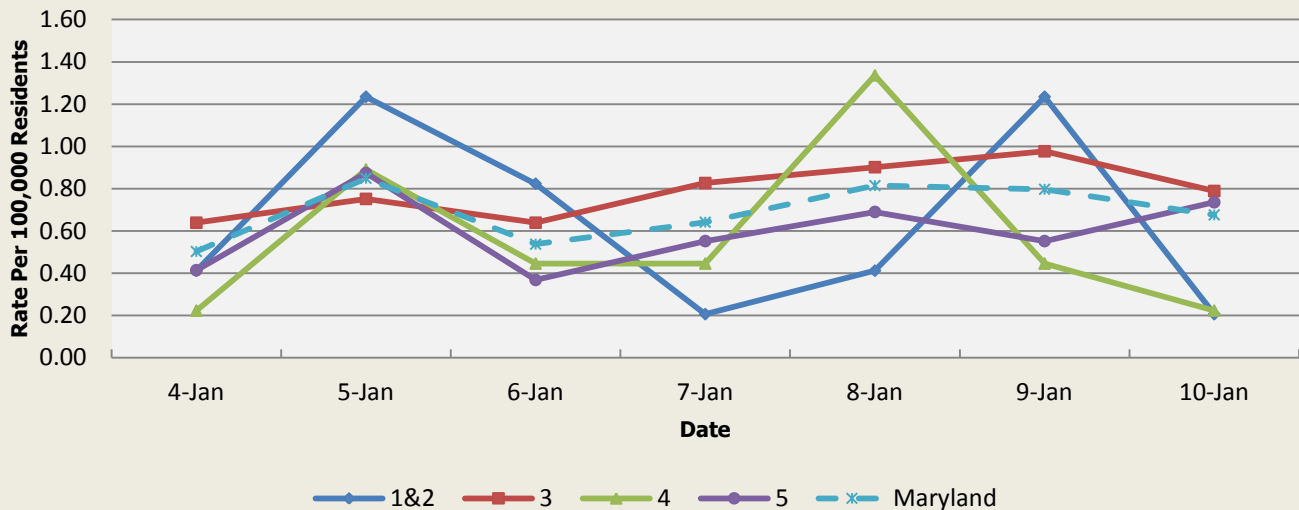


There was 1 outbreak of impetigo associated with a school (Region 3).

Rash Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	1.40	1.75	1.78	1.09	1.47
Median Rate*	1.23	1.69	1.78	1.06	1.42

\* Per 100,000 Residents

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

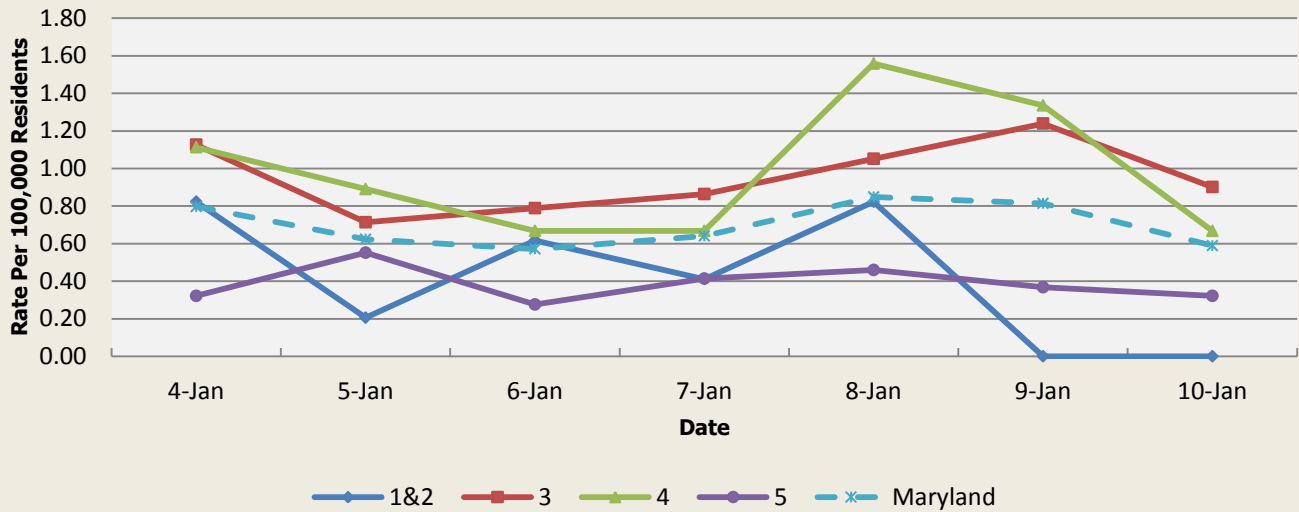


There were no neurological outbreaks reported this week.

Neurological Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.61	0.63	0.59	0.43	0.55
Median Rate*	0.62	0.60	0.45	0.41	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.

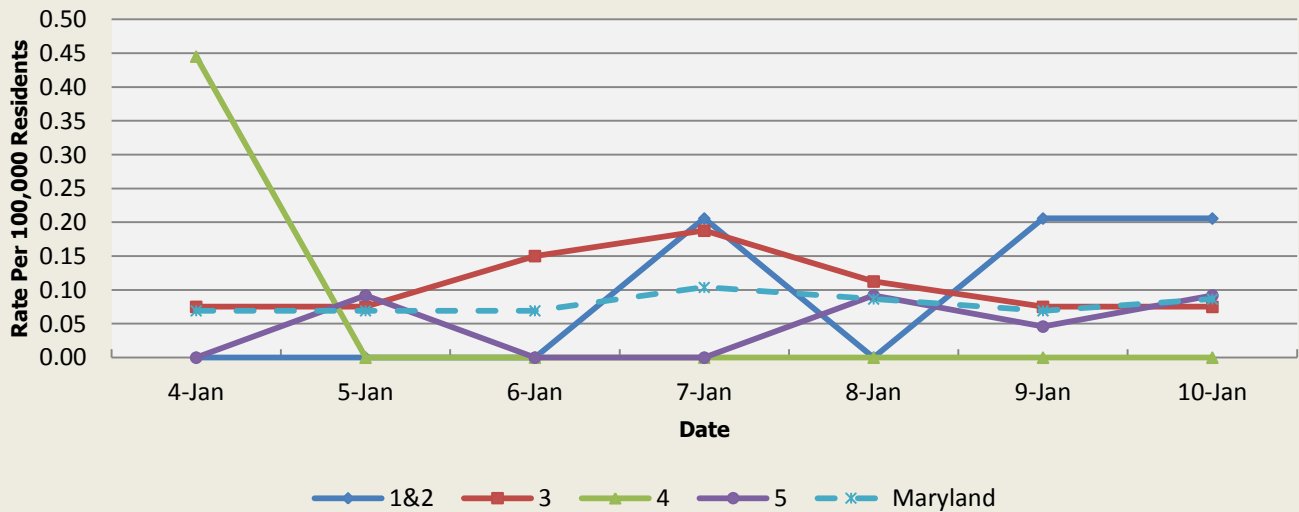
**Severe Illness or Death Syndrome  
Baseline Data  
January 1, 2010 - Present**

Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.79	0.95	0.89	0.42	0.73
Median Rate*	0.82	0.94	0.89	0.41	0.73

\* Per 100,000 Residents

**SYNDROMES RELATED TO CATEGORY A AGENTS**

**Emergency Department Chief Complaints for Botulism-like Syndrome  
Rate Per 100,000 Residents**



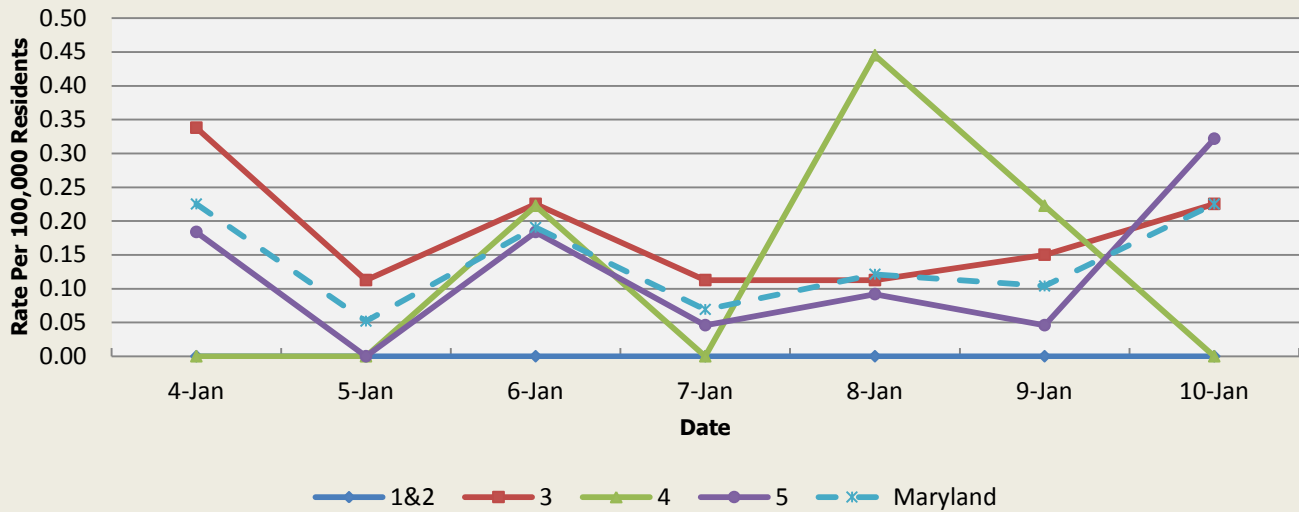
There was an appreciable increase above baseline in the rate of ED visits for Botulism-like Syndrome on 1/4 (Region 4). This increase is not known to be associated with any outbreaks.

**Botulism-like Syndrome Baseline Data  
January 1, 2010 - Present**

Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.06	0.05	0.04	0.03	0.04
Median Rate*	0.00	0.04	0.00	0.00	0.03

\* Per 100,000 Residents

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

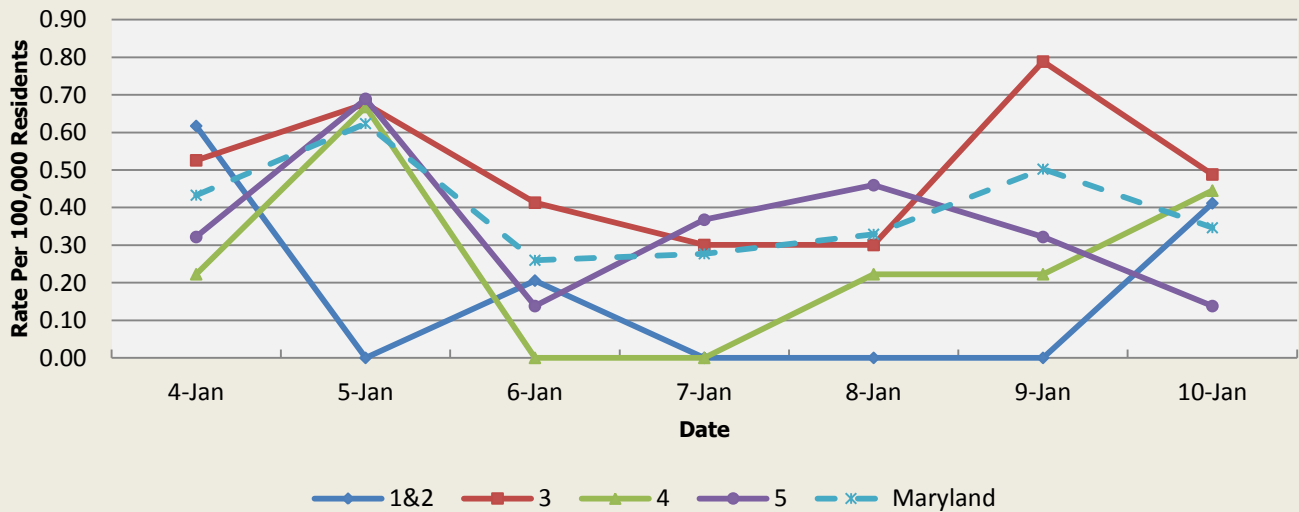


There was an appreciable increase above baseline in the rate of ED visits for Hemorrhagic Illness Syndrome on 1/8 (Region 4). This increase is not known to be associated with any outbreaks.

Hemorrhagic Illness Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.03	0.04	0.03	0.03	0.04
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**



Lymphadenitis Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.32	0.34	0.35	0.24	0.30
Median Rate*	0.21	0.34	0.22	0.23	0.29

\* Per 100,000 Residents

## MARYLAND REPORTABLE DISEASE SURVEILLANCE

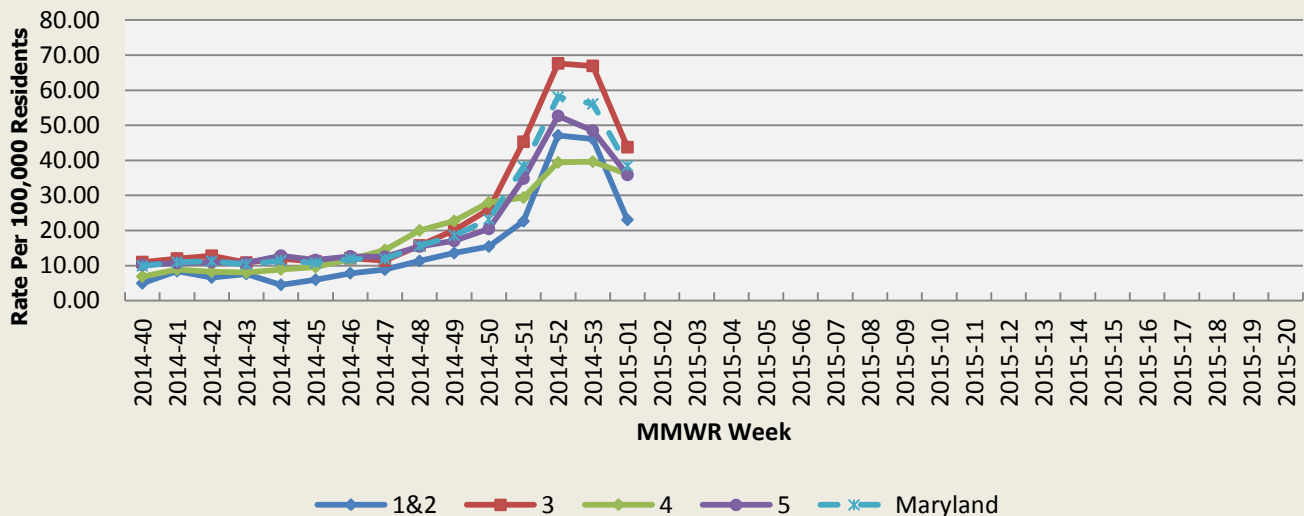
Condition	Counts of Reported Cases†					
	December			Cumulative (Year to Date)**		
Vaccine-Preventable Diseases	2014	Mean*	Median*	2014	Mean*	Median*
Aseptic meningitis	25	36.4	37	406	475	480
Meningococcal disease	1	0.6	0	7	8.4	9
Measles	0	0	0	0	1.6	1
Mumps	2	0.8	1	3	22.8	9
Rubella	0	0	0	1	1	0
Pertussis	15	15.6	14	182	196	141
Foodborne Diseases	2014	Mean*	Median*	2014	Mean*	Median*
Salmonellosis	25	50.4	49	772	923.8	937
Shigellosis	16	6.4	5	217	182.4	132
Campylobacteriosis	28	38.8	38	602	580.4	597
Shiga toxin-producing Escherichia coli (STEC)	1	5.4	6	76	69.6	69
Listeriosis	3	0.6	0	15	15.8	16
Arboviral Diseases	2014	Mean*	Median*	2014	Mean*	Median*
West Nile Fever	0	0	0	2	6.8	6
Lyme Disease	9	37.4	37	753	1355	1328
Emerging Infectious Diseases	2014	Mean*	Median*	2014	Mean*	Median*
Chikungunya	2	0	0	52	0.2	0
Dengue Fever	0	0.4	0	11	8.2	9
Other	2014	Mean*	Median*	2014	Mean*	Median*
Legionellosis	10	9.4	9	134	140.2	142

† Counts are subject to change \*Timeframe of 2009-2013 \*\*Includes January through December

## SYNDROMIC INFLUENZA SURVEILLANCE

Seasonal Influenza reporting occurs from MMWR Week 40 through MMWR Week 22 (October through May).  
Seasonal influenza activity for Week 1 was: Widespread Activity with Moderate Intensity.

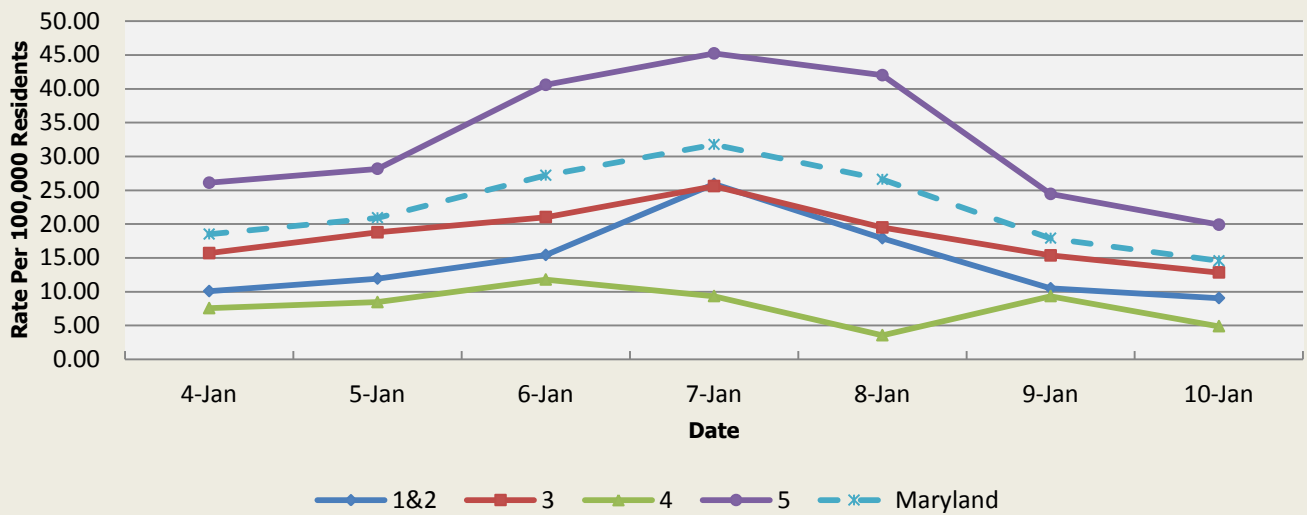
Emergency Department Chief Complaints for Influenza-like Illness  
Rate Per 100,000 Residents



Influenza-like Illness Baseline Data Week 1 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	9.78	10.52	11.00	9.85	10.24
Median Rate*	8.02	8.22	8.90	7.35	7.98

\* Per 100,000 Residents

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

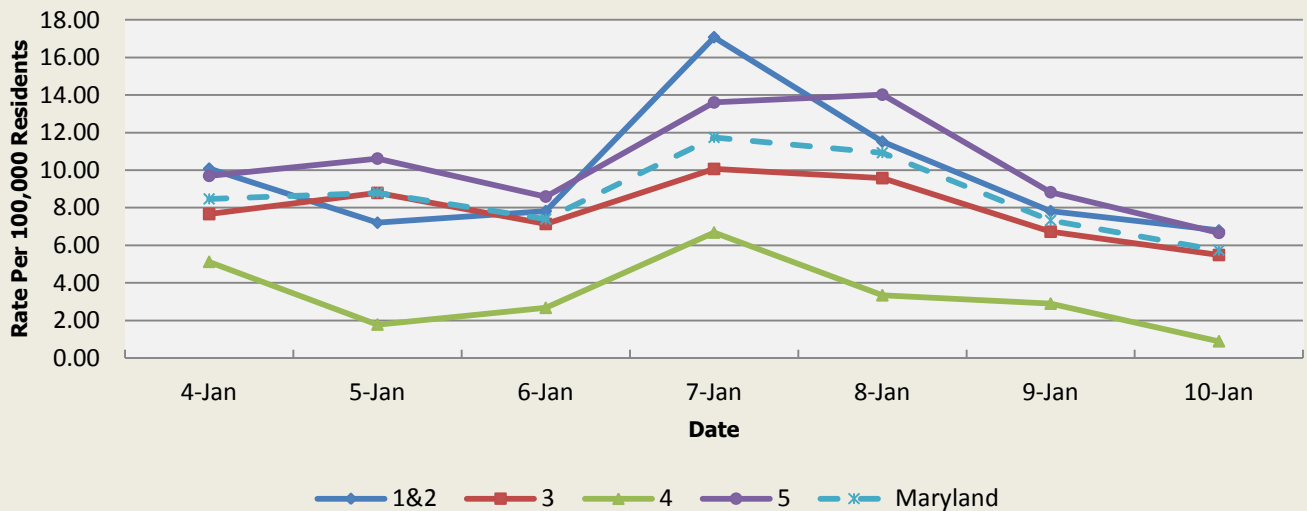


There was an appreciable increase above baseline in the rate of OTC flu medication sales on 1/6-1/8 (Region 5).

OTC Sales Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	5.51	6.28	3.03	14.71	9.14
Median Rate*	4.12	5.03	2.67	11.86	7.33

\* Per 100,000 Residents

**Over-the-Counter Thermometer Sales  
Rate Per 100,000 Residents**



There was an appreciable increase above baseline in the rate of OTC thermometer sales on 1/7 (Regions 1&2).

Thermometer Sales Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	5.91	4.98	3.45	8.48	6.26
Median Rate*	5.14	4.54	3.12	7.81	5.75

\* 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 January 6, 2015, the WHO-confirmed global total (2003-2014) of human cases of H5N1 avian influenza virus infection stands at 694, of which 402 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 58%.

**H5N1 (EGYPT):** 10 Jan 2015, It is an interesting observation that: "Egyptian scientists have found H5N1 viruses in Egyptian poultry that have 2 mutations that are usually associated with adaptation to mammals", suggesting that this is associated with the recent increase in avian H5N1 cases of influenza in the general virus population of Egypt, and that this may have been responsible for the current upsurge of H5N1 avian influenza in Egypt, but which has been absent elsewhere. Read more: <http://www.promedmail.org/direct.php?id=3084116>

**H5N2 (USA):** 10 Jan 2015, Eggs, poultry, and poultry products from domestic flocks can't be moved out of much of the Tri-Cities [Kennewick, Pasco, and Richland in Washington state] because of an emergency quarantine declared to limit the spread of the highly contagious avian flu. Read more: <http://www.promedmail.org/direct.php?id=3083028>

**H7N9 (CHINA):** 7 Jan 2015, The Centre for Health Protection (CHP) of the Department of Health (DH) is today [7 Jan 2015] closely monitoring an additional human case of avian influenza A(H7N9) in Zhaoqing notified by the Health and Family Planning Commission of Guangdong Province (GDHFPC), and again urged the public to maintain strict personal, food and environmental hygiene both locally and during travel. Read more: <http://www.promedmail.org/direct.php?id=3077378>

## **NATIONAL DISEASE REPORTS**

**FOODBORNE ILLNESS (CALIFORNIA):** 09 Jan 2015, An Orange County, CA bakery was closed after 30 people fell ill after eating Rosca de Reyes, a fruit cake traditionally eaten on 6 Jan 2015, known as Three Kings Day or Epiphany. The cake was distributed countywide by Cholula's Bakery in Santa Ana to nearly a dozen different locations. Read more: <http://www.promedmail.org/direct.php?id=3081740>

## **INTERNATIONAL DISEASE REPORTS**

**MERS-CoV (SAUDI ARABIA):** 09 Jan 2015, As of 12:00 noon today (9 Jan 2015) there have been a total of: 833 laboratory-confirmed cases of MERS-CoV infection, including 358 deaths, 466 recovered cases, and 9 currently active cases. Read more: <http://www.promedmail.org/direct.php?id=3082724>

**CRIMEAN-CONGO HEMORRHAGIC FEVER (RUSSIA):** 09 Jan 2015, Russian scientists writing yesterday [7 Jan 2015] in the International Journal of Infectious Diseases describe a cluster of nosocomial Crimean-Congo hemorrhagic fever (CCHF) in 8 HCWs [health care workers], 2 of whom had no contact with the patient's bodily fluids and may have been infected via airborne transmission. Read more: <http://www.promedmail.org/direct.php?id=3082619>

**EBOLA (WEST AFRICA):** 09 Jan 2015, Total in the 3 epidemic countries: 21,086 cases, 8,289 deaths (of which 7759 deaths confirmed in Sierra Leone alone). Read more: <http://www.promedmail.org/direct.php?id=3082431>

**SALMONELLOSIS (AUSTRALIA):** 09 Jan 2015, Eggs used in deep-fried ice cream batter have been blamed for a Queensland food poisoning outbreak that left 110 people ill. Read more: <http://www.promedmail.org/direct.php?id=3081468>

**ANTHRAX (ZIMBABWE):** 08 Jan 2015, At least 10 people were hospitalized while 9 cattle died from anthrax in Chipinge District [Manicaland Province], Department of Veterinary Services director in the Ministry of Agriculture, Mechanisation and Irrigation Development Josphat Nyika said yesterday [6 Jan 2015]. The 10 were hospitalized after they ate contaminated meat and were receiving treatment at a local hospital. Read more: <http://www.promedmail.org/direct.php?id=3079887>

**PLAGUE (MADAGASCAR):** 08 Jan 2015, The capital, Antananarivo, is no longer immune to the epidemic of the plague; 10 suspected cases were identified according to arrivals information at Compte-Gouttes. Read more: <http://www.promedmail.org/direct.php?id=3076901>

**HANTAVIRUS (ARGENTINA):** 05 Jan 2015, A 20-year-old man who had contracted [a] hantavirus [infection] died yesterday [31 Jan 2014] in the Alejandro Korn Hospital in Melchor Romero, where he had been hospitalized for 10 days as a result of this infectious disease. Read more: <http://www.promedmail.org/direct.php?id=3075077>

#### **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.dhmm.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.dhmm.maryland.gov/influenza/fluwatch/SitePages/Home.aspx>

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

