



July 1, 2016

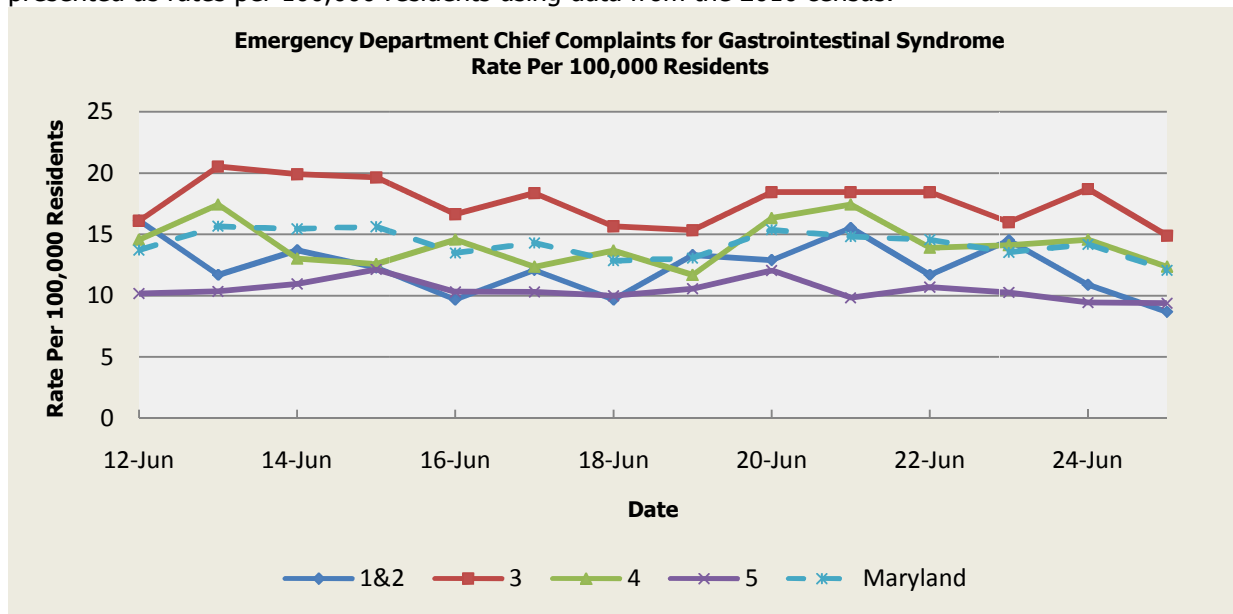
**Public Health Preparedness and Situational Awareness Report: #2016:25
Reporting for the week ending 6/25/16 (MMWR Week #25)**

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):

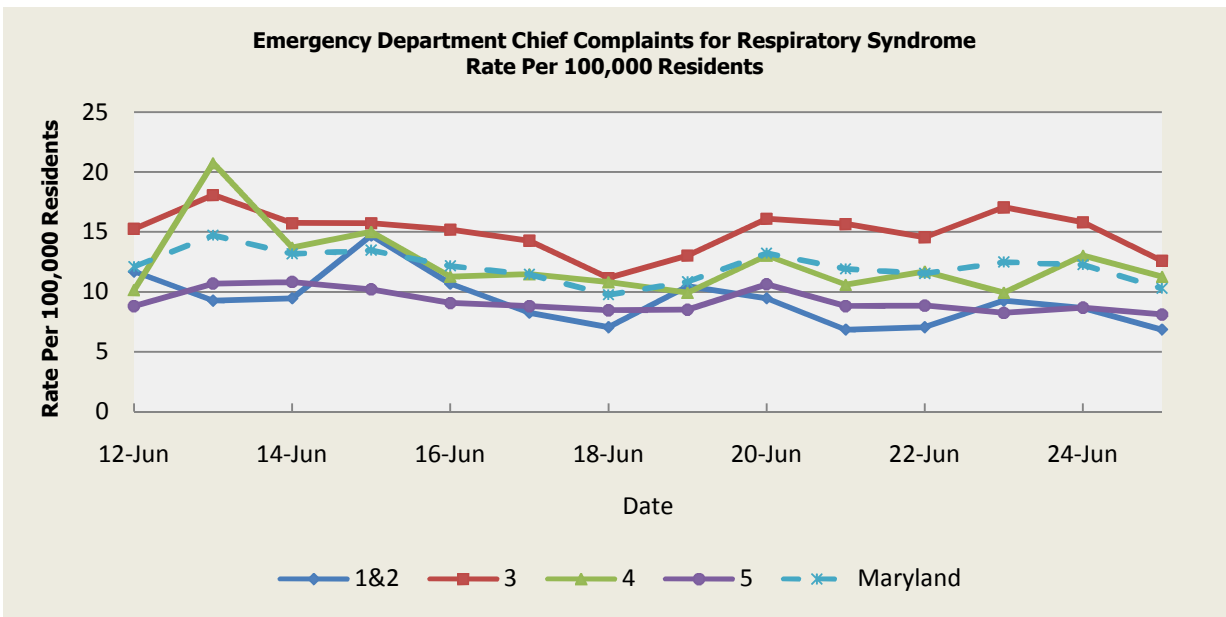
Graphical representation is provided for all syndromes (excluding the "Other" category; see Appendix 1) by Health and Medical Regions (See Appendix 2). Emergency department chief complaint data is presented as rates per 100,000 residents using data from the 2010 census.



There were no gastrointestinal illness outbreaks reported this week.

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

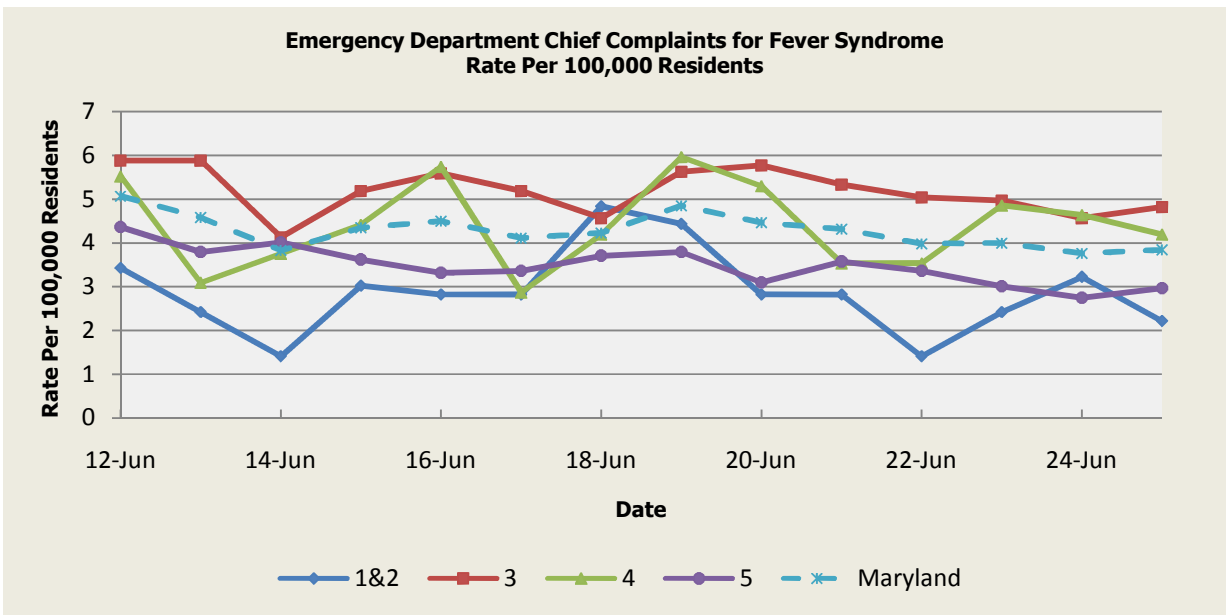
* Per 100,000 Residents



There were no respiratory illness 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

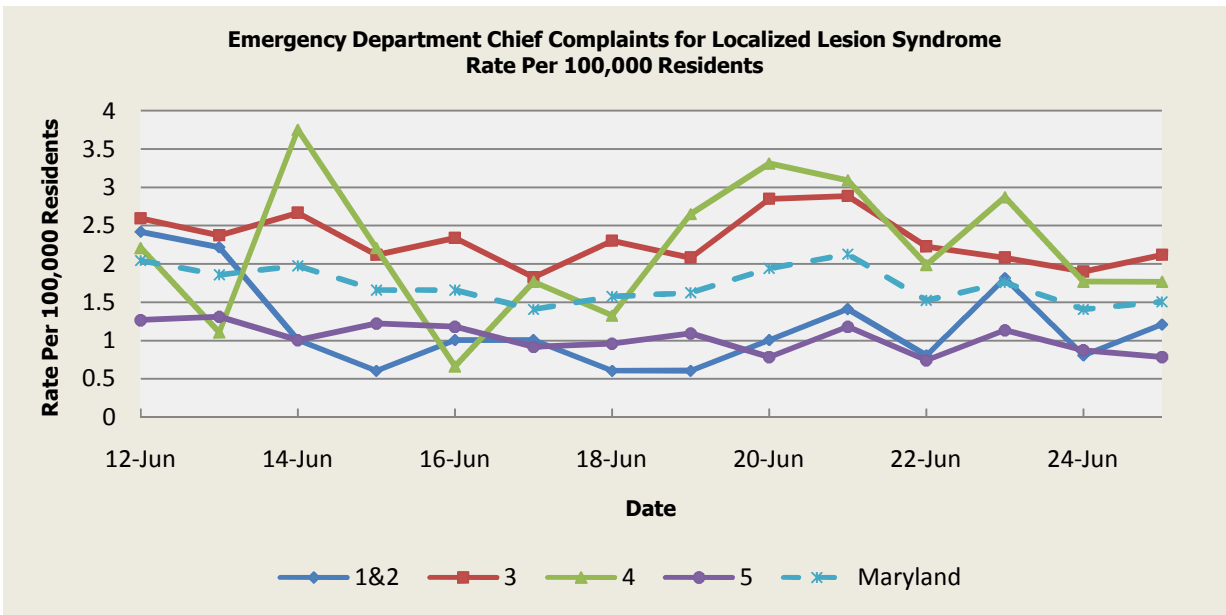
* Per 100,000 Residents



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

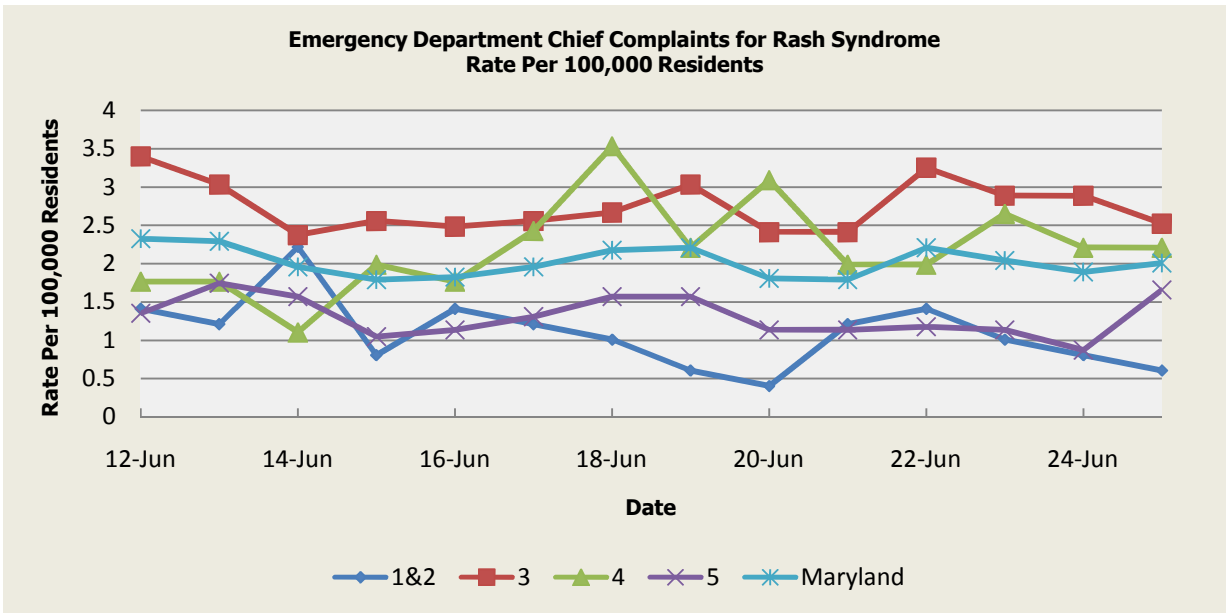
Per 100,000 Residents



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

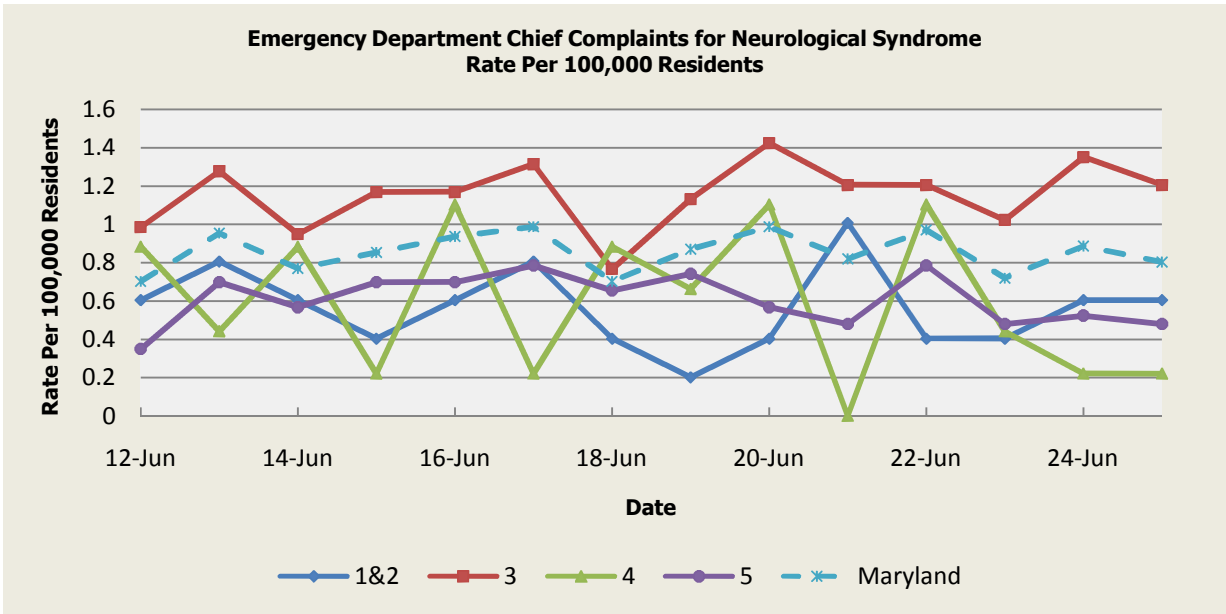
* Per 100,000 Residents



There were five (5) rash illness outbreaks reported this week: 5 outbreaks of Hand, Foot and Mouth Disease associated with Daycare Centers (3 Region 3; 1 Region 5; 1 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

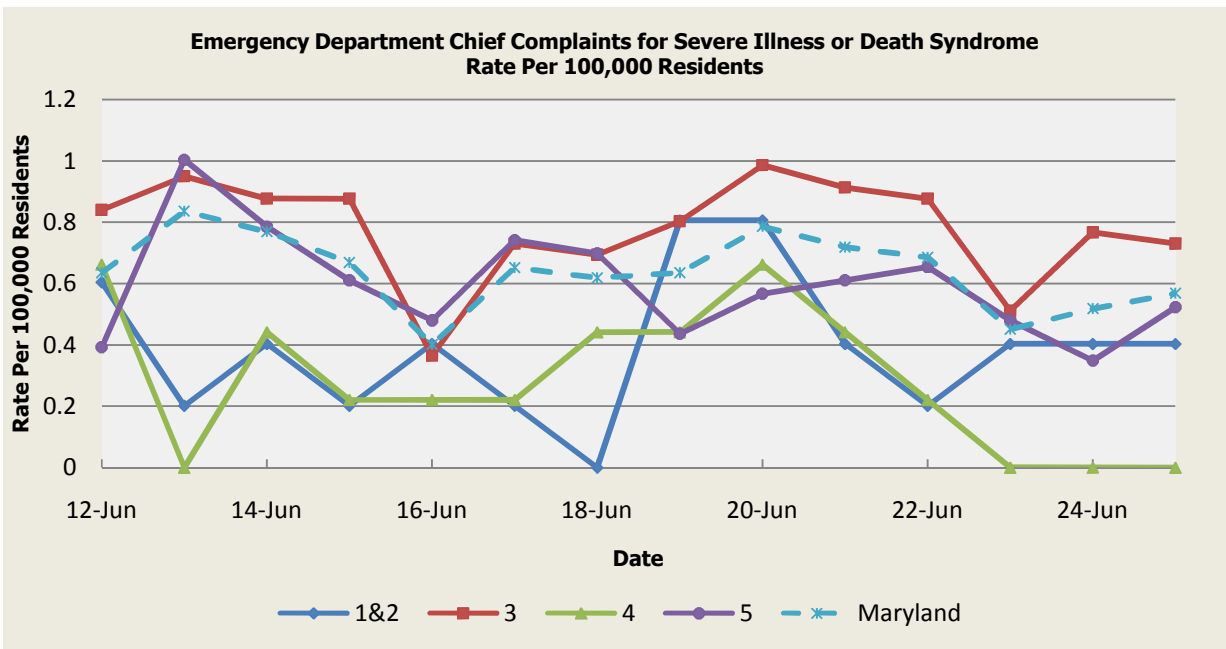
* Per 100,000 Residents



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

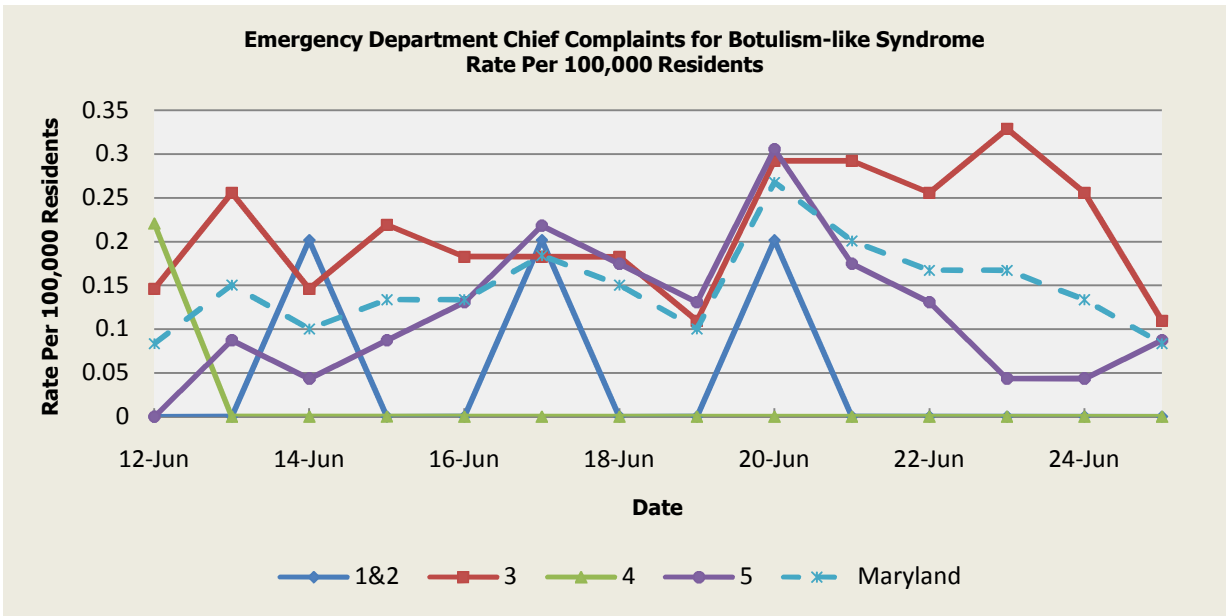


There were no severe illness or death outbreaks reported this week.

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

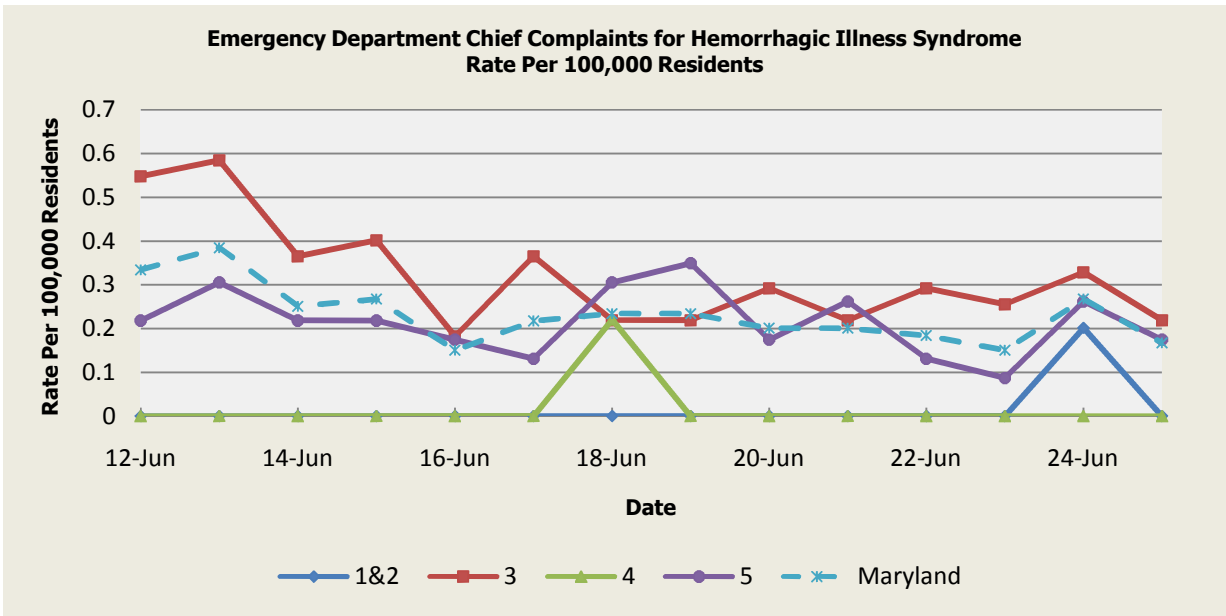
SYNDROMES RELATED TO CATEGORY A AGENTS



There was an appreciable increase above baseline in the rate of ED visits for Botulism-like Syndrome on 6/12 (Region 4), 6/13 (Region 3), 6/14 (Regions 1&2), 6/15 (Region 3), 6/16 (Regions 3,5), 6/17 (Regions 1&2,3,5), 6/18 (Regions 3,5), 6/19 (Region 5), 6/20 (Regions 1&2,3,5), 6/21 (Regions 3,5), 6/22 (Regions 3,5), 6/23 (Region 3), 6/24 (Region 3) and 6/25 (Region 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	0.08	0.04	0.05	0.06
Median Rate*	0.00	0.04	0.00	0.04	0.05

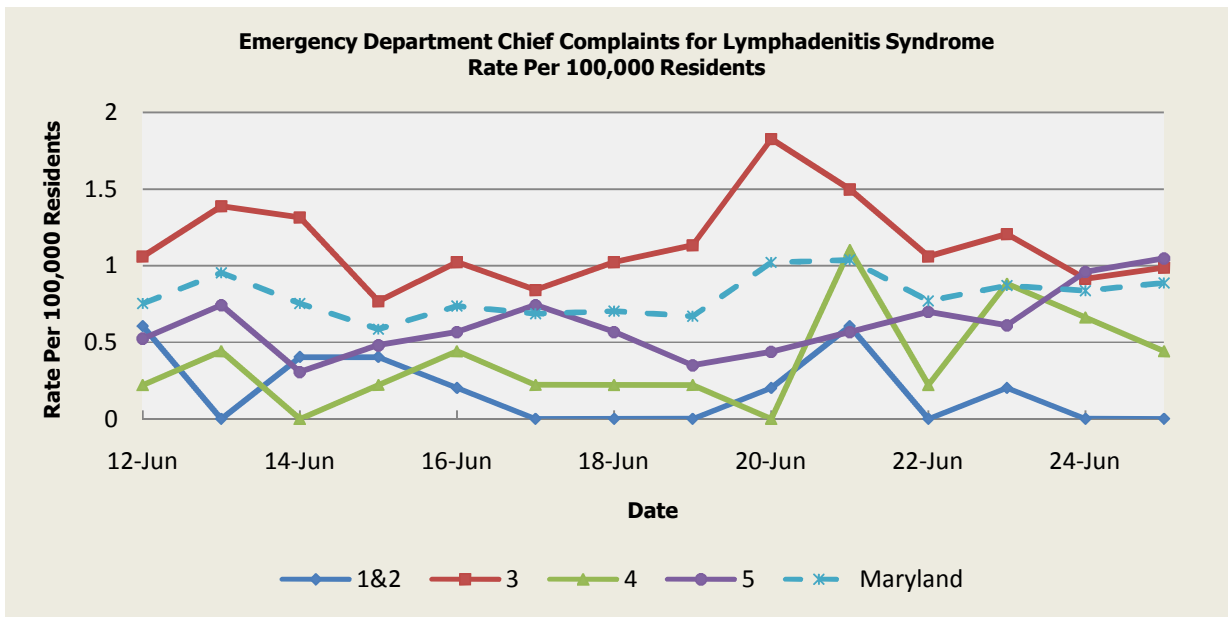
* Per 100,000 Residents



There was an appreciable increase above baseline in the rate of ED visits for Hemorrhagic Illness Syndrome on 6/12 (Regions 3,5), 6/13 (Regions 3,5), 6/14 (Region 3,5), 6/15 (Region 5,5), 6/17 (Region 3,5), 6/18 (Region 4,5), 6/19 (Regions 3,5), 6/20 (Regions 3,5), 6/21 (Regions 3,5), 6/22 (Region 3), 6/23 (Region 3), 6/24 (Regions 1&2,3,5) and 6/25 (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	0.10	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 6/12 (Region 3), 6/13 (Regions 3,5), 6/14 (Region 3), 6/16 (Region 3), 6/18 (Region 3), 6/19 (Region 3), 6/20 (Region 3), 6/21 (Regions 3,5), 6/22 (Regions 3,5), 6/23 (Regions 3,5) and 6/25 (Regions 3,5). These increases are not known to be associated with any outbreaks.

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

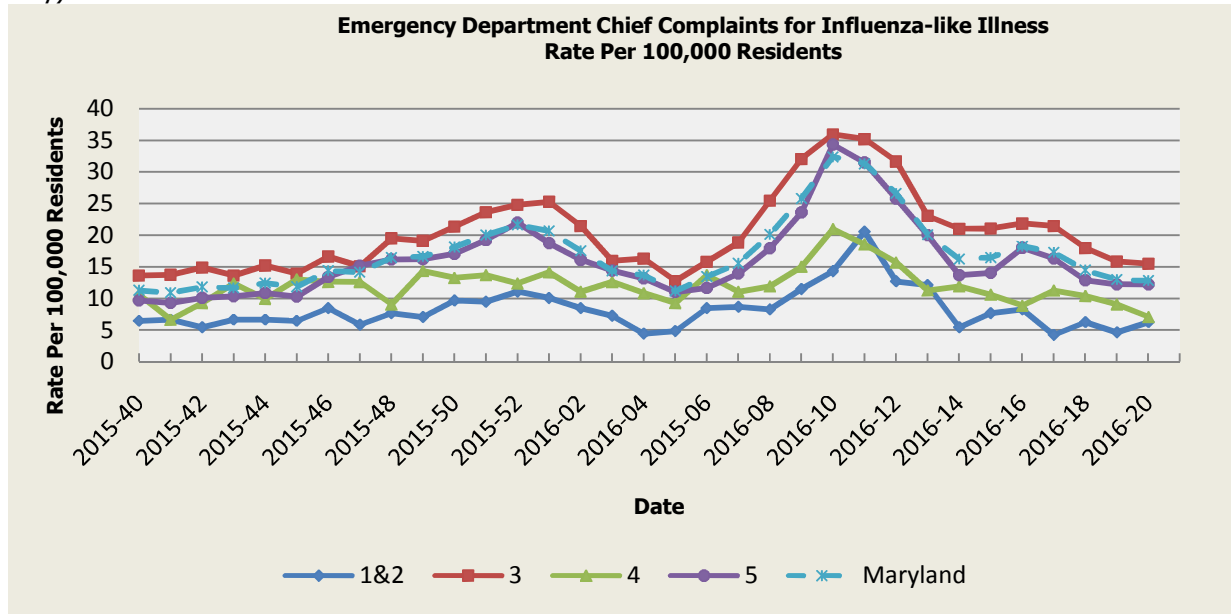
Condition	Counts of Reported Cases‡					
	April			Cumulative (Year to Date)**		
Vaccine-Preventable Diseases	2016	Mean*	Median*	2016	Mean*	Median*
Aseptic meningitis	6	30	25	137	175.2	171
Meningococcal disease	0	0.2	0	2	4.4	4
Measles	1	0.2	0	3	2.6	2
Mumps	0	1.4	1	7	30	9
Rubella	0	0.6	1	1	1.8	2
Pertussis	4	19	17	89	122.2	141
Foodborne Diseases	2015	Mean*	Median*	2015	Mean*	Median*
Salmonellosis	43	75.2	69	253	342.6	364
Shigellosis	11	13.8	16	53	86.8	103
Campylobacteriosis	44	69.6	61	306	293.6	299
Shiga toxin-producing Escherichia coli (STEC)	5	10.6	10	57	52.8	45
Listeriosis	1	1.2	1	5	5	5
Arboviral Diseases	2015	Mean*	Median*	2015	Mean*	Median*
West Nile Fever	0	0.8	0	0	0.8	0
Lyme Disease	111	263	270	528	644.2	690
Emerging Infectious Diseases	2015	Mean*	Median*	2015	Mean*	Median*
Chikungunya	0	1	0	3	4.8	0
Dengue Fever	1	1	1	15	6.2	7
Zika Virus***	7	0	0	30	0.2	0
Other	2015	Mean*	Median*	2015	Mean*	Median*
Legionellosis	8	19	16	54	62.8	59

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

***As of June 29, 2016, the total Maryland Confirmed Zika Virus Infections is 31.

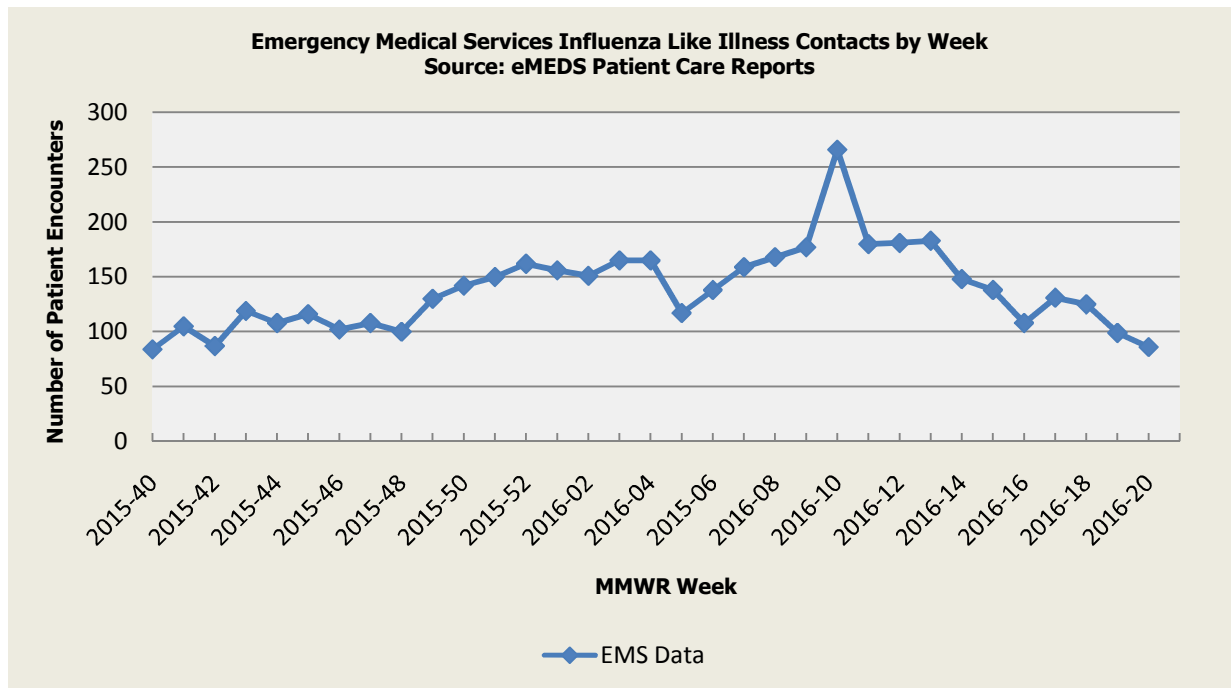
SYNDROMIC INFLUENZA SURVEILLANCE

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

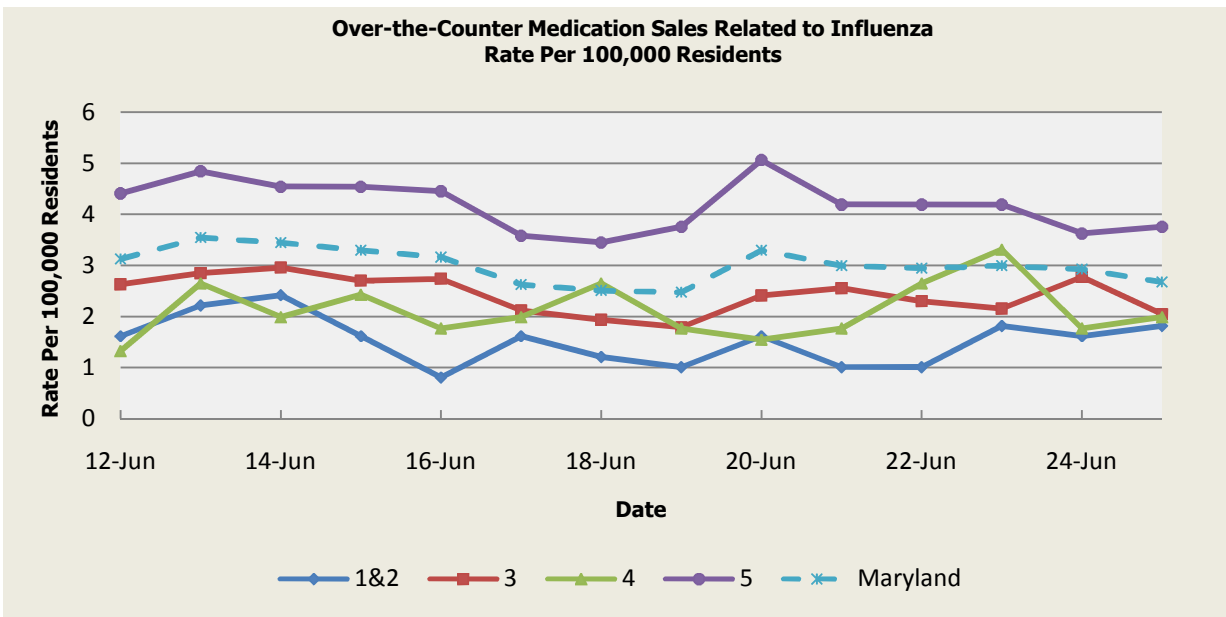


Influenza-like Illness Baseline Data Week 1 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	9.26	11.58	10.78	10.43	10.88
Median Rate*	7.66	8.99	9.05	8.03	8.72

* Per 100,000 Residents



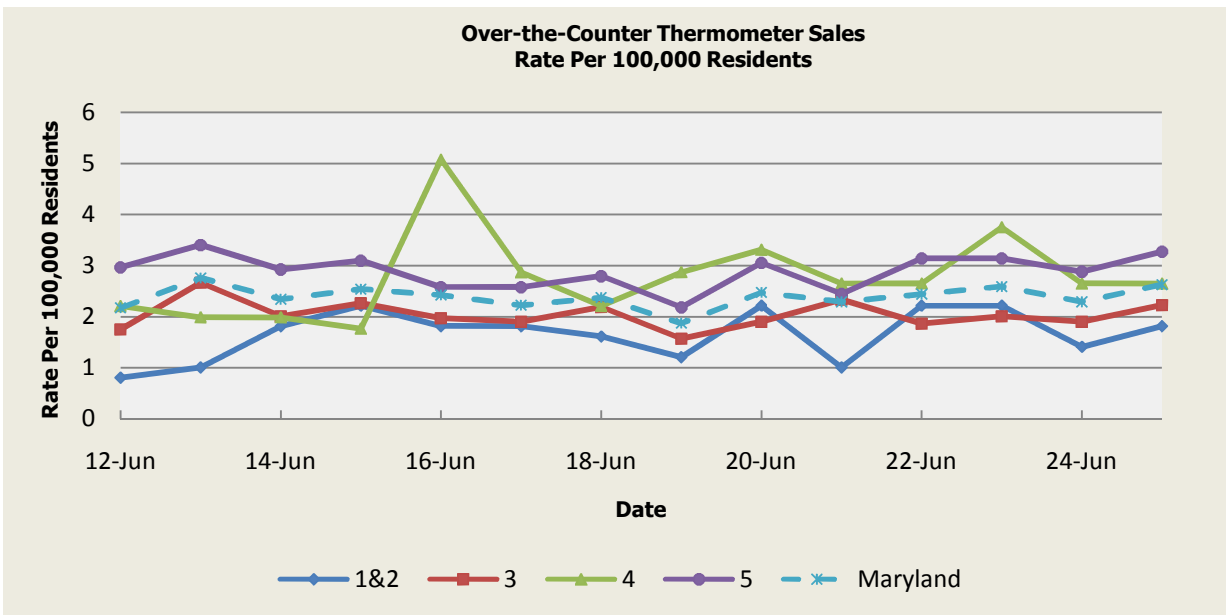
Disclaimer on eMEDS flu related data: This data is based on EMS Pre-hospital care reports where the EMS provider has selected "flu like illness" as a primary or secondary impression of a patient's illness. This impression is solely based on the signs and symptoms seen by the provider, not on any diagnostic 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 June 13, 2016, the WHO-confirmed global total (2003-2016) of human cases of H5N1 avian influenza virus infection stands at 851, of which 450 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 53%.

Avian Influenza in Humans:

There were no reports of human cases of avian influenza at the time that this report was compiled.

Avian Influenza in Poultry:

H7N9 (NETHERLANDS): 27 Jun 2016, Netherlands has reported an outbreak of avian influenza in domestic laying hens in Friesland region. Over 48 000 birds were present on the premises in 2 production systems with outside access of 16 000 free range birds and 32 000 organic birds. The virus was reported as H7N9 low pathogenicity with only very mild clinical signs observed of slight egg drop and dullness. Disease control measures have been put in place, and the birds are being culled. There are no other premises in the 1 km [0.62 mi] zone. Initial information suggests this is a European strain. Read More: <http://www.promedmail.org/post/4311490>

NATIONAL DISEASE REPORTS

TULAREMIA (COLORADO): 29 Jun 2016, A Broomfield resident has tested positive for tularemia. Tularemia is a disease of animals and humans caused by the bacterium *Francisella tularensis*. Although tularemia is a potentially serious disease, it is treatable with common antimicrobials. The Broomfield resident has been treated after being evaluated by a health care provider and is recovering. Tularemia is not known to be spread from person to person. People become infected with tularemia by: breathing in the bacteria; contact with contaminated soil; handling infected animal carcasses; being bitten by an infected tick, deerfly or other insect; or by eating or drinking contaminated food or water. Read More: <http://www.promedmail.org/post/4318916>

ANTIBIOTIC RESISTANCE (NEW YORK): 28 Jun 2016, Researchers have detected *mcr-1* "superbug" gene for the 2nd time in the United States. The gene makes bacteria highly resistant to a last-resort of antibiotics. It was found in a sample of *E. coli* bacteria from a patient in New York. In the country [USA], the gene was first discovered in a patient from Pennsylvania. Read More: <http://www.promedmail.org/post/4317770>

LEGIONELLOSIS (NORTH CAROLINA): 29 Jun 2016, The source of a legionnaires' disease outbreak that has infected 3 guests at Meadowbrook Inn & Suites in Blowing Rock, North Carolina has not yet been identified, according to the Appalachian District Health Department (AppHealthCare). The health department has released a public health advisory to alert visitors to the mountain resort

community about this recent outbreak. According to this advisory, the 3 victims all visited the 62-room hotel, located one block from central Blowing Rock, between [15 Apr and 15 Jun 2016]. Each had stayed at the hotel within the 2- to 10-day incubation period in which *Legionella* bacteria, once inhaled or aspirated into one's body, develops into full-blown legionnaires' disease. All three people were hospitalized, treated, and are now recovering. Read More: <http://www.promedmail.org/post/4320222>

ROCKY MOUNTAIN SPOTTED FEVER (NEBRASKA): 30 Jun 2016, Health officials confirmed a 3rd Southwest Nebraska case of Rocky Mountain spotted fever (RMSF) earlier this week, just as one McCook community leader returned from his own harrowing experience with the disease. McCook City Attorney NM spent the majority of what was supposed to be a scenic road-trip to Washington State last week bouncing from one healthcare facility to another before ending up under the care of an infectious disease doctor. He was eventually diagnosed with RMSF and believes he contracted the disease from a tick bite he received while hunting morel mushrooms in Hitchcock County. Read More: <http://www.promedmail.org/post/4317127>

INTERNATIONAL DISEASE REPORTS

TULAREMIA (NETHERLANDS): 28 Jun 2016, At least 2 people have been infected with tularemia, or hare plague in the Netherlands during the first 6 months of 2016, according to a Wageningen UR report Monday [27 Jun 2016] (computer translated). Read More: <http://www.promedmail.org/post/4317126>

YELLOW FEVER (CONGO): 20 Jun 2016, The Democratic Republic of Congo has almost run out of yellow fever vaccine in Kinshasa in the same week that the government declared an epidemic of the disease in the packed capital and 2 other provinces. Some local people have complained they were denied immunization due to the shortage, despite queueing for a shot. More supplies have been promised, but health officials in the impoverished country say they have to choose between the high cost of flying them in, or a long wait for shipment by sea. Read More: <http://www.promedmail.org/post/4317430>

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.

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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

