



September 12, 2014

**Public Health Preparedness and Situational Awareness Report: #2014:36**  
**Reporting for the week ending 09/06/14 (MMWR Week #36)**

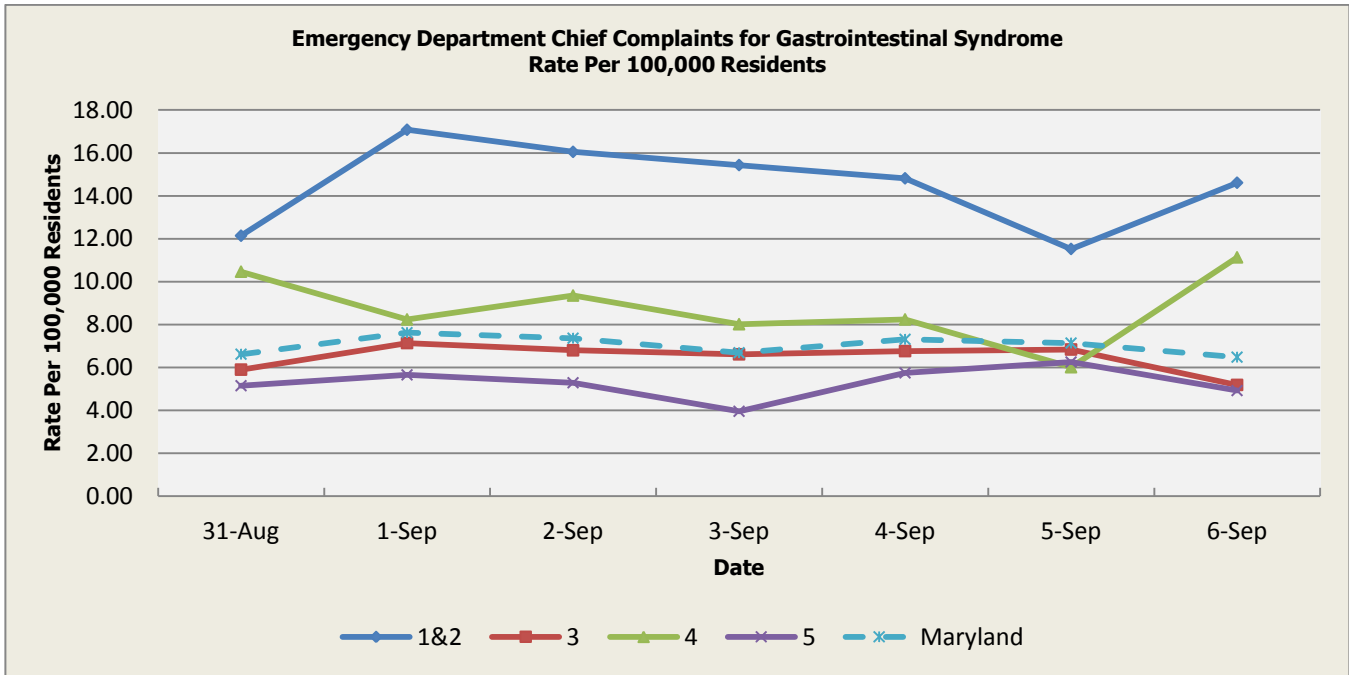
**CURRENT HOMELAND SECURITY THREAT LEVELS**

**National: No Active Alerts**  
**Maryland: Level Two (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.

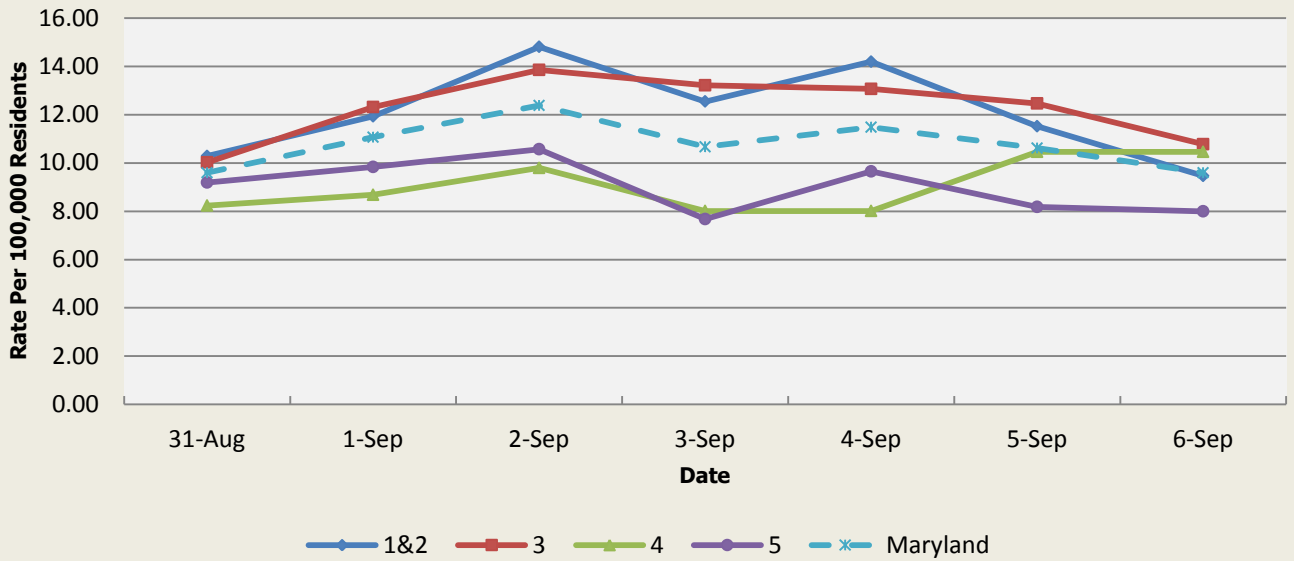


There were no GI outbreaks reported this week.

Gastrointestinal Syndrome Baseline Data January 1, 2010 - May 10, 2014					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	13.19	14.11	15.38	10.33	12.71
Median Rate*	13.17	14.01	14.69	10.25	12.61

\* Per 100,000 Residents

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

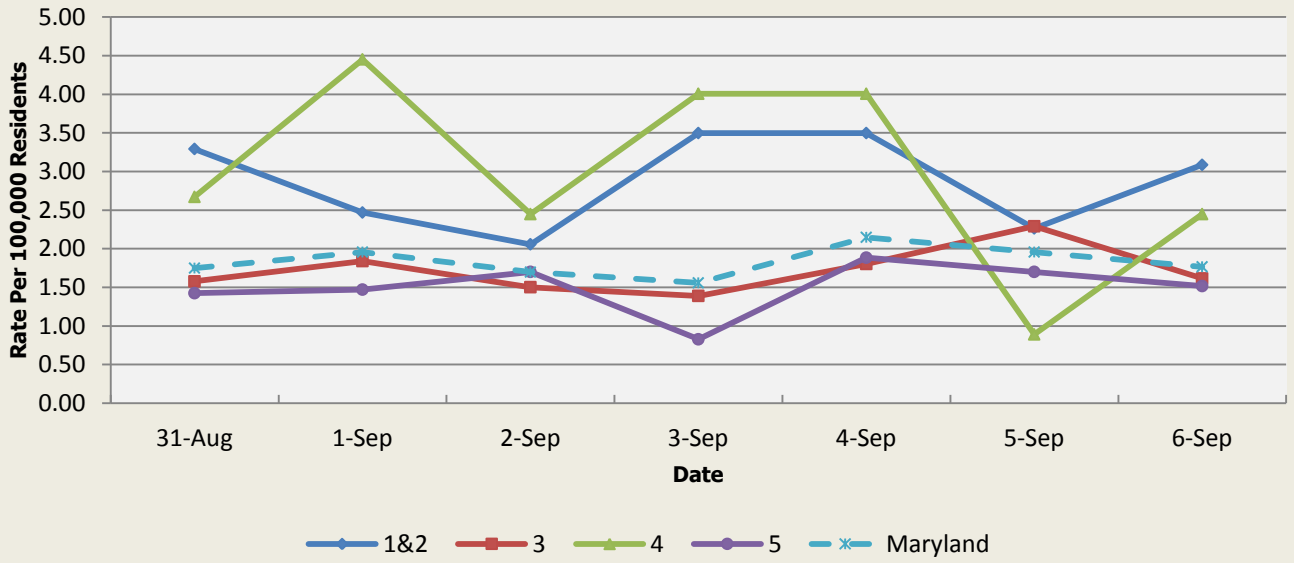


There were two respiratory outbreaks reported this week: 1 outbreak of pertussis associated with a private home in Region 4, and 1 outbreak of legionellosis associated with a prison in Regions 1&2.

Respiratory Syndrome Baseline Data January 1, 2010 - May 10, 2014					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	12.04	13.08	13.67	9.69	11.76
Median Rate*	11.73	12.71	13.13	9.42	11.53

\* Per 100,000 Residents

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

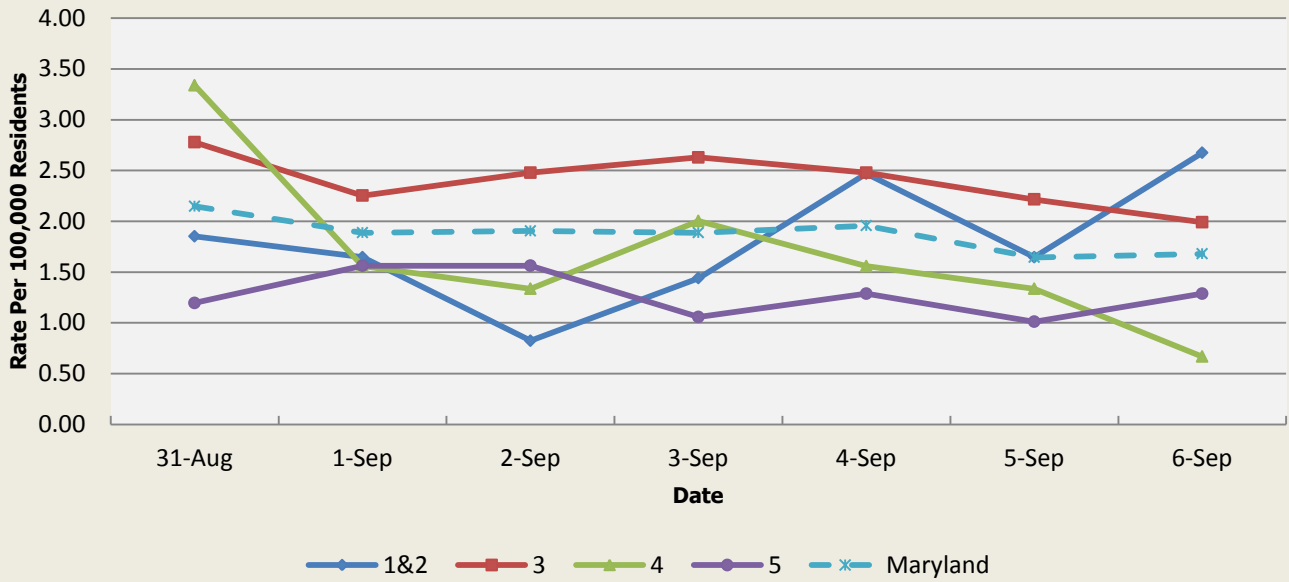


There were no fever outbreaks reported this week.

Fever Syndrome Baseline Data January 1, 2010 - May 10, 2014					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.24	3.56	3.81	3.11	3.38
Median Rate*	3.09	3.46	3.78	3.03	3.27

Per 100,000 Residents

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



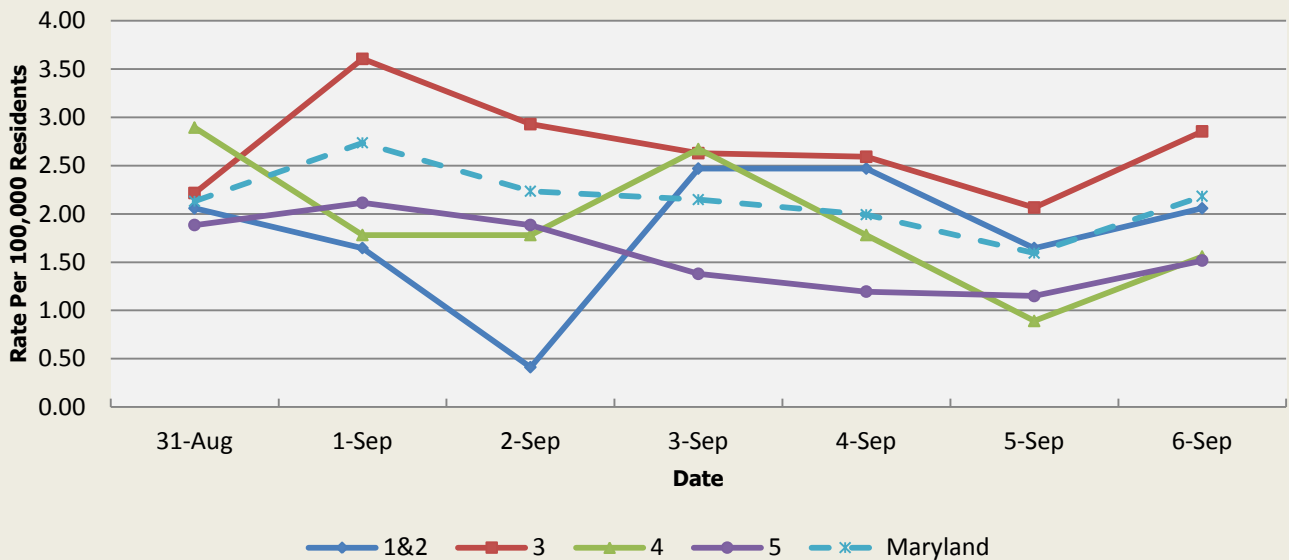
There were no localized lesion outbreaks reported this week.

**Localized Lesion Syndrome Baseline Data  
January 1, 2010 - May 10, 2014**

Health Region	1&2	3	4	5	Maryland
Mean Rate*	1.31	1.97	2.03	1.05	1.56
Median Rate*	1.03	1.92	2.00	1.01	1.52

\* Per 100,000 Residents

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



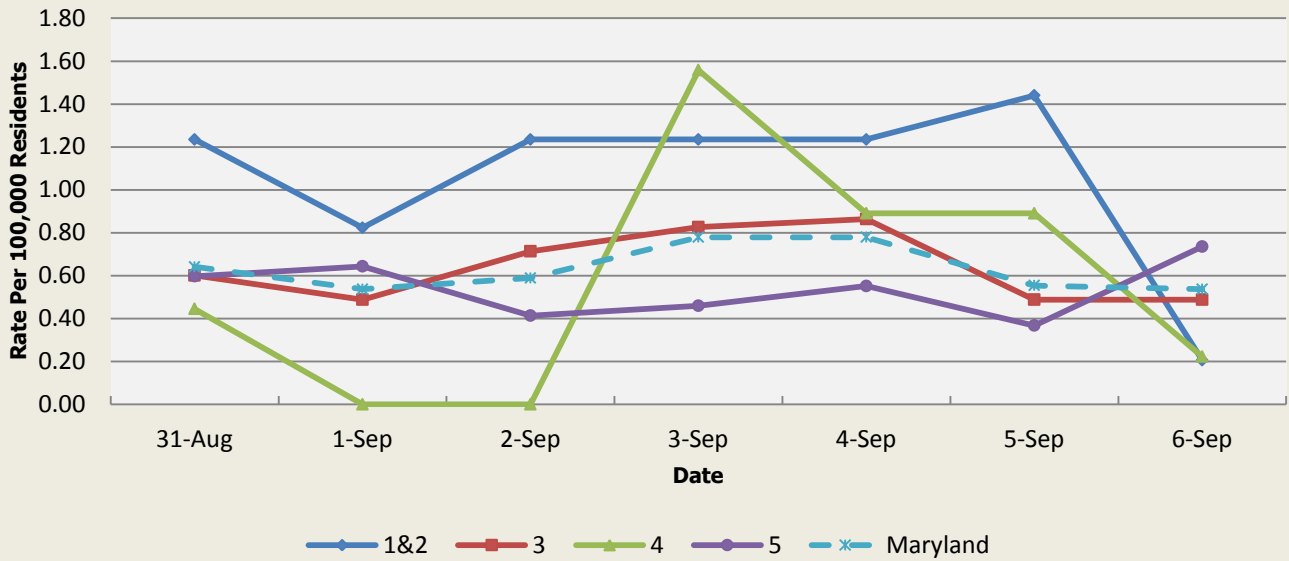
There were 4 rash outbreaks reported this week: 2 outbreaks of scabies in nursing homes (Region 3 and Region 5), 1 outbreak of scabies associated with an adult day care center (Region 3), and 1 outbreak of hand, foot, and mouth disease associated with a daycare center (Region 3).

**Rash Syndrome Baseline Data  
January 1, 2010 - May 10, 2014**

Health Region	1&2	3	4	5	Maryland
Mean Rate*	1.42	1.73	1.76	1.09	1.46
Median Rate*	1.34	1.65	1.78	1.06	1.40

\* Per 100,000 Residents

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



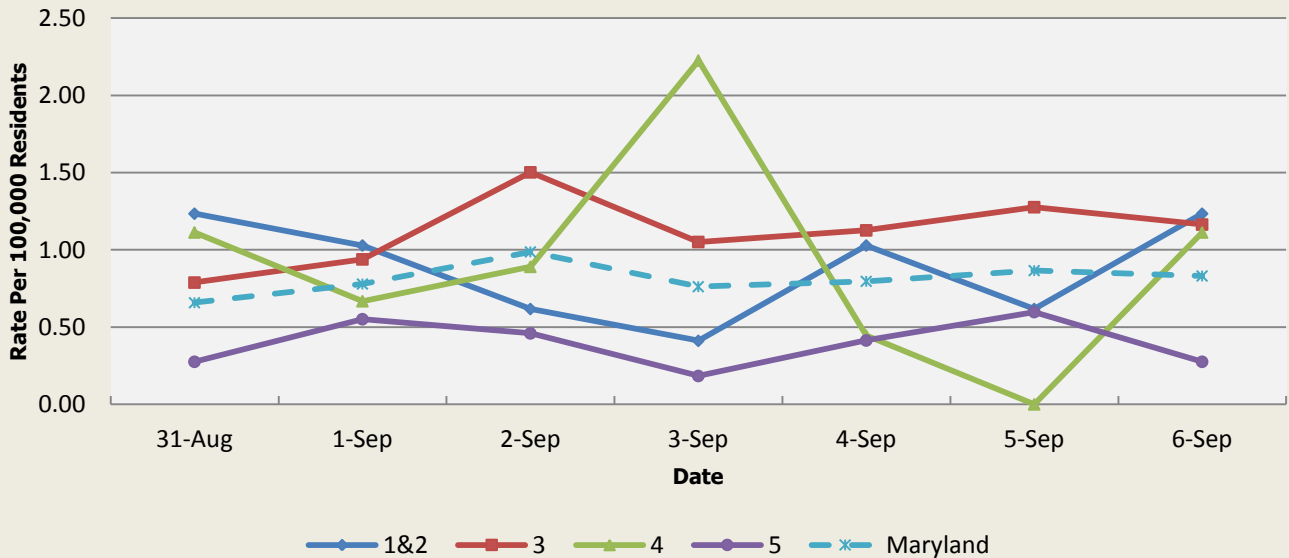
There were no neurological outbreaks reported this week.

**Neurological Syndrome Baseline Data  
January 1, 2010 - May 10, 2014**

Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.60	0.62	0.59	0.42	0.54
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 - May 10, 2014**

Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.81	0.94	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**

There was not a significant increase above baseline in the rate of ED visits for Botulism-like Syndrome.

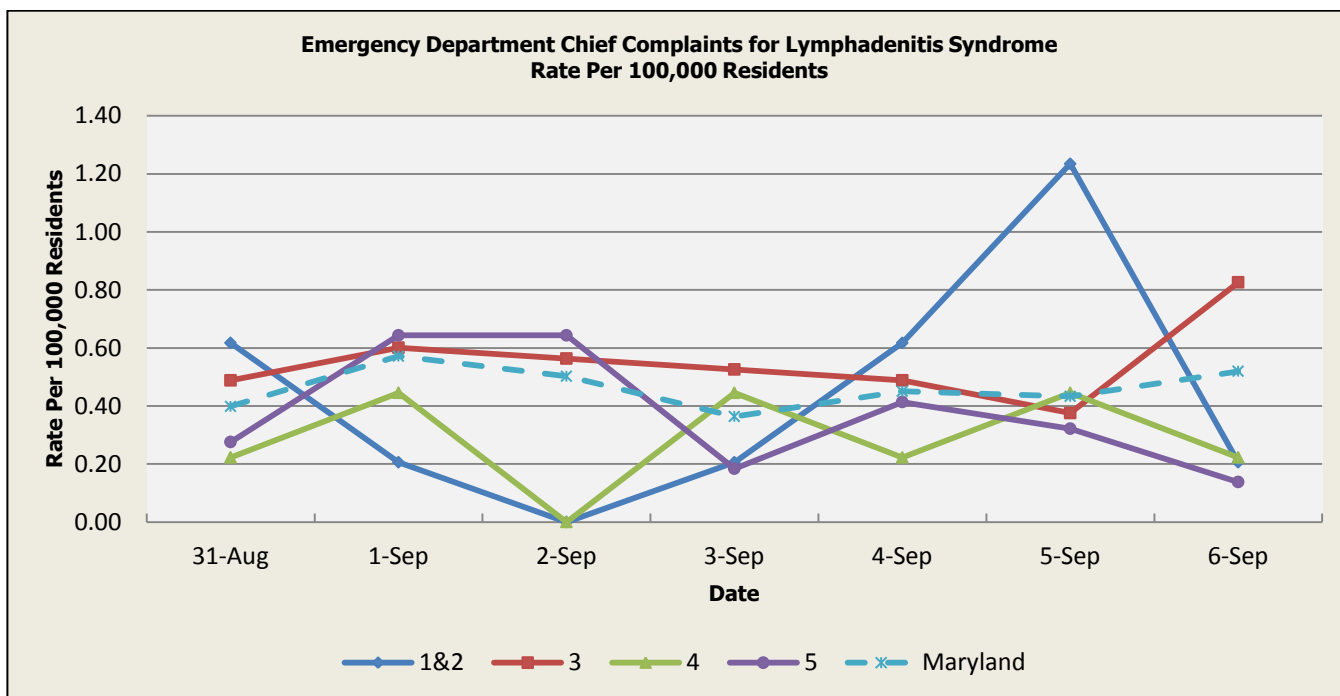
<b>Botulism-like Syndrome Baseline Data January 1, 2010 - May 10, 2014</b>					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.06	0.04	0.04	0.03	0.04
Median Rate*	0.00	0.04	0.00	0.00	0.03

\* Per 100,000 Residents

There was not a significant increase above baseline in the rate of ED visits for Hemorrhagic Illness Syndrome.

<b>Hemorrhagic Illness Syndrome Baseline Data January 1, 2010 - May 10, 2014</b>					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.03	0.03	0.02	0.03	0.03
Median Rate*	0.00	0.04	0.00	0.00	0.02

\* Per 100,000 Residents



There were no lymphadenitis outbreaks reported this week. However, Region 1&2 had an increase in lymphadenitis syndrome ED visits above the historical baseline on September 5, 2014.

<b>Lymphadenitis Syndrome Baseline Data January 1, 2010 - May 10, 2014</b>					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.33	0.31	0.36	0.23	0.31
Median Rate*	0.21	0.30	0.22	0.23	0.31

\* Per 100,000 Residents

## MARYLAND REPORTABLE DISEASE SURVEILLANCE

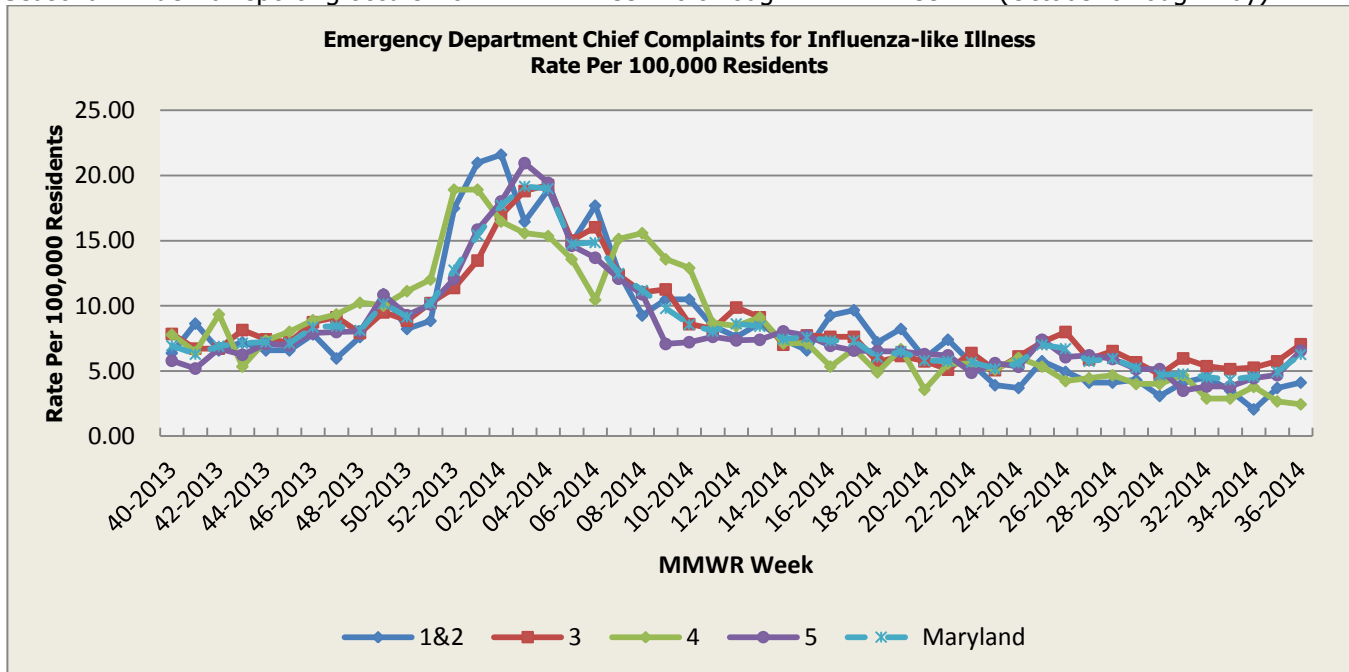
Condition	Counts of Reported Cases					
	August			Cumulative (Year to Date)**		
	2014	Mean*	Median*	2014	Mean*	Median*
<b>Vaccine-Preventable Diseases</b>	<b>2014</b>	<b>Mean*</b>	<b>Median*</b>	<b>2014</b>	<b>Mean*</b>	<b>Median*</b>
Aseptic meningitis	31	58.2	58	221	304	308
Meningococcal disease	0	0.8	1	5	5.6	6
Measles	0	0.4	0	0	1.6	1
Mumps	0	0.4	0	1	21.2	6
Rubella	0	0.2	0	1	1	0
Pertussis	15	20.8	14	84	123.6	93
<b>Foodborne Diseases</b>	<b>2014</b>	<b>Mean*</b>	<b>Median*</b>	<b>2014</b>	<b>Mean*</b>	<b>Median*</b>
Salmonellosis	115	134.4	133	508	641.2	646
Shigellosis	16	23	17	133	140.6	94
Campylobacteriosis	43	69.8	69	401	406.2	400
Shiga toxin-producing Escherichia coli (STEC)	4	9.4	9	48	45	43
Listeriosis	1	3.8	2	8	10.6	11
<b>Arboviral Diseases</b>	<b>2014</b>	<b>Mean*</b>	<b>Median*</b>	<b>2014</b>	<b>Mean*</b>	<b>Median*</b>
West Nile Fever	1	3.6	2	1	4.4	2
Lyme Disease	33	119.6	107	457	1064.6	1050
<b>Emerging Infectious Diseases</b>	<b>2014</b>	<b>Mean*</b>	<b>Median*</b>	<b>2014</b>	<b>Mean*</b>	<b>Median*</b>
Chikungunya	5	0	0	20	0	0
Dengue Fever	0	0	0	0	0	0
<b>Other</b>	<b>2014</b>	<b>Mean*</b>	<b>Median*</b>	<b>2014</b>	<b>Mean*</b>	<b>Median*</b>
Legionellosis	16	17.4	17	77	86.8	85

\*Timeframe of 2009 - 2013

\*\*Includes January through August

## SYNDROMIC INFLUENZA SURVEILLANCE

Seasonal Influenza reporting occurs from MMWR Week 40 through MMWR Week 22 (October through May).



Influenza-like Illness Baseline Data Week 1 2010 - Week 19 2014					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	9.83	4.00	10.54	4.42	5.16
Median Rate*	8.02	3.23	8.68	3.47	4.23

\* Per 100,000 Residents

There was not a significant increase above baseline in the rate of influenza related over-the-counter medication sales.

OTC Sales Baseline Data January 1, 2010 - May 10, 2014					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	5.08	5.80	2.81	13.84	8.54
Median Rate*	3.91	4.69	2.45	11.95	6.88

\* Per 100,000 Residents

There was not a significant increase above baseline in the rate of thermometer sales.

Thermometer Sales Baseline Data January 1, 2010 - May 10, 2014					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	5.76	4.88	3.43	8.37	6.16
Median Rate*	5.14	4.47	3.12	7.63	5.62

\* 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 24, 2014, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 650, of which 386 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 59%.

**AVIAN INFLUENZA (H5N8):** South Korea will soon remove most of the restrictions on farms affected by avian influenza since the 1st outbreak was confirmed earlier in the year, the government said on Wednesday [3 Sep 2014]. Read more: <http://www.promedmail.org/direct.php?id=20140905.2751562>

**AVIAN INFLUENZA (H7N9):** China has confirmed a fatal H7N9 avian flu case in a 66 year old woman, Hong Kong's Centre for Health Protection (CHP) said today [3 Sep 2014]. Read more: <http://www.promedmail.org/direct.php?id=20140904.2748478>

## **NATIONAL DISEASE REPORTS**

There are no national disease reports for MMWR Week 36

## **INTERNATIONAL DISEASE REPORTS**

**ANTHRAX (RUSSIA):** 1 Sep 2014 Two employees of a dairy farm in Rodionovo-Nesevetayskom district of Rostov region were hospitalized with a diagnosis of anthrax. Read more: <http://www.promedmail.org/direct.php?id=20140902.2740462>

**ANTHRAX (KENYA):** 3 Sep 2014 Bomet residents have been warned against consuming dead animals' meat, following an outbreak of anthrax disease. Read more: <http://www.promedmail.org/direct.php?id=20140903.2746572>

**ANTHRAX (UZBEKISTAN):** 4 Sep 2014 Patients with suspected anthrax, who were hospitalized last week [week of 25 Aug 2014], are now being treated at the central district hospital of the Uzunsky district of the Surxondaryo region of Uzbekistan. Patients contracted anthrax while slaughtering cattle. Read more: <http://www.promedmail.org/direct.php?id=20140908.2758092>

**ANTHRAX (MOLDOVA):** 5 Sep 2014 A total of 6 workers of a livestock farm in the Cahul district of Moldova have been hospitalized on the suspicion of contracting anthrax, the national Healthcare Ministry said on Friday [5 Sep 2014]. Read more: <http://www.promedmail.org/direct.php?id=20140905.2752261>

**EBOLA (GUINEA, LIBERIA, SENEGAL, SIERRA LEONE):** 05 Sep 2014 The outbreak continues to expand geographically. For the 1st time since the outbreak began, the majority of cases (55.3 per cent) have been reported outside Gueckedou and Macenta (Guinea); Lofa (Liberia), and Kenema and Kailahun (Sierra Leone); 3 districts in Guinea have been affected for the 1st time. Read more: <http://www.promedmail.org/direct.php?id=20140905.2751765>

**EBOLA (DRC):** 06 Sep 2014 The Democratic Republic of Congo upped its death toll from Ebola [virus disease] on [Sat 6 Sep 2014] to 32 but insisted the outbreak, separate from an epidemic raging in west Africa, could be contained in its remote forest hotspot. Read more: <http://www.promedmail.org/direct.php?id=20140908.2756041>

## **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/>. You can follow us on Facebook at [www.facebook.com/MarylandOPR](http://www.facebook.com/MarylandOPR), and on Twitter @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.



Zachary Faigen, MSPH, REHS  
Biosurveillance Epidemiologist  
Office of Preparedness and Response  
Maryland Department of Health & Mental Hygiene  
300 W. Preston Street, Suite 202  
Baltimore, MD 21201  
Office: 410-767-6745  
Fax: 410-333-5000  
Email: [Zachary.Faigen@maryland.gov](mailto:Zachary.Faigen@maryland.gov)

Anikah H. Salim, MPH, CPH  
Biosurveillance Epidemiologist  
Office of Preparedness and Response  
Maryland Department of Health & Mental Hygiene  
300 W. Preston Street, Suite 202  
Baltimore, MD 21201  
Office: 410-767-2074  
Fax: 410-333-5000  
Email: [Anikah.Salim@maryland.gov](mailto:Anikah.Salim@maryland.gov)

Elizabeth Humes, MPH  
Biosurveillance Epidemiologist  
Office of Preparedness and Response  
Maryland Department of Health & Mental Hygiene  
300 W. Preston Street, Suite 202  
Baltimore, MD 21201  
Office: 410-767-5668  
Fax: 410-333-5000  
Email: [elizabeth.humes@maryland.gov](mailto:elizabeth.humes@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	Cecil County Dorchester County Kent 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

