



December 26, 2014

**Public Health Preparedness and Situational Awareness Report: # 2014:51
Reporting for the week ending 12/20/14 (MMWR Week #51)**

CURRENT HOMELAND SECURITY THREAT LEVELS

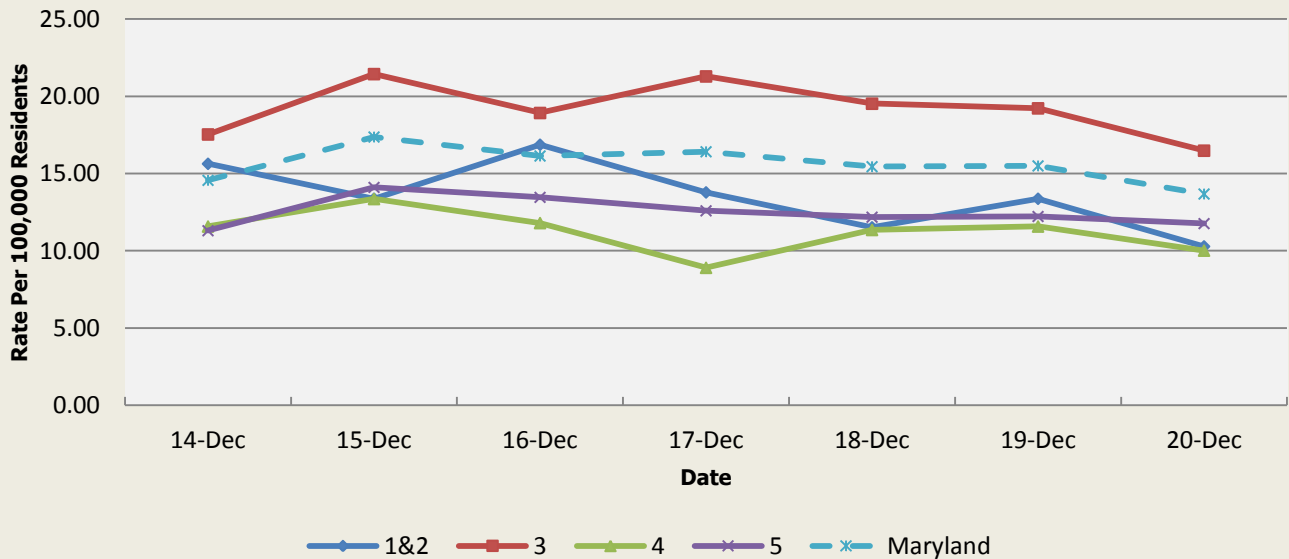
National: No Active Alerts
Maryland: Level Four (MEMA status)

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**

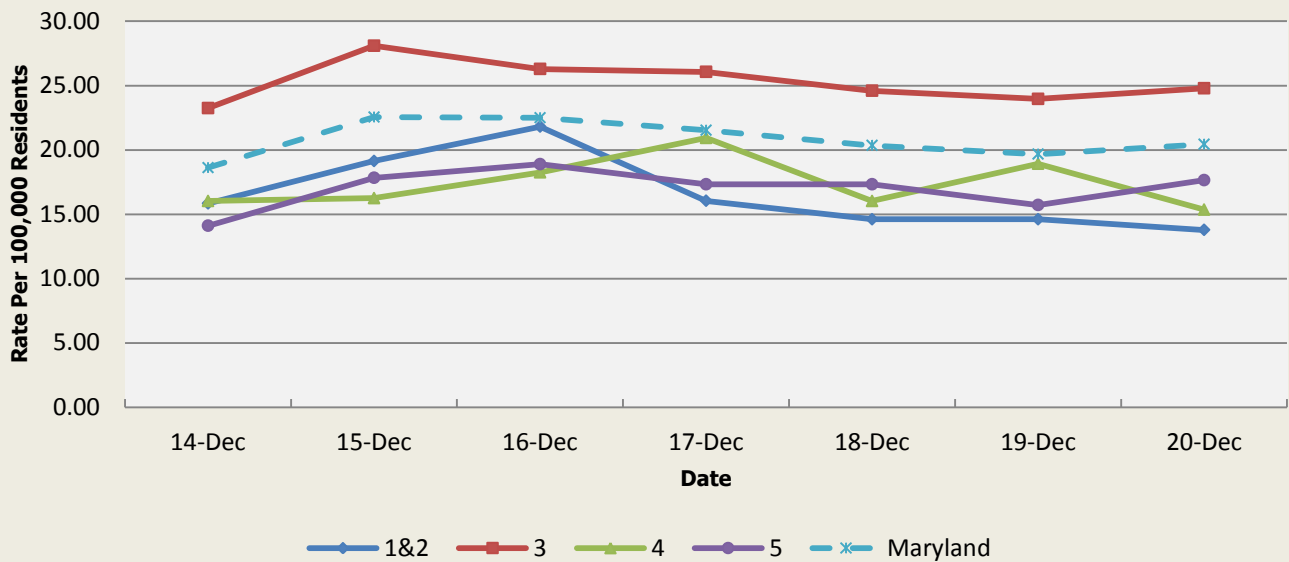


There were 5 gastrointestinal illness outbreaks reported this week: 1 outbreak of gastroenteritis in a nursing home (Regions 5), 1 outbreak of gastroenteritis in a hospital (Region 4), 2 outbreaks of gastroenteritis associated with schools (Regions 4, 5), and 1 outbreak of gastroenteritis/foodborne associated with a restaurant (Region 3).

Gastrointestinal Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	13.17	14.26	15.32	10.38	12.79
Median Rate*	13.17	14.16	14.69	10.30	12.71

* Per 100,000 Residents

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

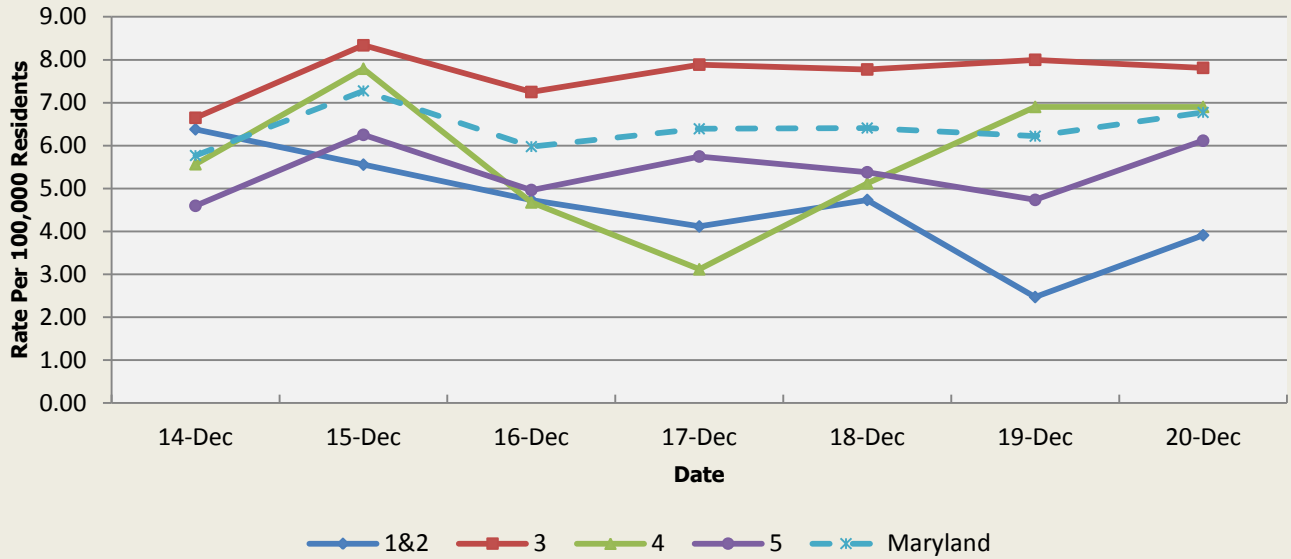


There were 22 respiratory illness outbreaks reported this week: 5 outbreaks of influenza in nursing homes (Regions 1&2, 3), 2 outbreaks of influenza in assisted living facilities (Region 5), 1 outbreak of influenza/pneumonia in a nursing home (Region 3), 3 outbreaks of ILI in nursing homes (Regions 1&2, 3), 1 outbreak of ILI in an assisted living facility (Region 4), 4 outbreaks of ILI associated with schools (Regions 1&2, 4), 1 outbreak of ILI/pneumonia in a nursing home (Region 3), 1 outbreak of ILI/pneumonia in an assisted living facility (Region 4), 2 outbreaks of pneumonia in nursing homes (Region 3), 1 outbreak of pneumonia associated with a school (Region 5), and 1 outbreak of legionellosis in a nursing home (Region 3).

Respiratory Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	12.10	13.31	13.73	9.81	11.92
Median Rate*	11.73	12.99	13.36	9.56	11.66

* Per 100,000 Residents

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

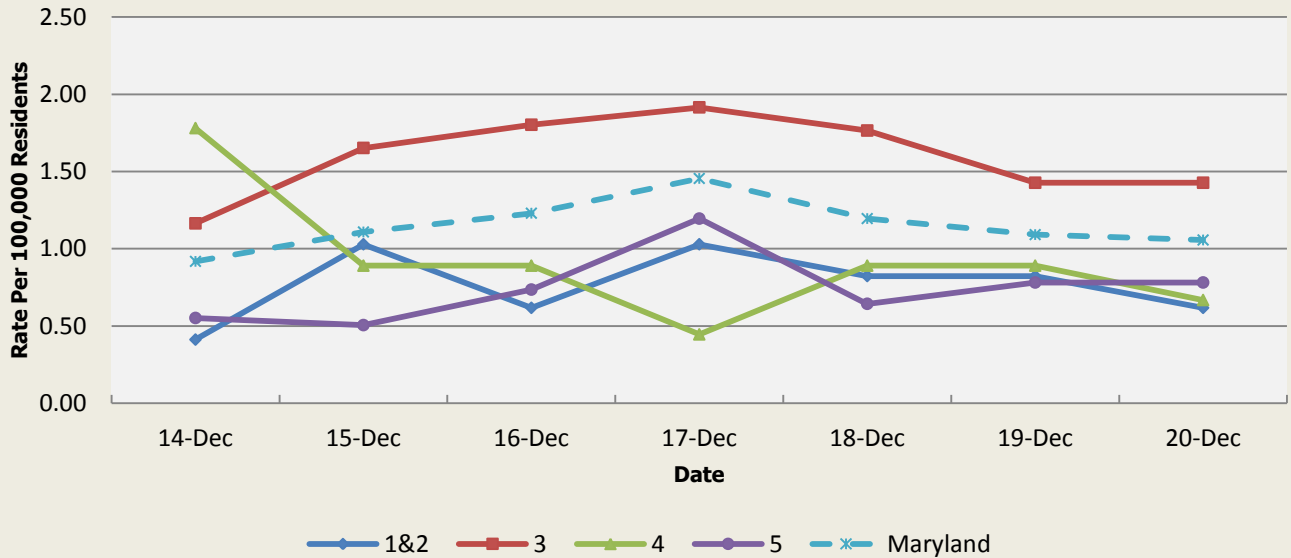


There were no fever outbreaks reported this week.

Fever Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.23	3.62	3.88	3.13	3.42
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**

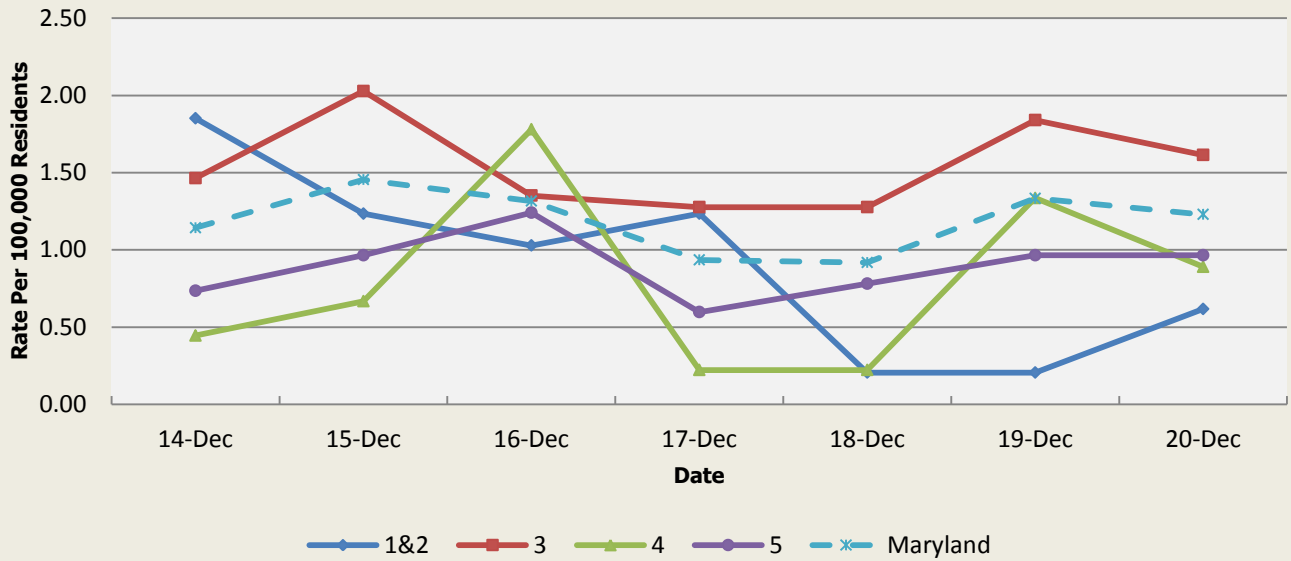


There were no localized lesion outbreaks reported this week.

Localized Lesion Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	1.17	1.98	2.07	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**

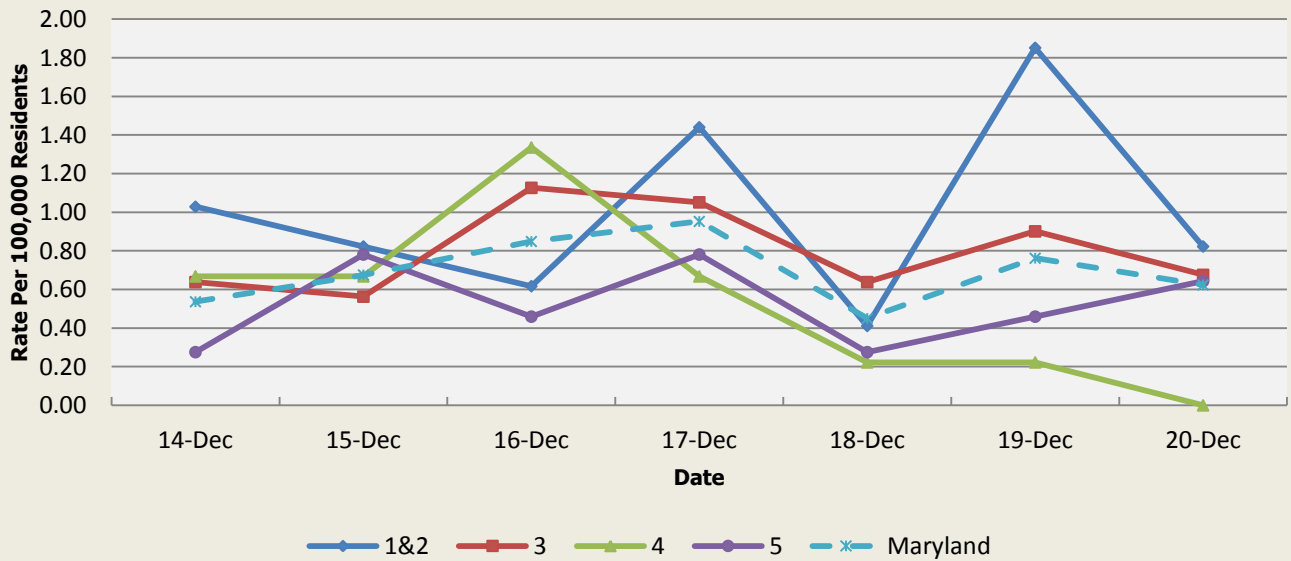


There were no rash outbreaks reported this week.

Rash Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	1.41	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**

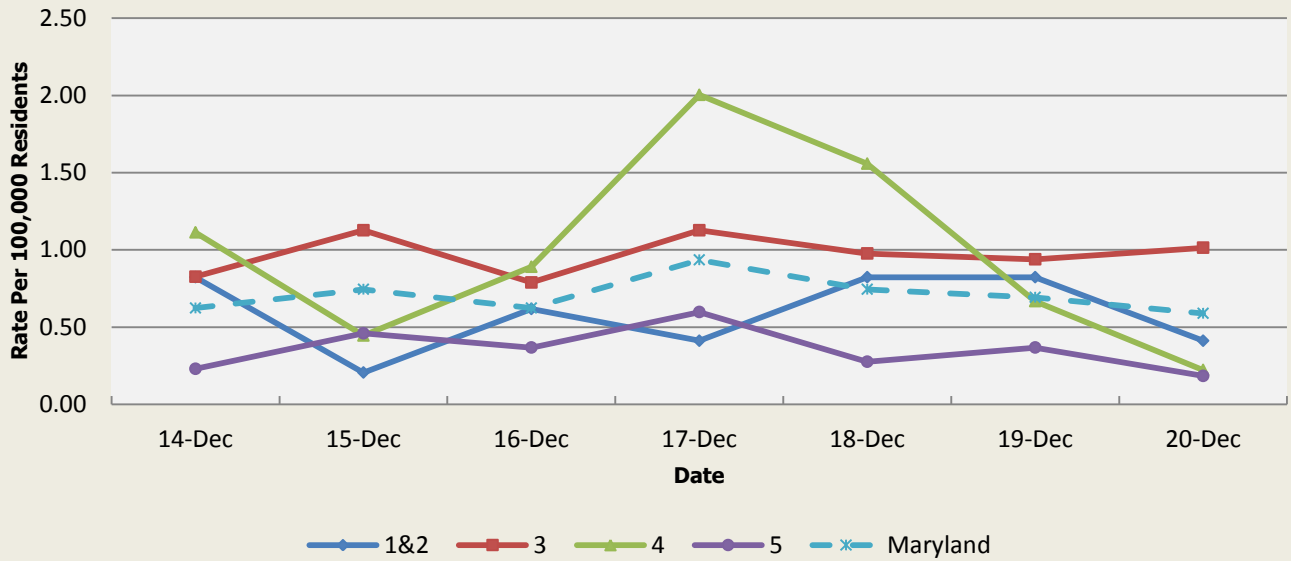


There were no neurological outbreaks reported this week.

Neurological Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.61	0.62	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.

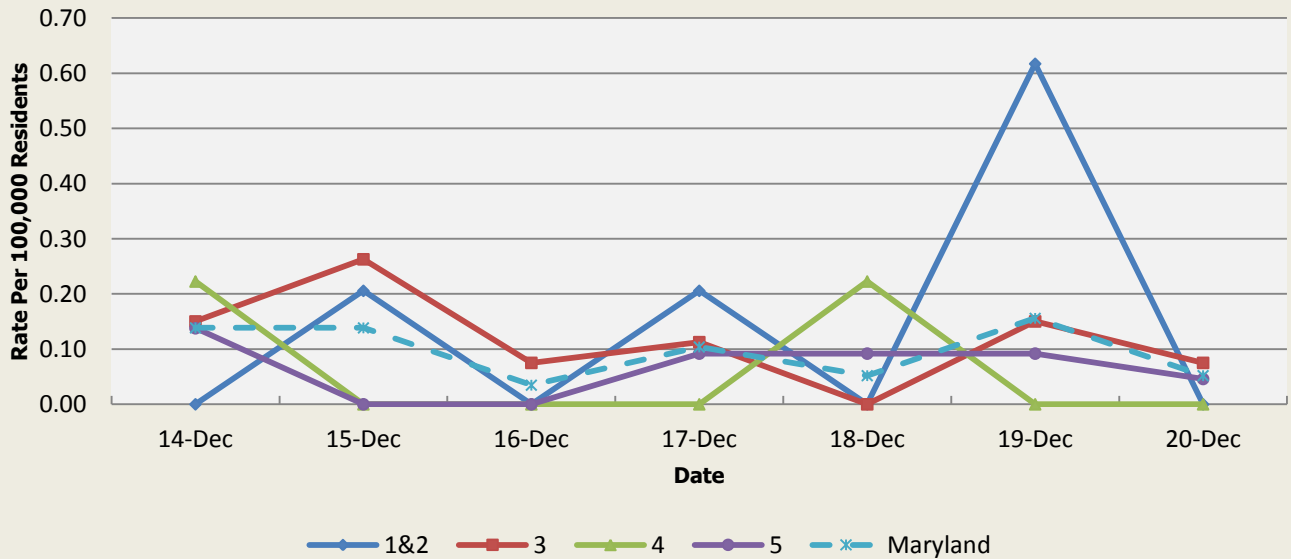
**Severe Illness or Death Syndrome
Baseline Data
January 1, 2010 - Present**

Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.80	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**



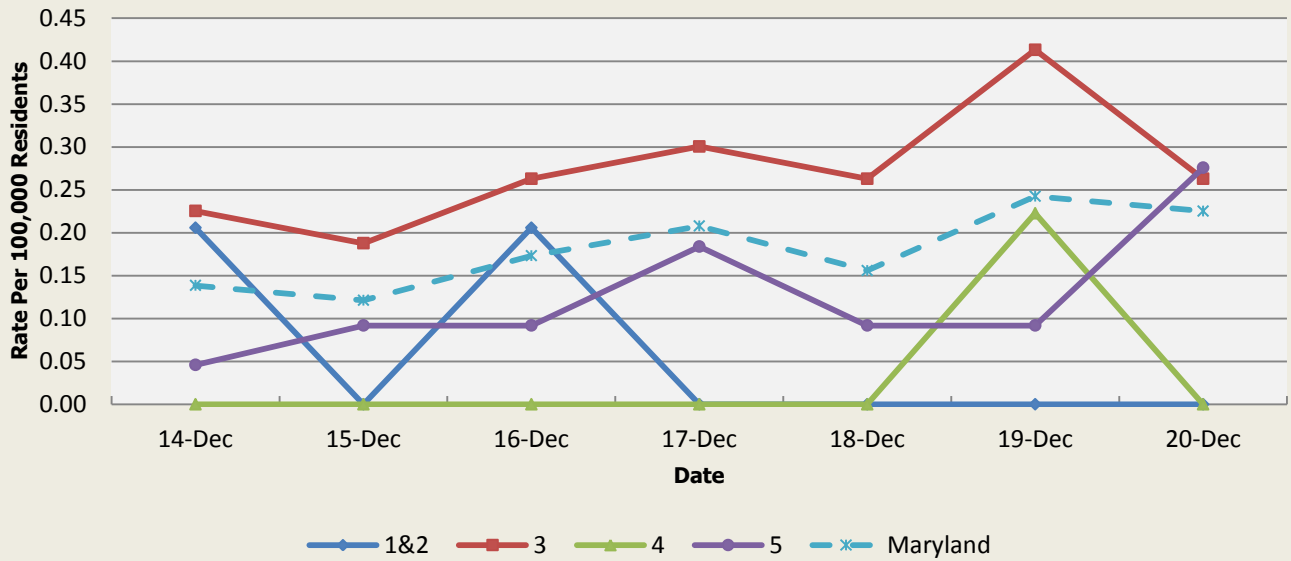
There was an appreciable increase above baseline in the rate of ED visits for Botulism-like Syndrome on 12/15 (Regions 1&2, 3), 12/17 (Regions 1&2), 12/18 (Region 4), and 12/19 (Regions 1&2). These increases are not known to be associated with any outbreaks.

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

Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.06	0.04	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**



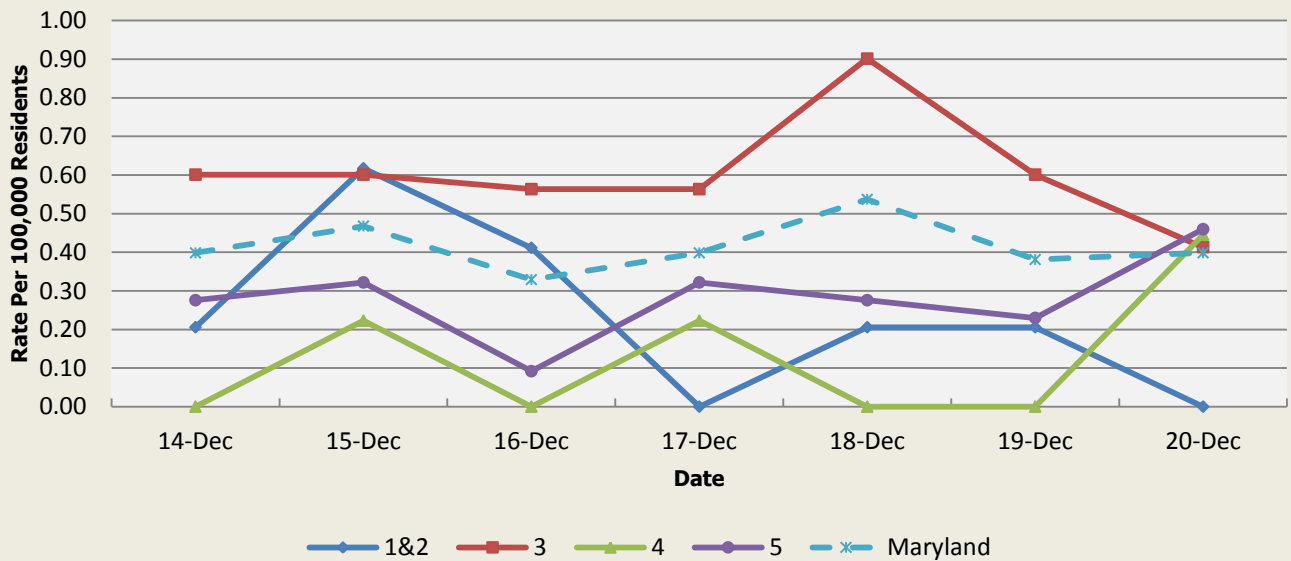
There was an appreciable increase above baseline in the rate of ED visits for Hemorrhagic Illness Syndrome on 12/14 (Regions 1&2, 3), 12/15 (Region 3), 12/16 (Regions 1&2, 3), 12/17 (Region 3, 5), 12/18 (Region 3), 12/19 (Regions 3, 4), and 12/20 (Regions 3, 5). These increases are not known to be associated with any outbreaks.

**Hemorrhagic Illness Syndrome
Baseline Data
January 1, 2010 - Present**

Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.03	0.04	0.03	0.03	0.03
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 12/18 (Region 3). This increase is 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*	0.33	0.34	0.35	0.24	0.30
Median Rate*	0.21	0.30	0.22	0.23	0.29

* Per 100,000 Residents

MARYLAND REPORTABLE DISEASE SURVEILLANCE

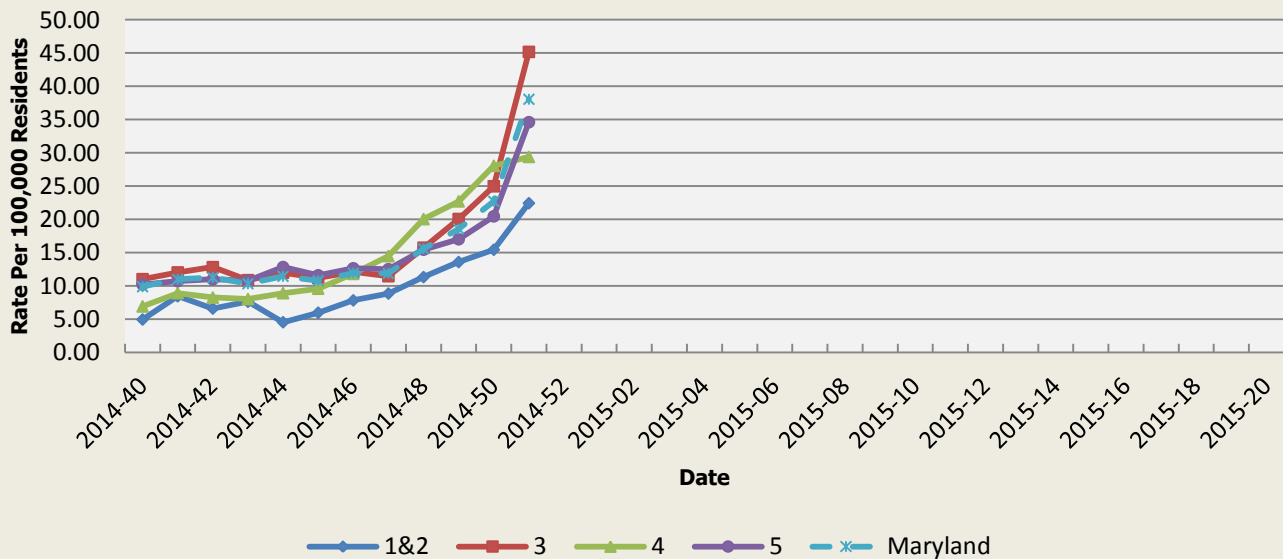
Condition	Counts of Reported Cases†					
	December			Cumulative (Year to Date)**		
Vaccine-Preventable Diseases	2014	Mean*	Median*	2014	Mean*	Median*
Aseptic meningitis	6	36.4	37	383	475	480
Meningococcal disease	1	0.6	0	7	8.4	9
Measles	0	0	0	0	1.6	1
Mumps	2	0.8	1	3	22.8	9
Rubella	0	0	0	1	1	0
Pertussis	1	15.6	14	154	196	141
Foodborne Diseases	2014	Mean*	Median*	2014	Mean*	Median*
Salmonellosis	11	50.4	49	741	923.8	937
Shigellosis	7	6.4	5	201	182.4	132
Campylobacteriosis	7	38.8	38	569	580.4	597
Shiga toxin-producing Escherichia coli (STEC)	1	5.4	6	76	69.6	69
Listeriosis	1	0.6	0	12	15.8	16
Arboviral Diseases	2014	Mean*	Median*	2014	Mean*	Median*
West Nile Fever	0	0	0	2	6.8	6
Lyme Disease	5	37.4	37	720	1355	1328
Emerging Infectious Diseases	2014	Mean*	Median*	2014	Mean*	Median*
Chikungunya	1	0	0	48	0.2	0
Dengue Fever	0	0.4	0	10	8.2	9
Other	2014	Mean*	Median*	2014	Mean*	Median*
Legionellosis	3	9.4	9	124	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).

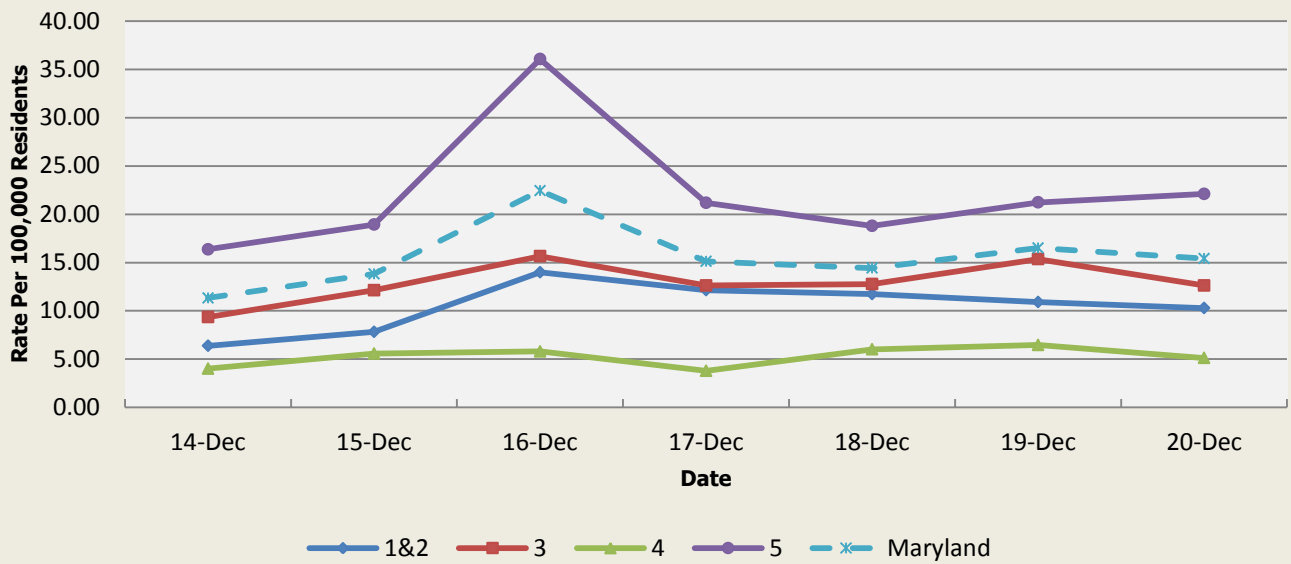
Emergency Department Chief Complaints for Influenza-like Illness
Rate Per 100,000 Residents



Influenza-like Illness Baseline Data Week 1 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	9.45	9.95	10.69	9.44	9.77
Median Rate*	7.82	8.19	8.90	7.35	7.97

* Per 100,000 Residents

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

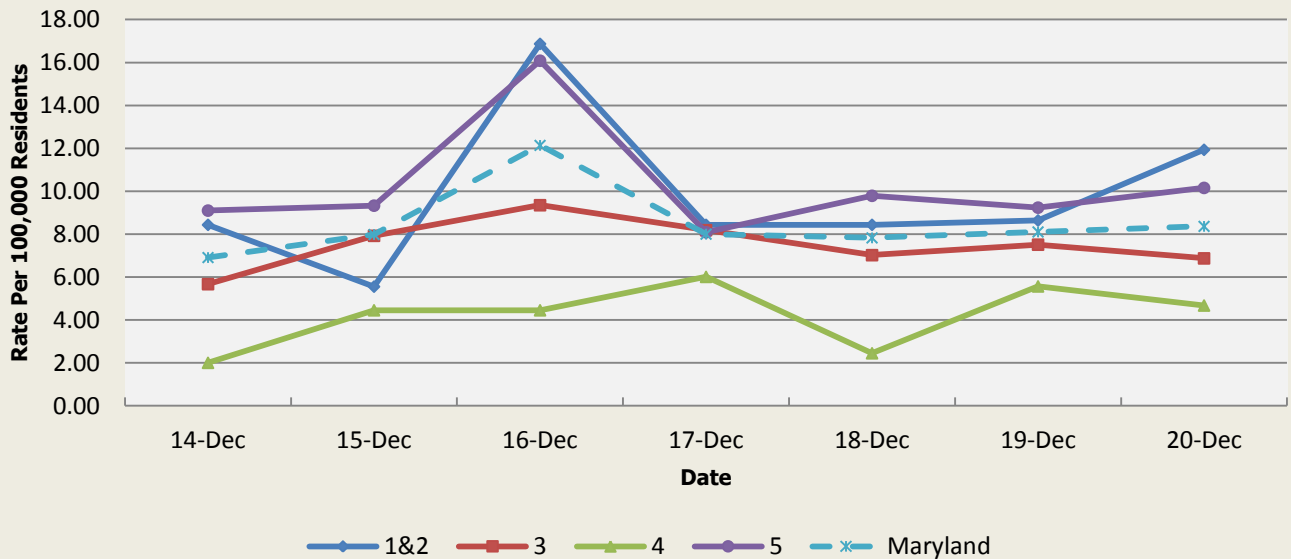


There was an appreciable increase above baseline in the rate of OTC flu medication sales on 12/16 (Regions 1&2, 3, 5) and 12/19 (Region 3).

OTC Sales Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	5.21	5.93	2.88	14.07	8.70
Median Rate*	4.12	4.96	2.45	11.77	7.17

* 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 12/16 (Regions 1&2, 5).

Thermometer Sales Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	5.79	4.89	3.42	8.36	6.16
Median Rate*	5.14	4.51	3.12	7.77	5.72

* 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 2, 2014, the WHO-confirmed global total (2003-2014) of human cases of H5N1 avian influenza virus infection stands at 688, of which 393 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 57%.

H5N1 (EGYPT): 17 Dec 2014 An Egyptian woman died on [Wed 17 Dec 2014] of bird flu [avian influenza] bringing the number of deaths of bird flu to 9 cases since the beginning of the year [2014], Al-Masry Al-Youm [the Arabic version of the newspaper Egypt Independent] reports. Read more: <http://www.promedmail.org/direct.php?id=20141219.3042397>

NATIONAL DISEASE REPORTS

SALMONELLA (MULTI-STATE): 16 Dec 2014 As of 15 Dec 2014, a total of 111 persons infected with the outbreak strains of Salmonella [enterica serotype] Enteritidis have been reported from 12 states. Read more: <http://www.promedmail.org/direct.php?id=20141218.3040150>

BOTULISM (CA): 17 Dec 2014 In November 2014, 3 people in Orange County, California were hospitalized with a type of botulism likely contracted from injecting contaminated black tar heroin, the Health Care Agency said Wed 17 Dec 2014. Read more: <http://www.promedmail.org/direct.php?id=20141218.3041400>

LISTERIA (MULTI-STATE): 18 Dec 2014 The Minnesota Departments of Health and Agriculture are working with the Centers for Disease Control and Prevention (CDC) and the US Food and Drug Administration on a multi-state outbreak of listeriosis linked to eating caramel apples. Read more: <http://www.promedmail.org/direct.php?id=20141219.3044758>

INTERNATIONAL DISEASE REPORTS

EBOLA (MULTI-COUNTRY): 17 Dec 2014 WHO Ebola Response Roadmap Situation Report. Read more: <http://www.promedmail.org/direct.php?id=20141218.3040373> (click through to apps.who.int link)

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.

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/>

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

