



June 17, 2016

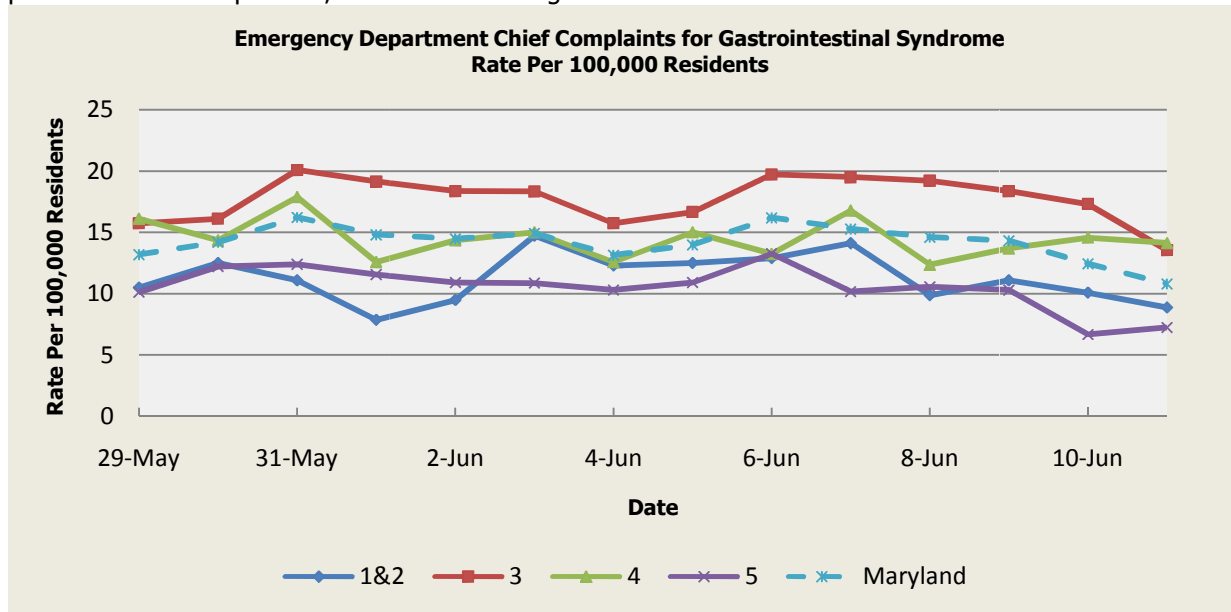
**Public Health Preparedness and Situational Awareness Report: #2016:23
Reporting for the week ending 6/11/16 (MMWR Week #23)**

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):

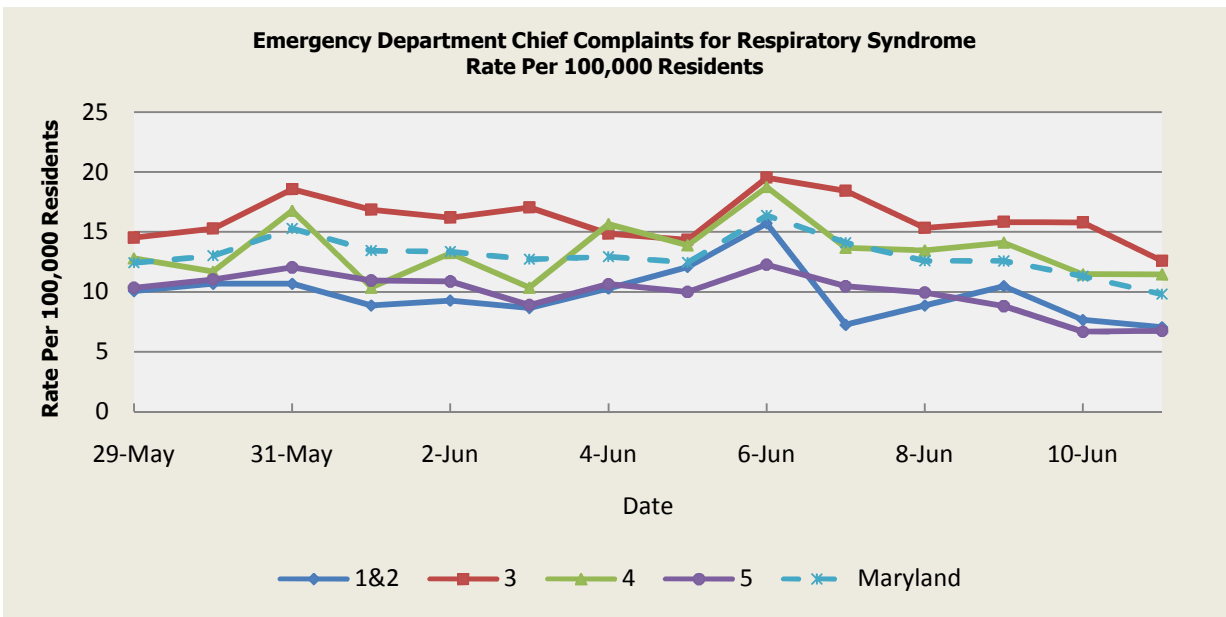
Graphical representation is provided for all syndromes (excluding the "Other" category; see Appendix 1) by Health and Medical Regions (See Appendix 2). Emergency department chief complaint data is presented as rates per 100,000 residents using data from the 2010 census.



There were two (2) gastrointestinal illness outbreaks reported this week: 1 outbreak of gastroenteritis associated with a Daycare Center (Region 5), 1 outbreak of gastroenteritis/foodborne associated with a Religious Facility (Region 3).

Gastrointestinal Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	12.94	14.88	15.42	10.31	13.01
Median Rate*	12.70	14.47	14.80	10.17	12.75

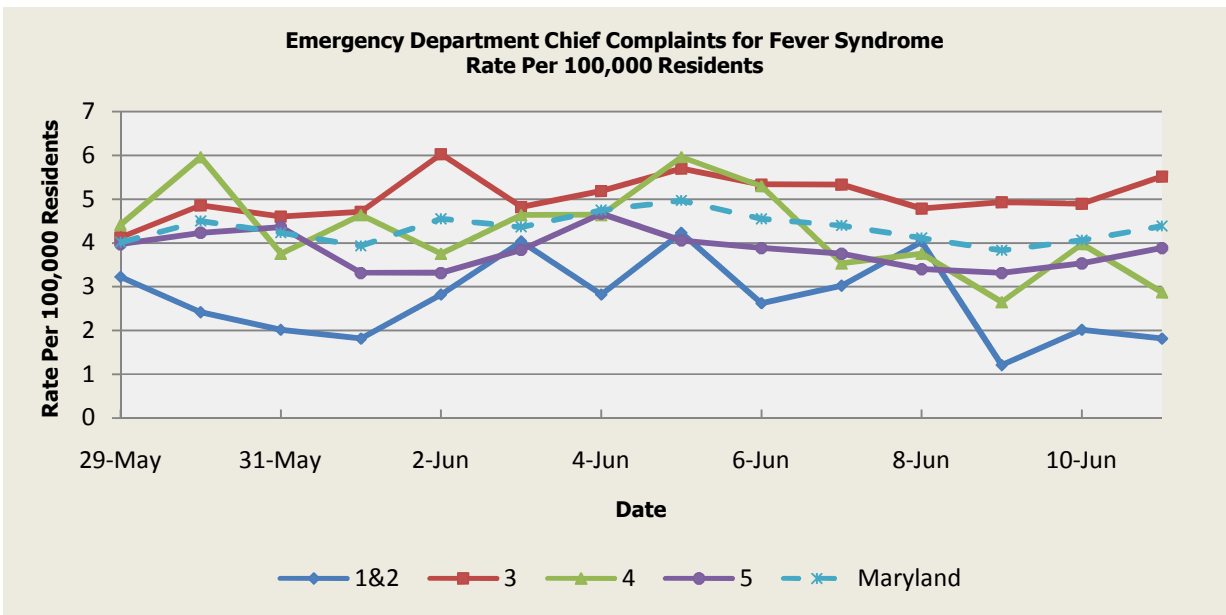
* Per 100,000 Residents



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*	11.99	14.12	14.04	9.94	12.34
Median Rate*	11.70	13.37	13.69	9.52	11.79

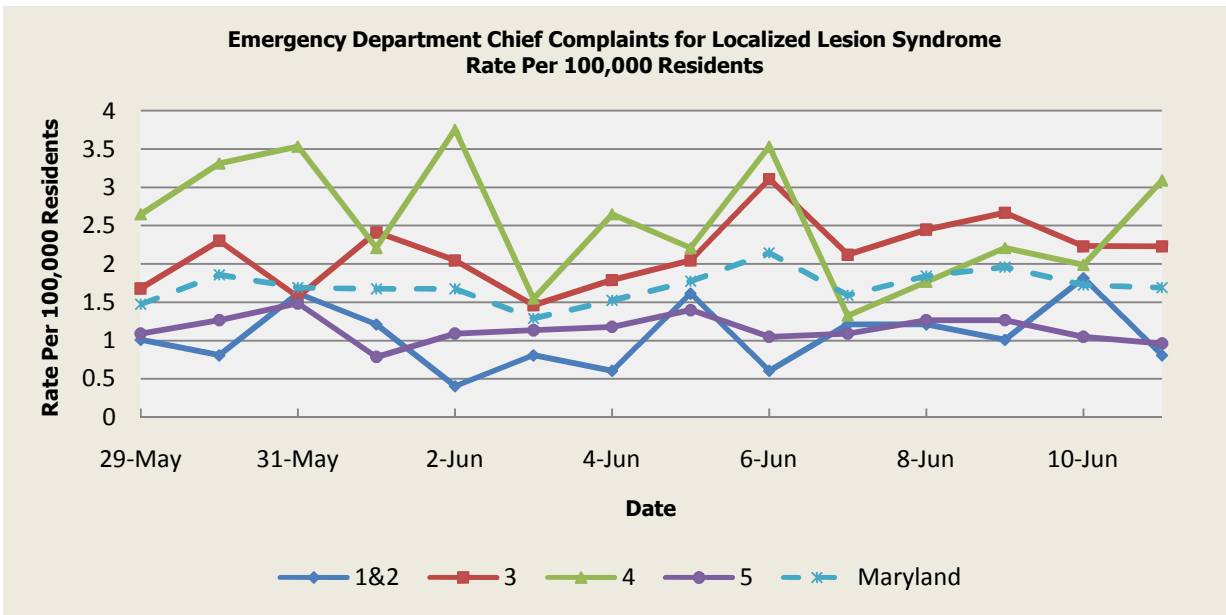
* Per 100,000 Residents



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*	3.07	3.80	3.93	3.09	3.48
Median Rate*	3.02	3.62	3.75	2.97	3.35

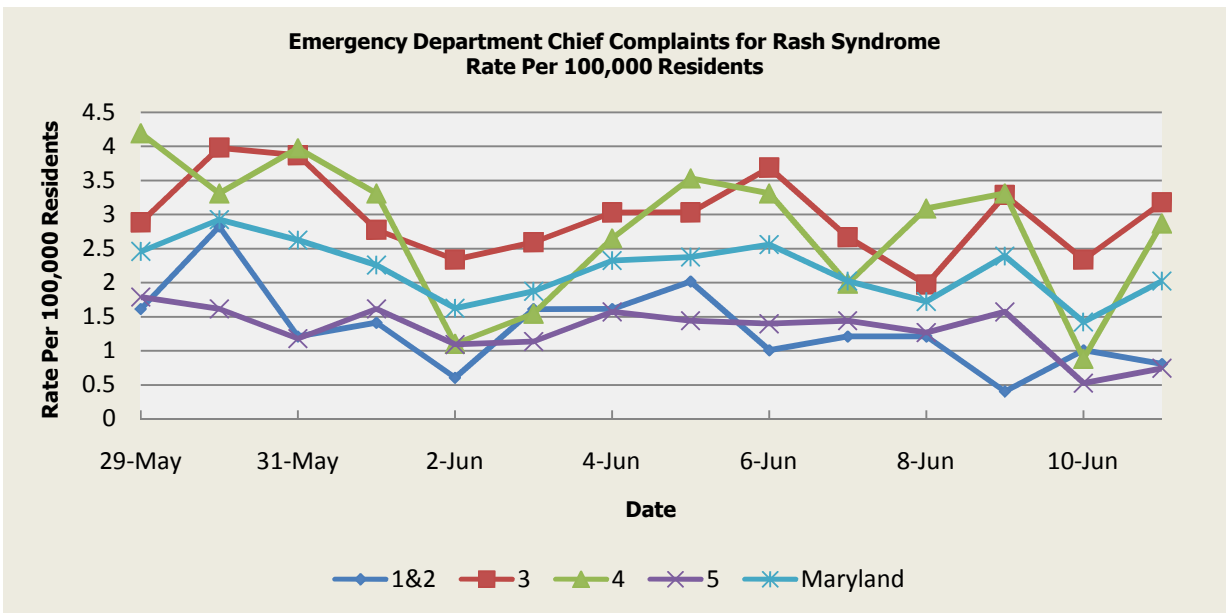
Per 100,000 Residents



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*	1.07	1.91	2.03	0.98	1.49
Median Rate*	1.01	1.86	1.99	0.92	1.44

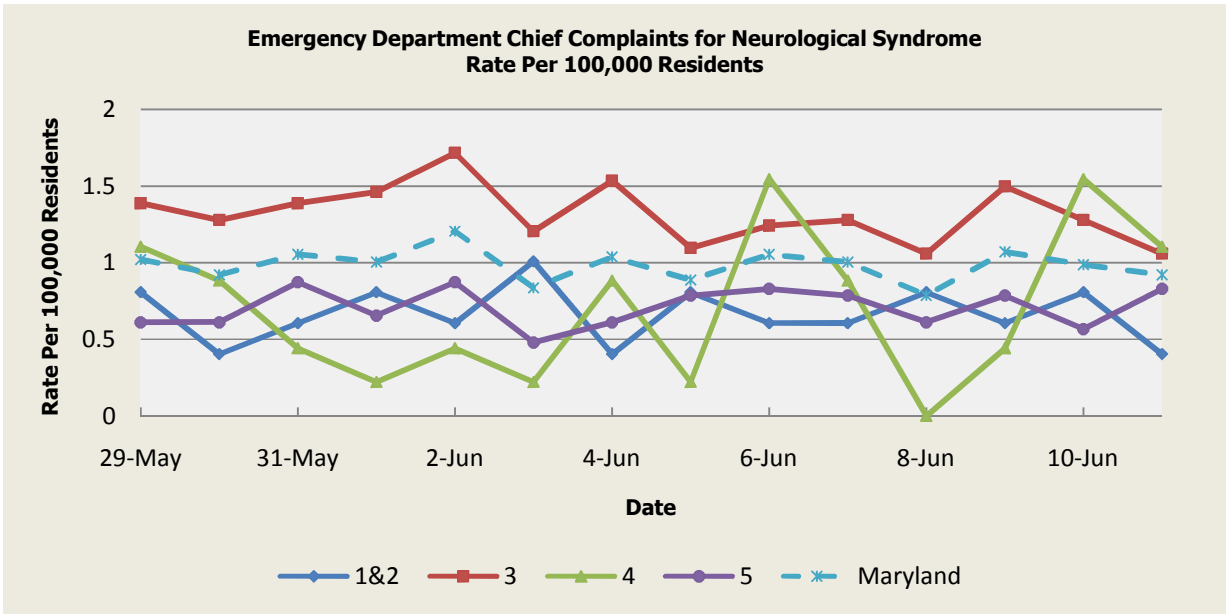
* Per 100,000 Residents



There were six (6) rash illness outbreaks reported this week: 5 outbreaks of Hand, Foot and Mouth Disease associated with Daycare Centers (4 Region 3 and 1 Region 5), 1 outbreak of Scabies in an Assisted Living Facility (Region 4).

Rash Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	1.30	1.75	1.75	1.04	1.44
Median Rate*	1.21	1.68	1.77	1.00	1.39

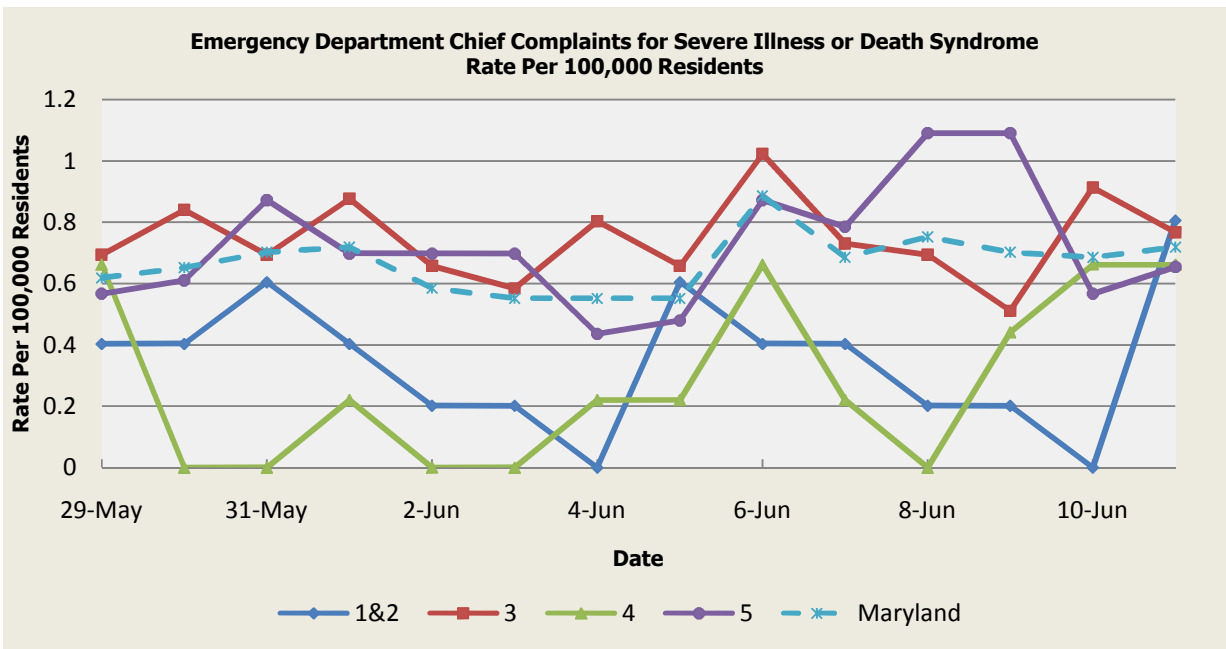
* Per 100,000 Residents



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*	0.63	0.73	0.65	0.48	0.62
Median Rate*	0.60	0.66	0.66	0.44	0.57

* Per 100,000 Residents

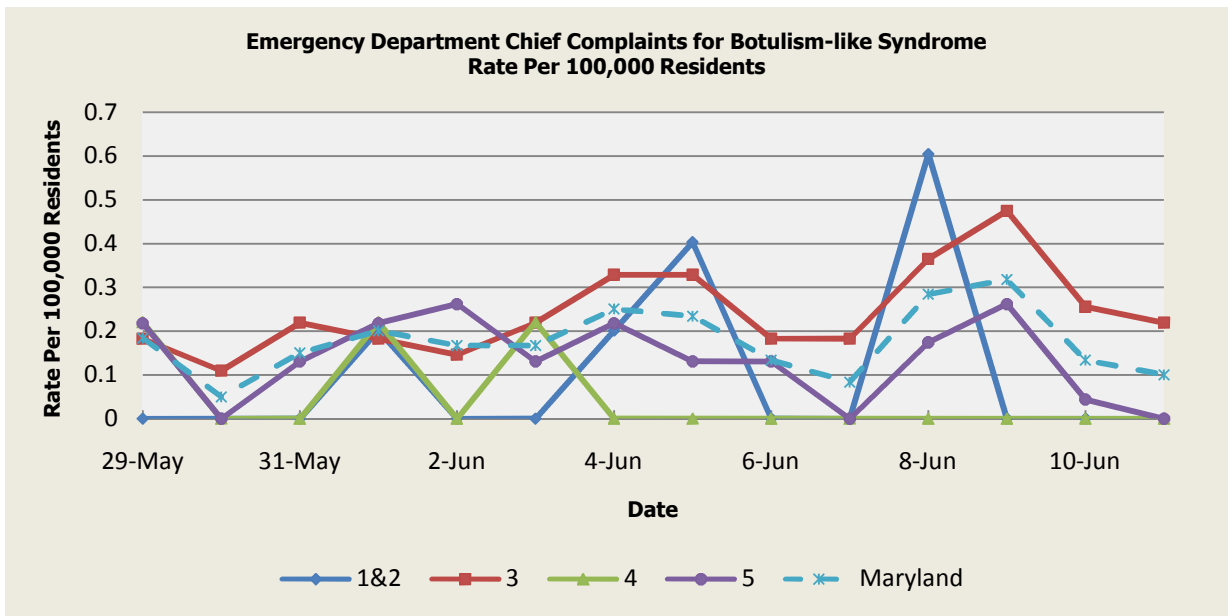


There were no severe illness or death outbreaks reported this week.

Severe Illness or Death Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.70	0.95	0.84	0.44	0.73
Median Rate*	0.60	0.91	0.88	0.44	0.72

* Per 100,000 Residents

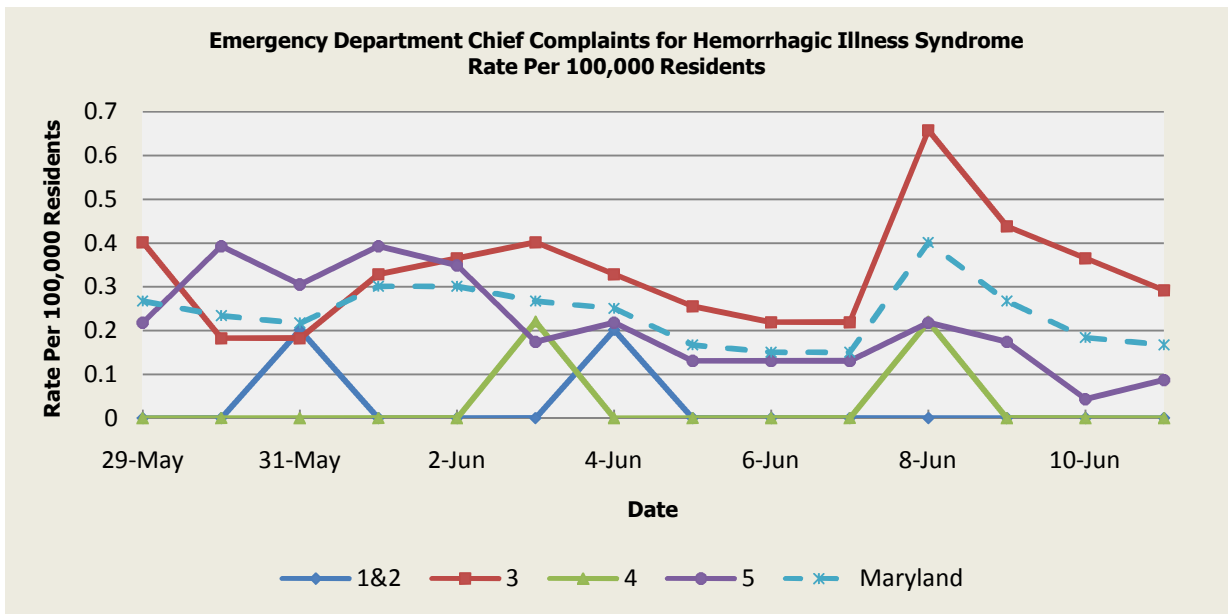
SYNDROMES RELATED TO CATEGORY A AGENTS



There was an appreciable increase above baseline in the rate of ED visits for Botulism-like Syndrome on 5/29 (Regions 3,4,5), 5/31 (Regions 3,5), 6/1 (Regions 1&2,3,4,5), 6/2 (Regions 3,5), 6/3 (Regions 3,4,5), 6/4 (Regions 1&2,3,5), 6/5 (Regions 1&2,3,5), 6/6 (Regions 3,5), 6/7 (Region 3), 6/8 (Regions 1&2,3,5) 6/9 (Regions 3,5), 6/10 (Region 3) and 6/11 (Region 3). 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	0.08	0.04	0.05	0.06
Median Rate*	0.00	0.04	0.00	0.04	0.05

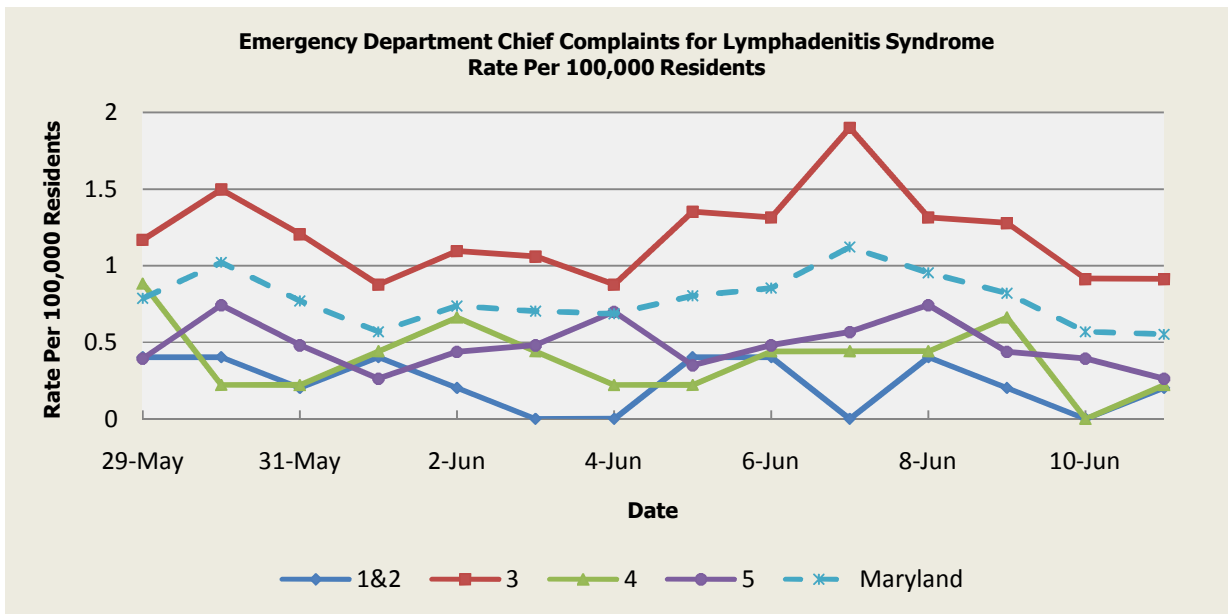
* Per 100,000 Residents



There was an appreciable increase above baseline in the rate of ED visits for Hemorrhagic Illness Syndrome on 5/29 (Regions 3,5), 5/31 (Regions 1&2,5), 6/1 (Regions 3,5), 6/2 (Regions 3,5), 6/3 (Regions 3,5), 6/4 (Regions 1&2,3,5), 6/5 (Regions 3,5), 6/6 (Regions 3,5), 6/7 (Regions 3,5), 6/8 (Regions 3,5), 6/9 (Regions 3,5), 6/10 (Region 3), and 6/11 (Region 3). 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	0.10	0.03	0.07	0.08
Median Rate*	0.00	0.04	0.00	0.04	0.03

* Per 100,000 Residents



There was an appreciable increase above baseline in the rate of ED visits for Lymphadenitis Syndrome on 5/29 (Regions 3,4), 5/30 (Regions 3,5), 5/31 (Region 3), 6/2 (Region 3), 6/3 (Region 3), 6/4 (Region 5), 6/5 (Region 3), 6/6 (Region 3), 6/7 (Region 3), 6/8 (Regions 3,5), and 6/9 (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	0.47	0.34	0.29	0.38
Median Rate*	0.20	0.37	0.22	0.26	0.32

* Per 100,000 Residents

MARYLAND REPORTABLE DISEASE SURVEILLANCE

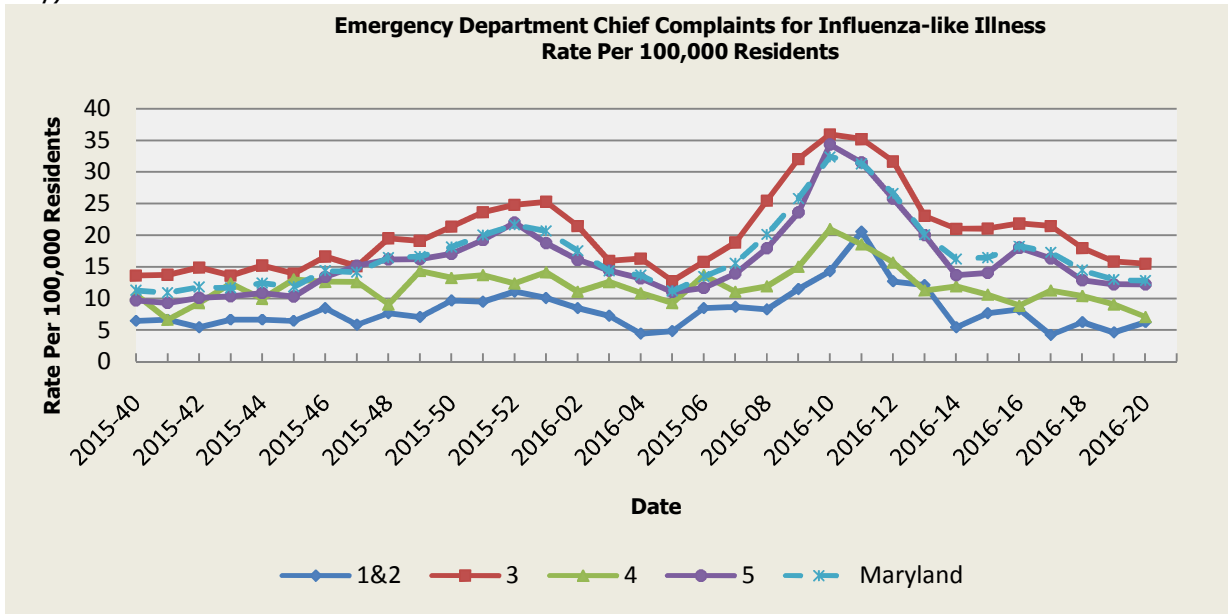
Condition	Counts of Reported Cases‡					
	April			Cumulative (Year to Date)**		
Vaccine-Preventable Diseases	2016	Mean*	Median*	2016	Mean*	Median*
Aseptic meningitis	2	10.8	10	131	156	144
Meningococcal disease	0	0	0	2	4.2	4
Measles	0	0.2	0	2	2.6	2
Mumps	0	0.8	1	7	29.4	7
Rubella	0	0.4	0	1	1.6	2
Pertussis	3	6.4	5	82	109.6	119
Foodborne Diseases	2015	Mean*	Median*	2015	Mean*	Median*
Salmonellosis	12	31.8	31	215	298.8	310
Shigellosis	1	4.8	5	41	77.8	87
Campylobacteriosis	20	29.4	30	271	253.2	249
Shiga toxin-producing Escherichia coli (STEC)	2	5.6	5	50	47.8	43
Listeriosis	0	0.6	0	3	4.4	4
Arboviral Diseases	2015	Mean*	Median*	2015	Mean*	Median*
West Nile Fever	0	0.2	0	0	0.2	0
Lyme Disease	30	120.2	129	404	501.4	511
Emerging Infectious Diseases	2015	Mean*	Median*	2015	Mean*	Median*
Chikungunya	0	0.4	0	3	4.2	0
Dengue Fever	1	0.2	0	15	5.4	5
Zika Virus***	0	0	0	23	0.2	0
Other	2015	Mean*	Median*	2015	Mean*	Median*
Legionellosis	5	5.2	4	47	49	47

‡ Counts are subject to change *Timeframe of 2011-2015 **Includes January through current month

***As of June 1, 2016, the total Maryland Confirmed Zika Virus Infections is 19.

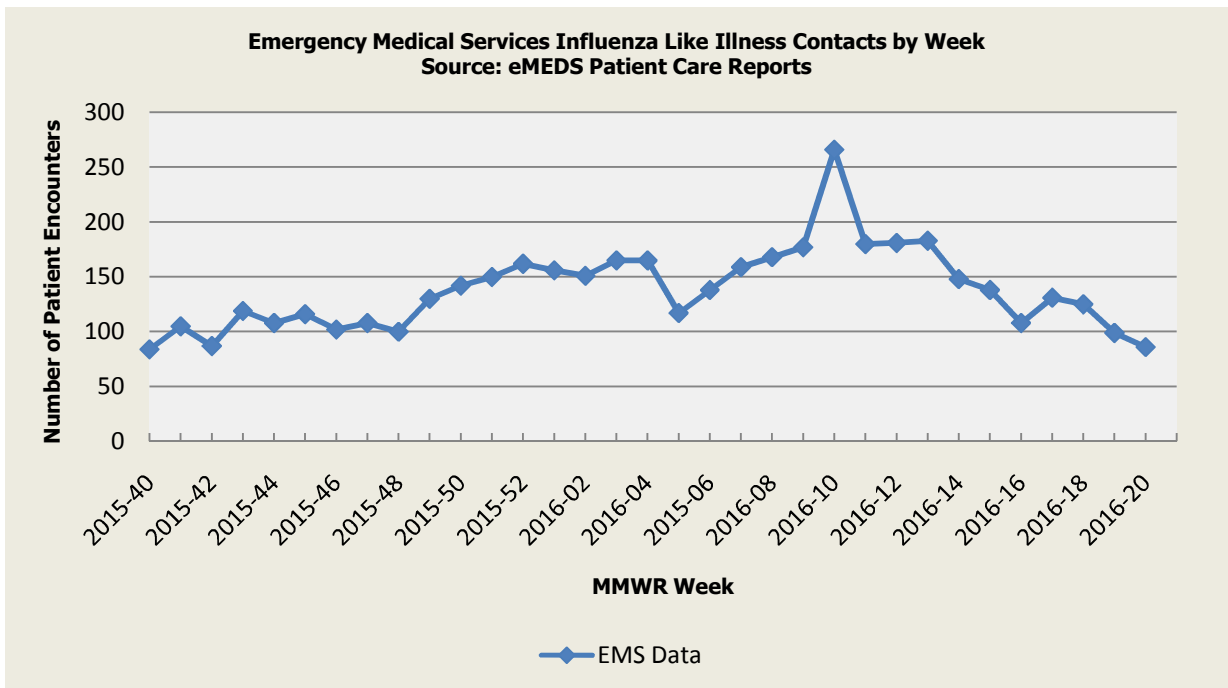
SYNDROMIC INFLUENZA SURVEILLANCE

Seasonal Influenza reporting occurs from MMWR Week 40 through MMWR Week 20 (October through May).

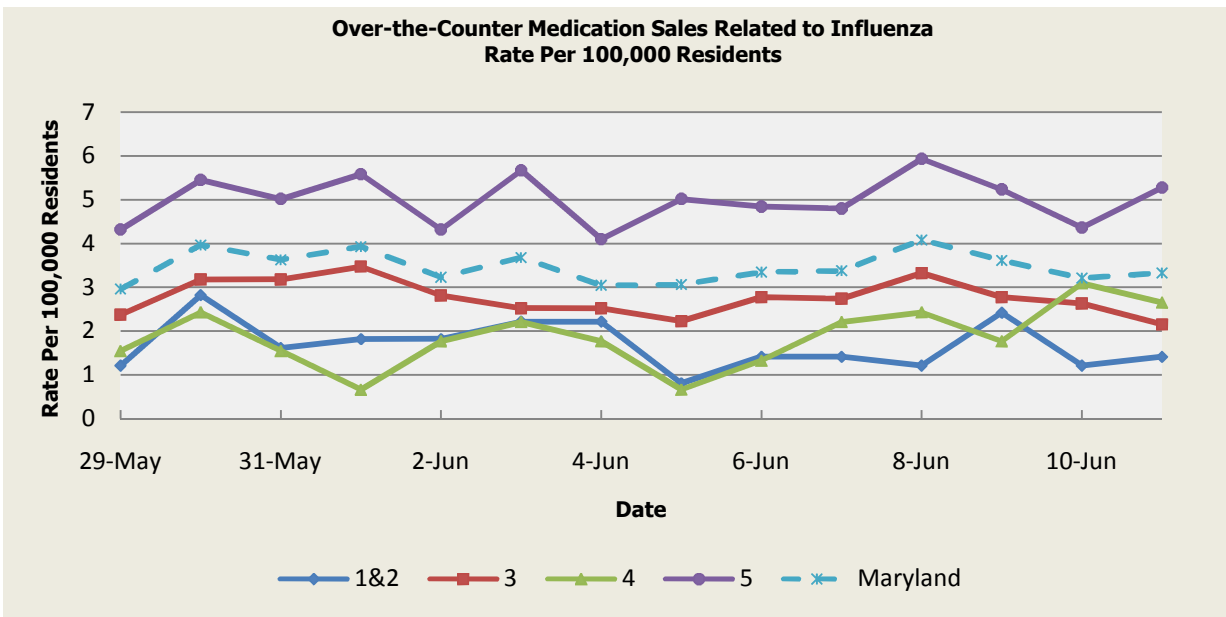


Influenza-like Illness Baseline Data Week 1 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	9.26	11.58	10.78	10.43	10.88
Median Rate*	7.66	8.99	9.05	8.03	8.72

* Per 100,000 Residents



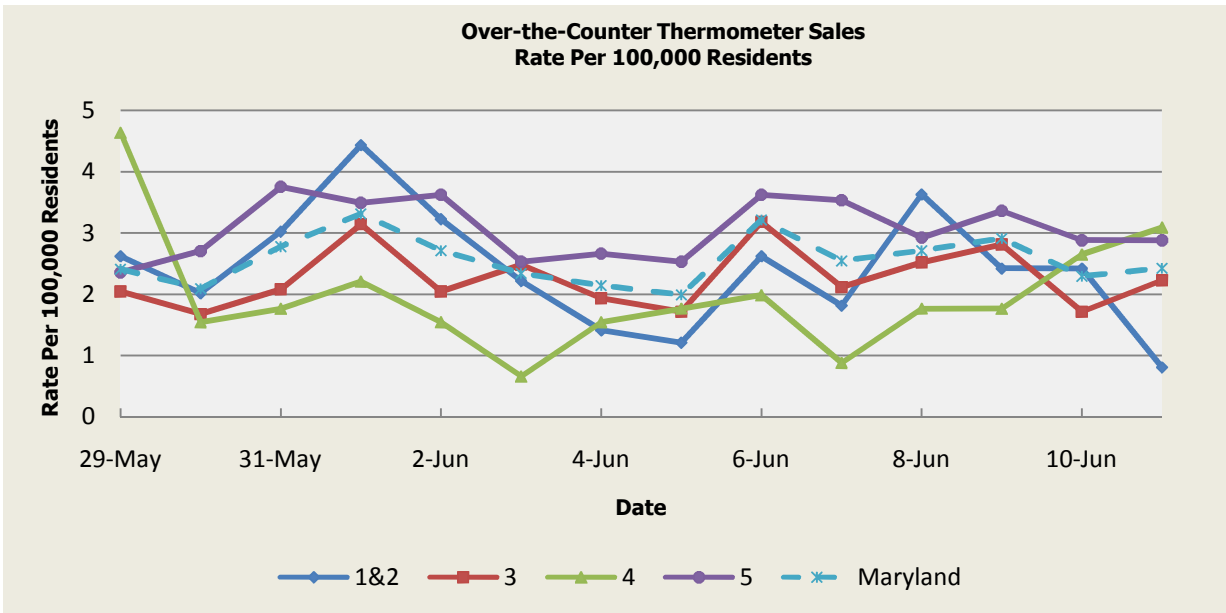
Disclaimer on eMEDS flu related data: This data is based on EMS Pre-hospital care reports where the EMS provider has selected "flu like illness" as a primary or secondary impression of a patient's illness. This impression is solely based on the signs and symptoms seen by the provider, not on any diagnostic 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.



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

OTC Sales Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.86	6.41	1.86	13.92	8.73
Median Rate*	3.02	5.30	1.55	11.35	7.13

* 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*	4.12	4.71	1.61	7.30	5.42
Median Rate*	3.63	4.35	1.55	6.68	4.97

* 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 May 9, 2016, the WHO-confirmed global total (2003-2016) of human cases of H5N1 avian influenza virus infection stands at 850, of which 449 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 53%.

Avian Influenza in Humans:

H7N9 (CHINA): 09 Jun 2016, The avian [influenza] strain that has killed 17 people in China may have originated in wild ducks, says a Singapore scientist. Proteins on the virus' shell appear to have come from the birds, said associate professor Gavin Smith of the Duke-NUS Graduate Medical School Emerging Infectious Diseases programme. This could have happened years, not months, ago. Read More: <http://www.promedmail.org/post/4278689>

H5N6 (CHINA): 10 Jun 2016, On 30 May 2016, the National Health and Family Planning Commission (NHFPC) of China notified WHO of one laboratory-confirmed case of human infection with avian influenza A(H5N6) virus. On 30 May 2016, the National Health and Family Planning Commission (NHFPC) of China notified WHO of one laboratory-confirmed case of human infection with avian influenza A(H5N6) virus. Read More: <http://www.promedmail.org/post/4275291>

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:

H7N3 (MEXICO): 09 Jun 2016, A new outbreak of highly pathogenic avian influenza (HPAI) has been reported in Mexico. The H7N3 strain of the flu was discovered at a commercial layers farm in Sayula, Jalisco. In total, of the 151 000 birds susceptible, 15 cases were reported. Read More: <http://www.promedmail.org/post/4273777>

NATIONAL DISEASE REPORTS

E. COLI EHEC (WASHINGTON): 10 Jun 2016, An *Escherichia coli* outbreak in King County, Washington has sickened at least 3 children under the age of 5, according to the county's public health department. 2 of them developed hemolytic uremic syndrome (HUS), a potentially life-threatening complication of enterohemorrhagic *E. coli* infections, and have been hospitalized. The 3rd child is recovering at home. The children reported eating fresh produce before becoming ill, but health officials have not yet determined the source of the outbreak. Read More: <http://www.promedmail.org/post/4279449>

E. COLI EHEC (COLORADO): 12 Jun 2016, A restaurant in Aurora, Colorado, closed at the request of public health officials [Fri 10 Jun 2016], because of an *E. coli* outbreak among its customers. Multiple media outlets in the area reported that Pho 75, on S. Havana Street, is part of an investigation into an *E. coli* O157 outbreak that had 4 confirmed victims as of [Sat 11 Jun 2016]. Read More: <http://www.promedmail.org/post/4284618>

SALMONELLOSIS (TEXAS): 13 Jun 2016, Seven Ajuua's Mexican Restaurant employees have tested positive for salmonella, but officials do not know whether they contracted the infection before or after the outbreak was caught by Ector County health officials. Ector County Health Department Director Gino Solla said the tests for the 7 employees came to the department Mon 13 Jun 2016, and the number of lab-confirmed tests has increased to 11 since the outbreak was confirmed on 6 Jun 2016. The number of probable cases, he added, was now at 23. Read More: <http://www.promedmail.org/post/4288680>

BOTULISM (MISSISSIPPI): 14 Jun 2016, Mississippi health officials have confirmed that 17 inmates at the federal prison in Yazoo City have been treated for botulism. At least 1 of the prisoners is in critical condition, authorities said. The outbreak has been linked to a homemade alcoholic drink that was brewed inside the prison and consumed, authorities said. Read More: <http://www.promedmail.org/post/4288676>

INTERNATIONAL DISEASE REPORTS

BRUCELLOSIS (CHINA): 12 Jun 2016, A Hong Kong woman has reportedly contracted the bacterial disease, brucellosis, after traveling to Mainland China, according to Hong Kong officials. On 19 May 2016, the Hong Kong Centre for Health Protection (CHP) recorded a case of brucellosis affecting a 51-year-old woman with underlying illnesses. Read More: <http://www.promedmail.org/post/4288677>

BOTULISM (CHINA): 12 Jun 2016, The Hong Kong Centre for Health Protection (CHP) of the Department of Health (DH) is investigating an additional suspected case of botulism after receiving injections of botulinum toxin in the Mainland, and again urged the public that such injections should only be prescribed and performed by registered doctors. The female patient, aged 21 with good past health, has developed shortness of breath, difficulty in swallowing, double vision, and generalized muscle weakness since 25 May 2016. Read More: <http://www.promedmail.org/post/4288686>

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/Pages/Home.aspx>

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

Prepared By:

Office of Preparedness and Response
Maryland Department of Health & Mental Hygiene
300 W. Preston Street, Suite 202
Baltimore, MD 21201
Fax: 410-333-5000

Anikah H. Salim, MPH, CPH
Biosurveillance Epidemiologist
Office: 410-767-2074
Email: Anikah.Salim@maryland.gov

Jessica Goodell, MPH
Temporary Epidemiology Field Assignee, CDC
Office: 410-767-6745
Email: Jessica.Goodell@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	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

