



STATE OF MARYLAND

DHMH

Maryland Department of Health and Mental Hygiene

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

November 06, 2015

**Public Health Preparedness and Situational Awareness Report: #2015:43
Reporting for the week ending 10/31/15 (MMWR Week #43)**

CURRENT HOMELAND SECURITY THREAT LEVELS

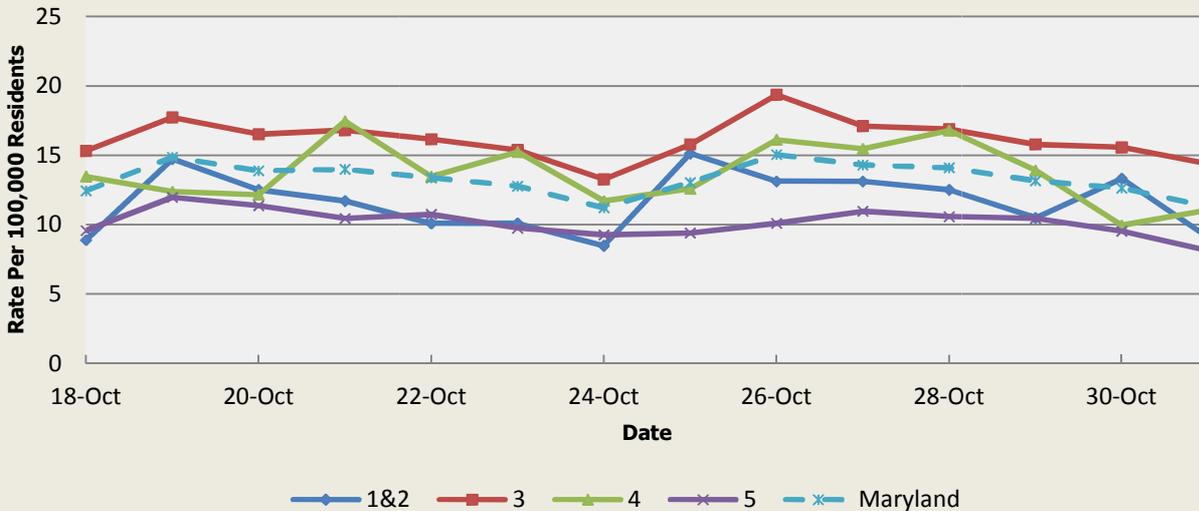
National: No Active Alerts
Maryland: Level Four (MEMA status)

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**



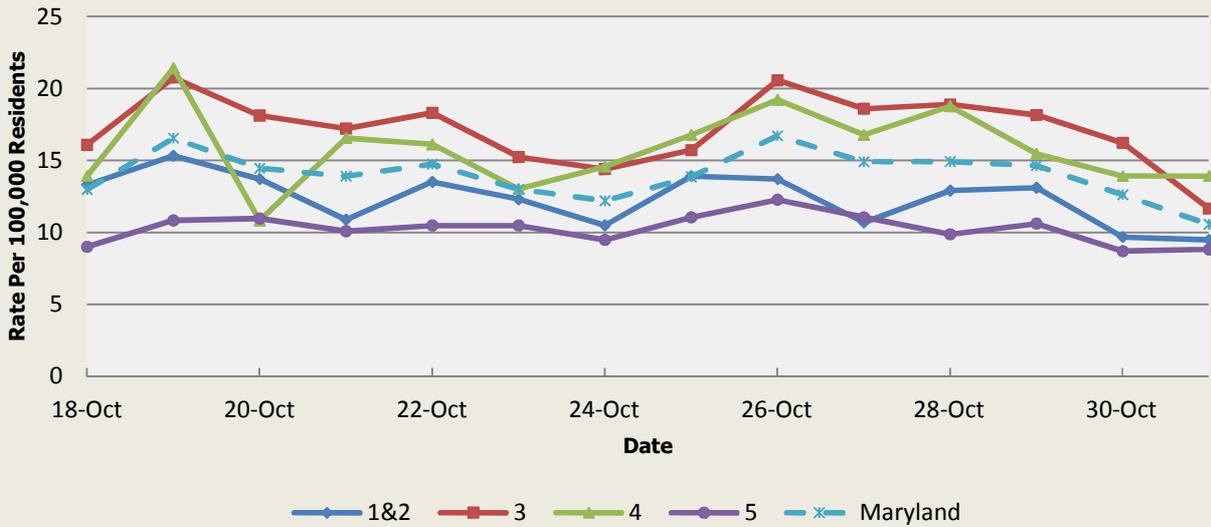
There was 1 gastrointestinal illness outbreak reported for Week 43: 1 outbreak of gastroenteritis in a hospital (Region 4).

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

| Health Region | 1&2 | 3 | 4 | 5 | Maryland |
|---------------|-------|-------|-------|-------|----------|
| Mean Rate* | 12.90 | 14.41 | 15.27 | 10.15 | 12.72 |
| Median Rate* | 12.91 | 14.18 | 14.57 | 10.04 | 12.58 |

* Per 100,000 Residents

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

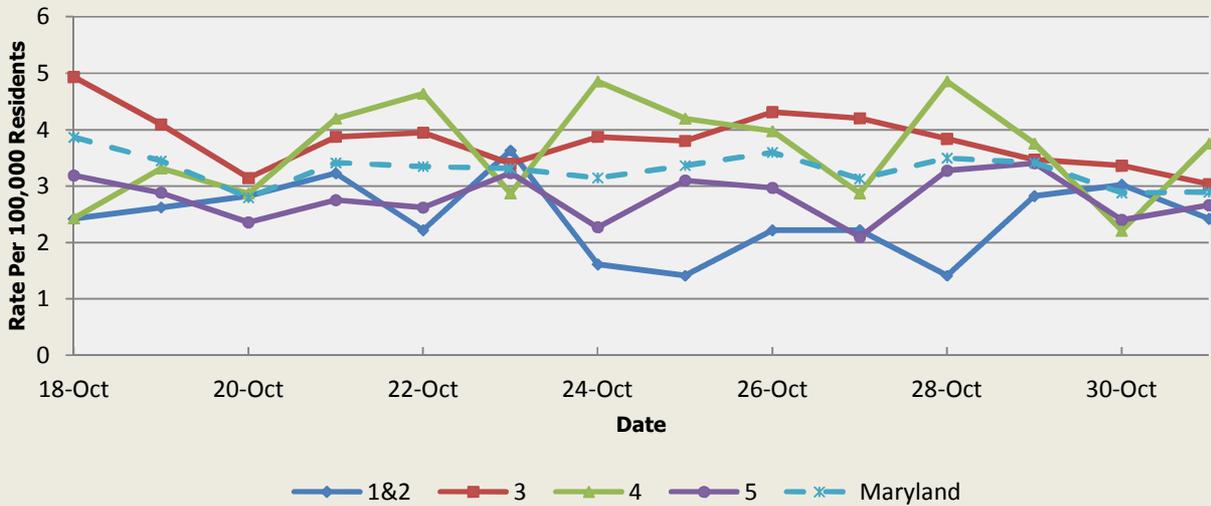


There were no respiratory outbreaks reported this week.

| Respiratory Syndrome Baseline Data January 1, 2010 - Present | | | | | |
|---|-------|-------|-------|------|----------|
| Health Region | 1&2 | 3 | 4 | 5 | Maryland |
| Mean Rate* | 11.88 | 13.50 | 13.74 | 9.66 | 11.91 |
| Median Rate* | 11.49 | 13.04 | 13.25 | 9.30 | 11.51 |

* Per 100,000 Residents

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

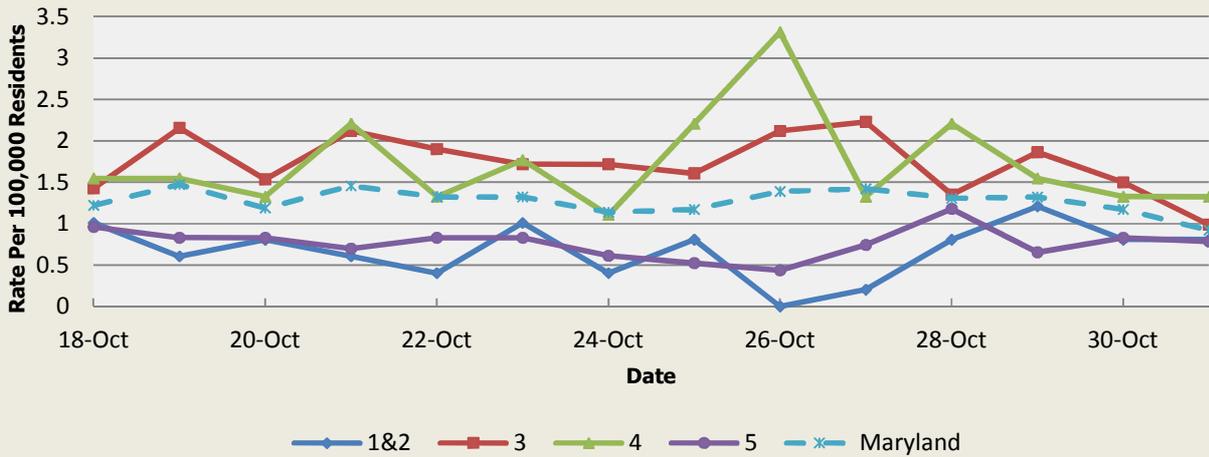


There were no fever outbreaks reported this week.

| Fever Syndrome Baseline Data January 1, 2010 - Present | | | | | |
|---|------|------|------|------|----------|
| Health Region | 1&2 | 3 | 4 | 5 | Maryland |
| Mean Rate* | 3.11 | 3.67 | 3.86 | 3.04 | 3.40 |
| Median Rate* | 3.02 | 3.54 | 3.75 | 2.92 | 3.28 |

Per 100,000 Residents

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



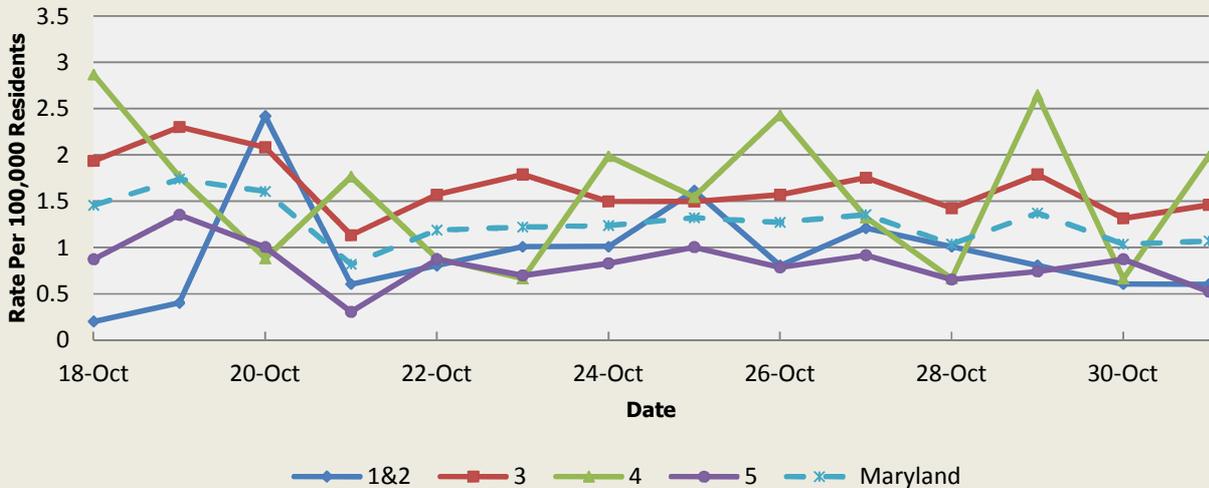
There were no localized lesion outbreaks reported this week.

**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**



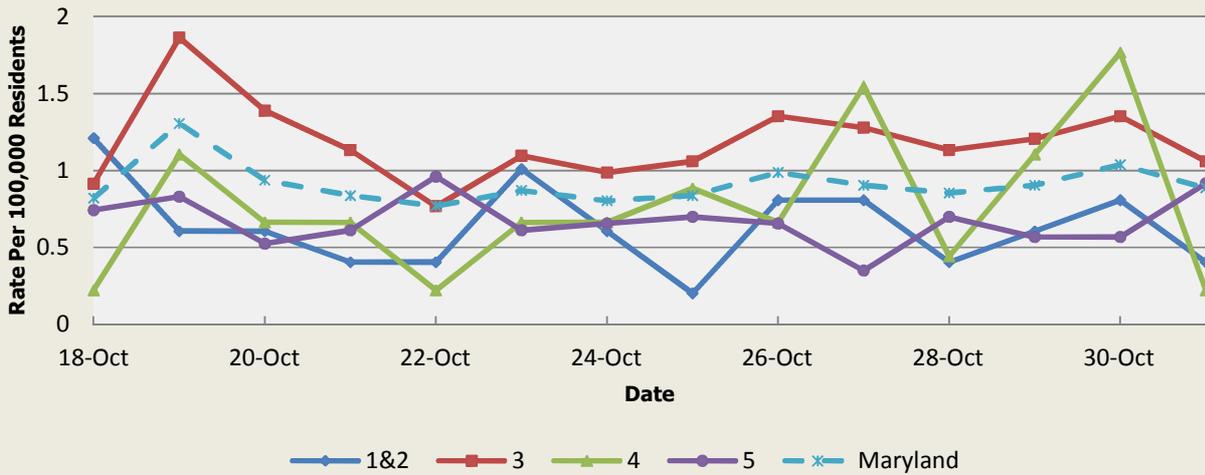
There was 1 rash outbreak reported for Week 43: 1 outbreak of Scabies associated with a Nursing Home (Region 3).

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

| Health Region | 1&2 | 3 | 4 | 5 | Maryland |
|---------------|------|------|------|------|----------|
| Mean Rate* | 1.33 | 1.74 | 1.77 | 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**

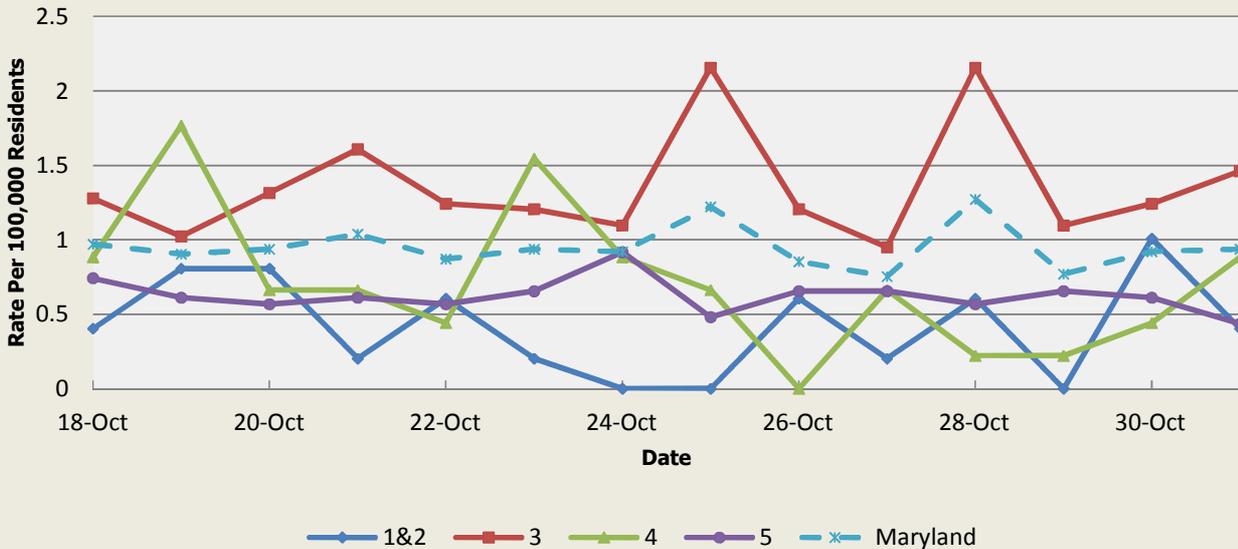


There were no neurological syndrome outbreaks reported this week.

| Neurological Syndrome Baseline Data January 1, 2010 - Present | | | | | |
|--|------|------|------|------|----------|
| Health Region | 1&2 | 3 | 4 | 5 | Maryland |
| Mean Rate* | 0.62 | 0.68 | 0.63 | 0.45 | 0.59 |
| Median Rate* | 0.60 | 0.62 | 0.66 | 0.44 | 0.55 |

* Per 100,000 Residents

**Emergency Department Chief Complaints for Severe Illness or Death Syndrome
Rate Per 100,000 Residents**



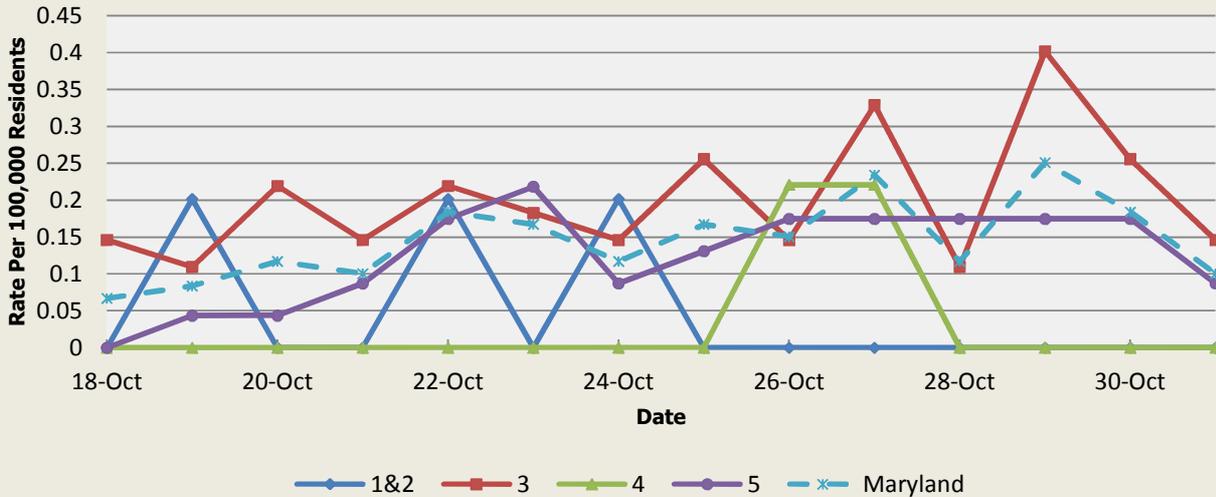
There were no severe illness or death outbreaks reported this week.

| Severe Illness or Death Syndrome Baseline Data January 1, 2010 - Present | | | | | |
|---|------|------|------|------|----------|
| Health Region | 1&2 | 3 | 4 | 5 | Maryland |
| Mean Rate* | 0.74 | 0.97 | 0.88 | 0.43 | 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**

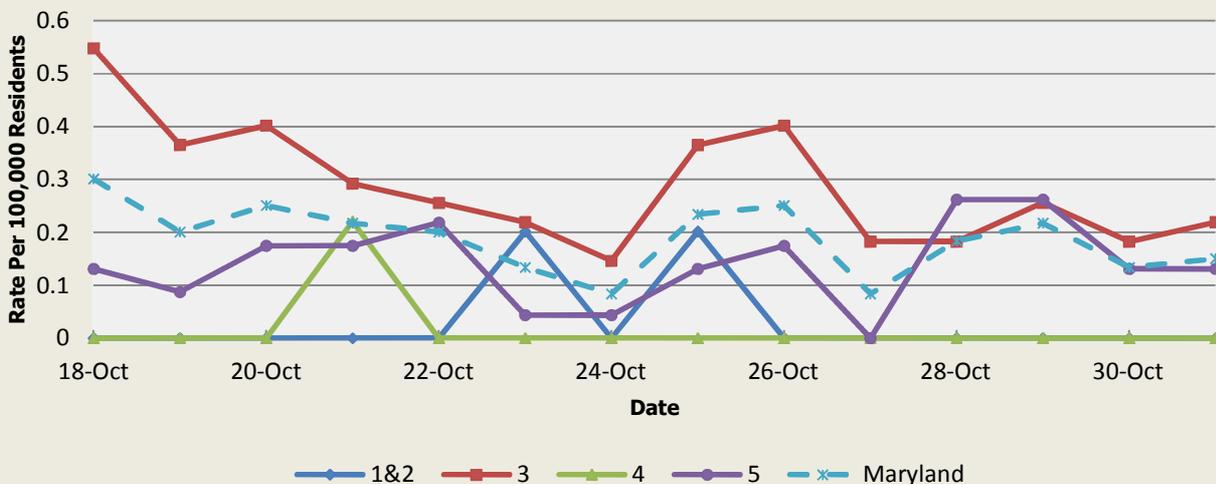


There was an appreciable increase above baseline in the rate of ED visits for Botulism-like Syndrome on 10/25 (Regions 3,5), 10/26 (Regions 3,4,5), 10/27 (Regions 3,4,5), 10/28 (Region 5), 10/29 (Regions 3,5), 10/30 (Regions 3,5), 10/31 (Regions 3,5). These increases are not known to be associated with any outbreaks.

| Botulism-like Syndrome Baseline Data January 1, 2010 - Present | | | | | |
|---|------|------|------|------|----------|
| Health Region | 1&2 | 3 | 4 | 5 | Maryland |
| Mean Rate* | 0.06 | 0.07 | 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**

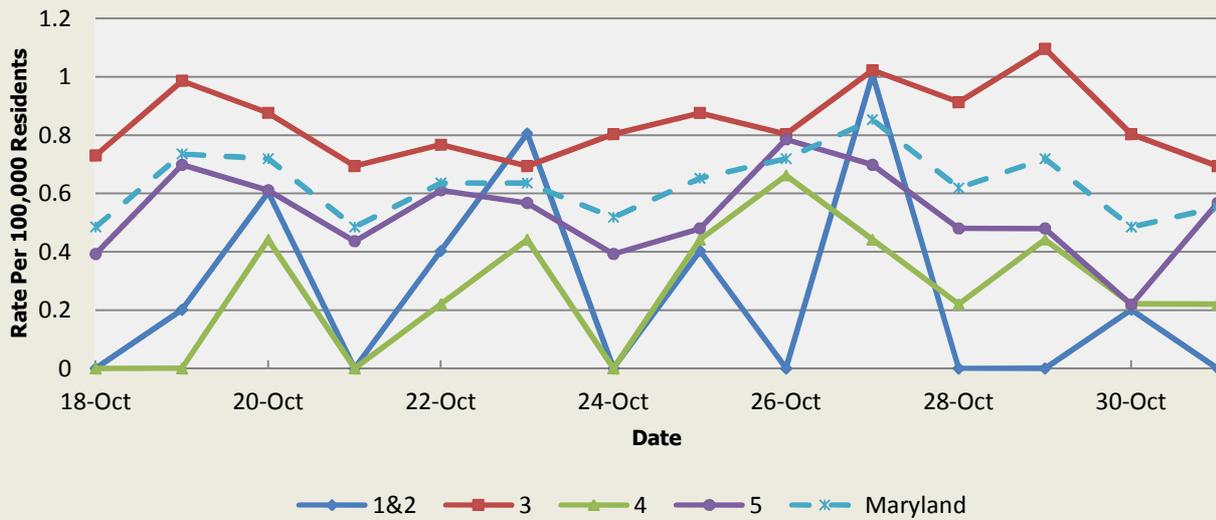


There was an appreciable increase above baseline in the rate of ED visits for Hemorrhagic Illness Syndrome on 10/25 (Regions 1&2,3,5), 10/26 (Regions 3,5), 10/27 (Region 3), 10/28 (Regions 3,5), 10/29 (Regions 3,5), 10/30 (Regions 3,5) and 10/31 (Regions 3,5). These increases are not known to be associated with any outbreaks.

| Hemorrhagic Illness Syndrome Baseline Data January 1, 2010 - Present | | | | | |
|---|------|------|------|------|----------|
| Health Region | 1&2 | 3 | 4 | 5 | Maryland |
| Mean Rate* | 0.03 | 0.07 | 0.03 | 0.05 | 0.06 |
| Median Rate* | 0.00 | 0.04 | 0.00 | 0.04 | 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 10/25 (Region 3), 10/26 (Region 5), 10/27 (Regions 1&2,3,5), 10/28 (Region 3), 10/29 (Region 3), and 10/31 (Region 5). 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 | 0.41 | 0.34 | 0.27 | 0.34 |
| Median Rate* | 0.20 | 0.33 | 0.22 | 0.22 | 0.30 |

* Per 100,000 Residents

MARYLAND REPORTABLE DISEASE SURVEILLANCE

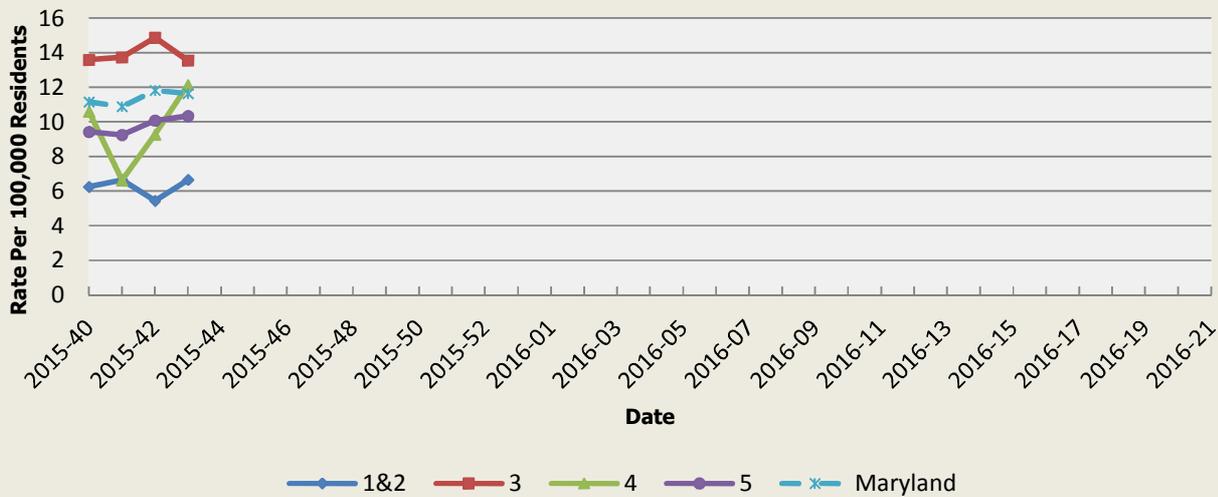
| Condition | Counts of Reported Cases† | | | | | |
|---|---------------------------|-------|---------|-----------------------------|--------|---------|
| | October | | | Cumulative (Year to Date)** | | |
| | 2015 | Mean* | Median* | 2015 | Mean* | Median* |
| Vaccine-Preventable Diseases | | | | | | |
| Aseptic meningitis | 21 | 52.4 | 54 | 397 | 382.4 | 406 |
| Meningococcal disease | 0 | 0.6 | 1 | 2 | 6.4 | 6 |
| Measles | 0 | 0 | 0 | 0 | 0.6 | 0 |
| Mumps | 0 | 0.2 | 0 | 21 | 20.8 | 2 |
| Rubella | 0 | 0 | 0 | 1 | 1.2 | 1 |
| Pertussis | 3 | 16 | 11 | 77 | 169 | 167 |
| Foodborne Diseases | | | | | | |
| Salmonellosis | 46 | 72.8 | 72 | 719 | 820.6 | 836 |
| Shigellosis | 7 | 12.6 | 14 | 183 | 139.8 | 116 |
| Campylobacteriosis | 23 | 46.6 | 45 | 536 | 521.2 | 530 |
| Shiga toxin-producing Escherichia coli (STEC) | 2 | 9.6 | 10 | 76 | 63 | 60 |
| Listeriosis | 2 | 1.8 | 1 | 15 | 13.4 | 15 |
| Arboviral Diseases | | | | | | |
| West Nile Fever | 0 | 0.2 | 0 | 16 | 7 | 6 |
| Lyme Disease | 29 | 76.4 | 70 | 1038 | 1100.8 | 1182 |
| Emerging Infectious Diseases | | | | | | |
| Chikungunya | 0 | 3.4 | 0 | 14 | 11 | 0 |
| Dengue Fever | 0 | 1.2 | 1 | 8 | 9.4 | 10 |
| Other | | | | | | |
| Legionellosis | 11 | 15.4 | 14 | 113 | 122.2 | 124 |

† Counts are subject to change *Timeframe of 2009-2014 **Includes January through current month

SYNDROMIC INFLUENZA SURVEILLANCE

Seasonal Influenza reporting occurs from MMWR Week 40 through MMWR Week 20 (October through May). Seasonal Influenza activity for Week 43 was: Minimal Spread with No Activity.

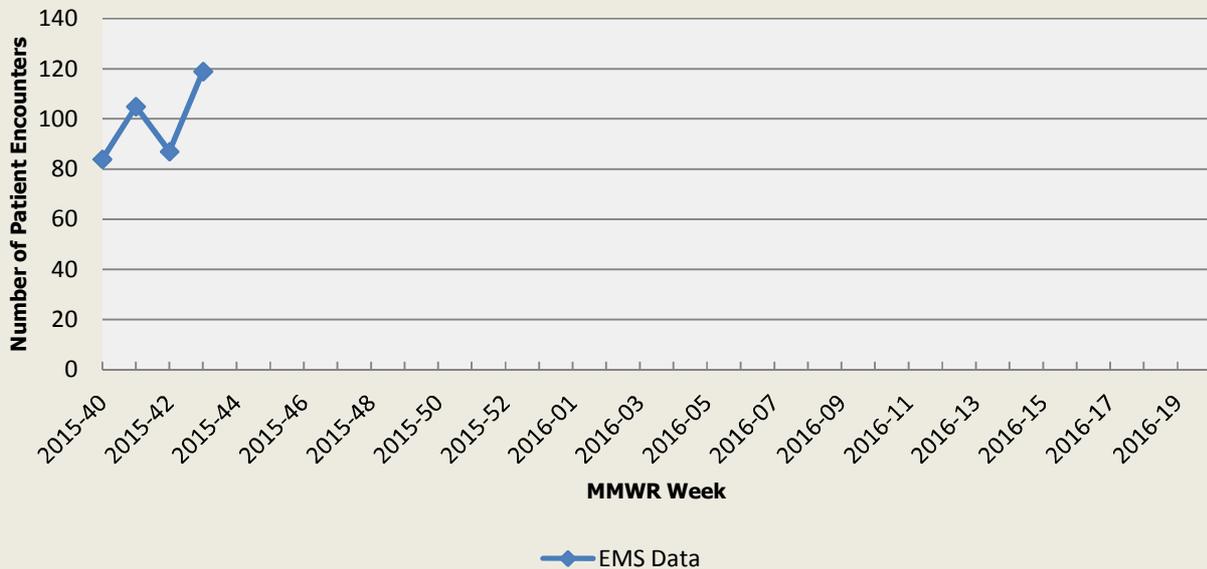
**Emergency Department Chief Complaints for Influenza-like Illness
Rate Per 100,000 Residents**



| Influenza-like Illness Baseline Data Week 1 2010 - Present | | | | | |
|---|------|-------|-------|------|----------|
| Health Region | 1&2 | 3 | 4 | 5 | Maryland |
| Mean Rate* | 9.24 | 10.66 | 10.63 | 9.78 | 10.20 |
| Median Rate* | 7.56 | 8.44 | 8.72 | 7.53 | 8.06 |

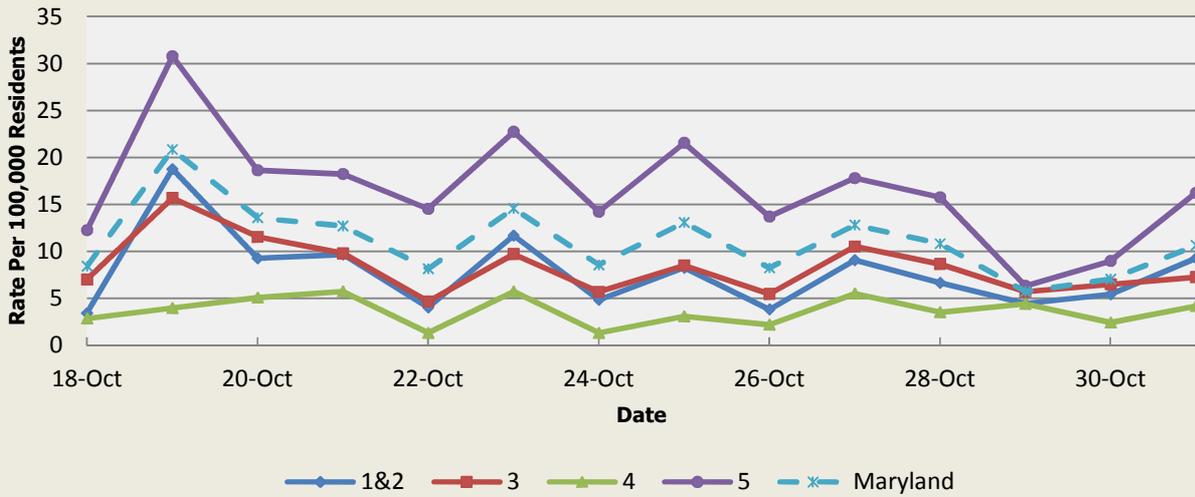
* Per 100,000 Residents

**Emergency Medical Services Influenza Like Illness Contacts by Week
Source: eMEDS Patient Care Reports**



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**

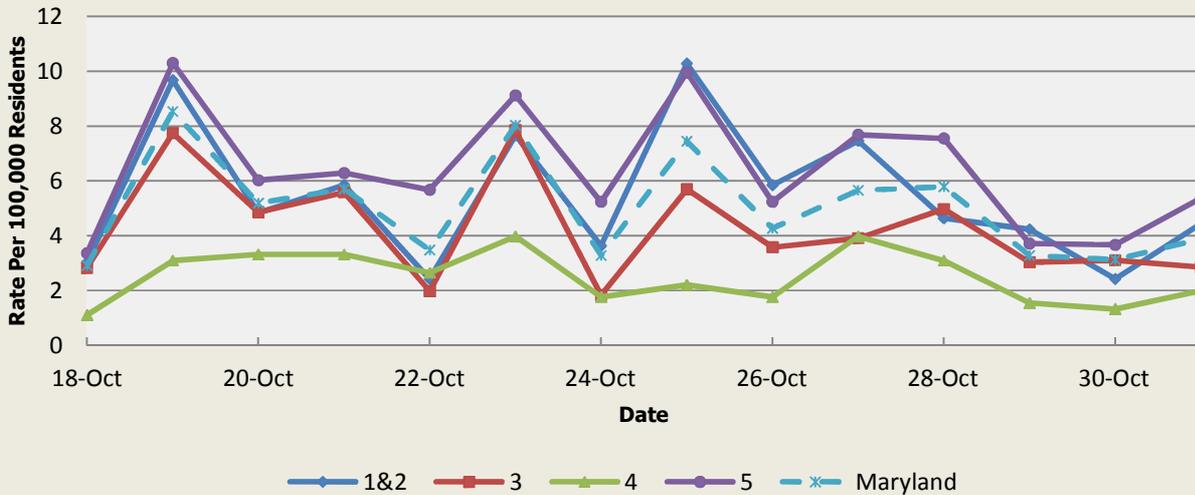


There was not an appreciable increase above baseline in the rate of OTC flu medication sales this week.

| OTC Sales Baseline Data January 1, 2010 - Present | | | | | |
|--|------|------|------|-------|----------|
| Health Region | 1&2 | 3 | 4 | 5 | Maryland |
| Mean Rate* | 5.40 | 6.08 | 3.07 | 13.79 | 8.75 |
| Median Rate* | 4.23 | 5.01 | 2.65 | 11.26 | 7.13 |

* 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* | 5.64 | 4.68 | 3.34 | 7.71 | 5.82 |
| Median Rate* | 5.04 | 4.31 | 3.09 | 7.07 | 5.35 |

* 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 15, 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:

There were no international reports of human cases of avian influenza this week.

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:

No avian influenza in poultry reports this week.

NATIONAL DISEASE REPORTS

E. COLI (MULTI-STATE): 31 Oct 2015 Health officials are investigating an outbreak of Escherichia coli infection linked to Chipotle restaurants in Washington state and Oregon, health officials said on Saturday 31 Oct 2015. 3 people in the Portland [Oregon] area and at least 19 people in Washington have become sick after eating at the Mexican food chain since 14 Oct 2015, the Oregon Health Authority said. No deaths have been reported and about a third of the people have been hospitalized, agency spokesman Jonathan Modie said. Read More: <http://www.promedmail.org/post/3758268>

INTERNATIONAL DISEASE REPORTS

UNDIAGNOSED HEMORRHAGIC FEVER (SUDAN): 02 Nov 2015 The Sudanese Ministry of Health and the World Health Organization (WHO) confirmed the outbreak of viral hemorrhagic fever (VHF) in Darfur on Tue 27 Oct 2015. Read More: <http://www.promedmail.org/post/3760440>

HUMAN ENTEROVIRUS D68 (JAPAN): 31 Oct 2015 A number of recent reports about children suffering fever and paralysis from unknown causes has prompted the National Institute of Infectious Diseases [Japan] to start investigating nationwide for similar cases. Some of the children were infected with enterovirus D68, and the national institute has been studying if the virus is responsible for the symptoms. Read More: <http://www.promedmail.org/post/3758443>

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.

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/>

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 |

