



July 29, 2016

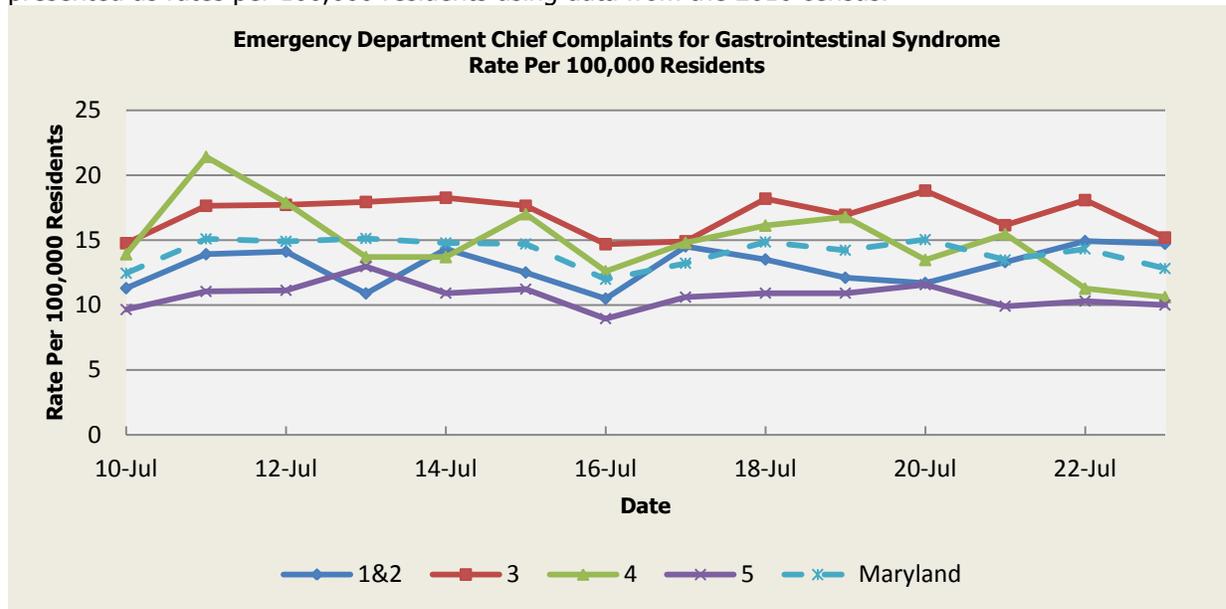
**Public Health Preparedness and Situational Awareness Report: #2016:29
Reporting for the week ending 7/23/16 (MMWR Week #29)**

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):

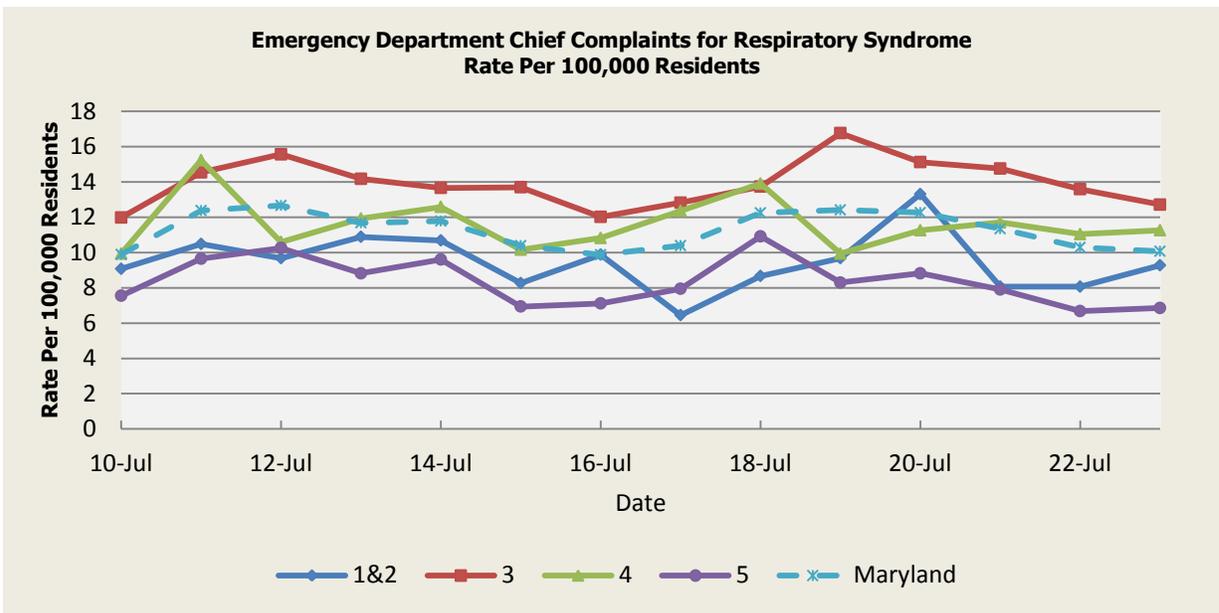
Graphical representation is provided for all syndromes (excluding the "Other" category; see Appendix 1) by Health and Medical Regions (See Appendix 2). Emergency department chief complaint data is presented as rates per 100,000 residents using data from the 2010 census.



There were no gastroenteritis 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

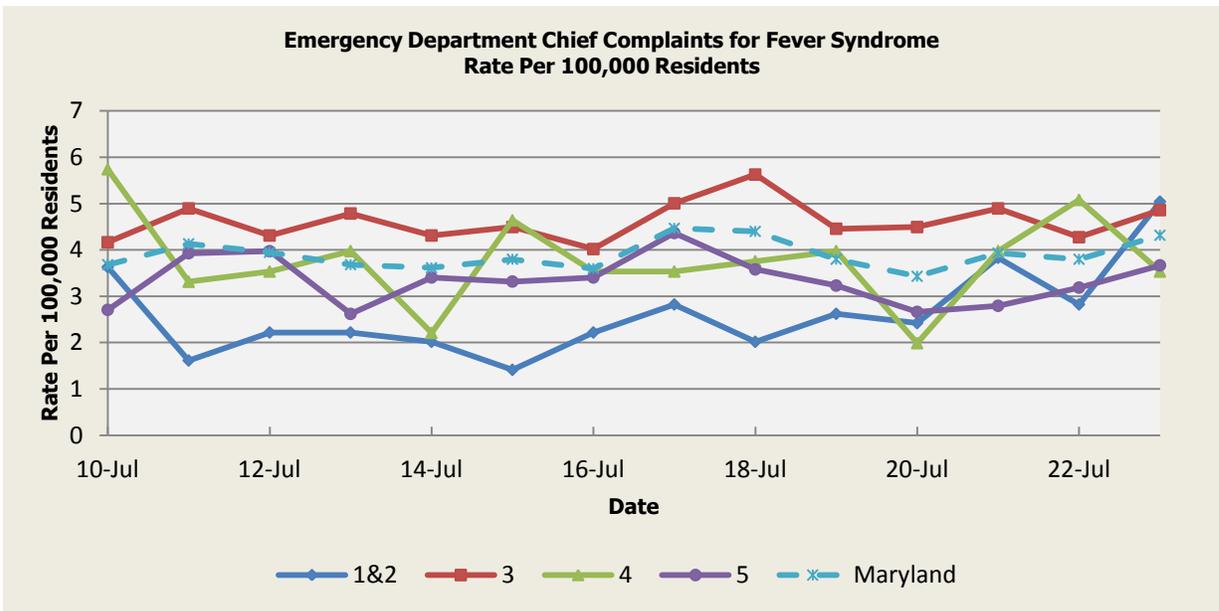
* Per 100,000 Residents



There were two (2) respiratory illness outbreaks reported this week: two outbreaks of pneumonia in a Nursing Home (Regions 3).

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

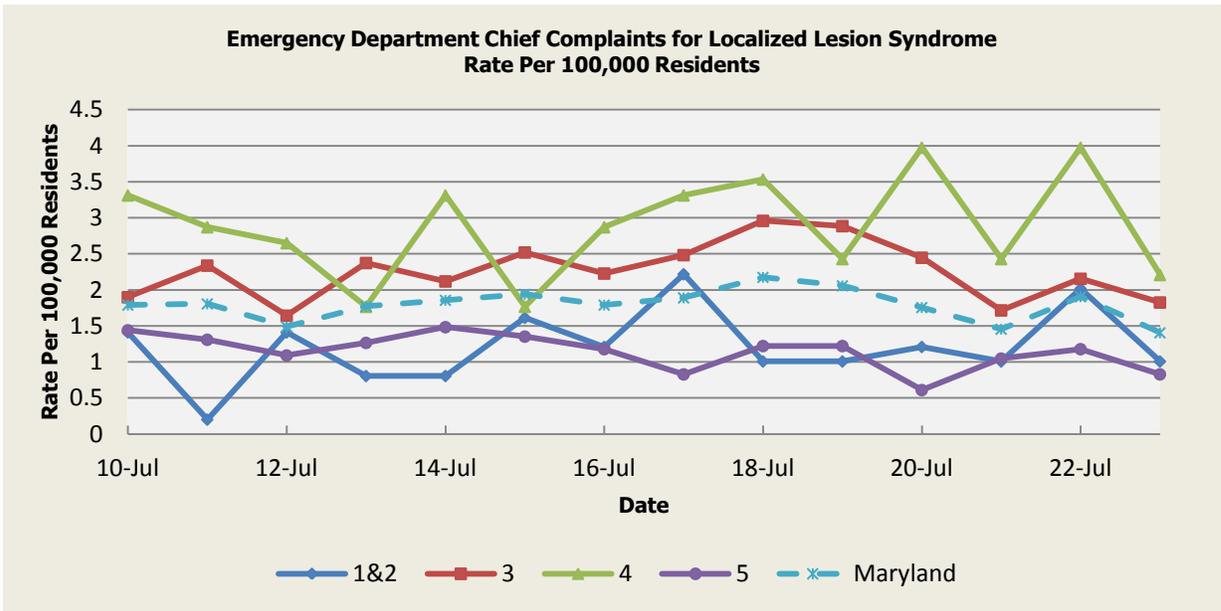
* Per 100,000 Residents



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

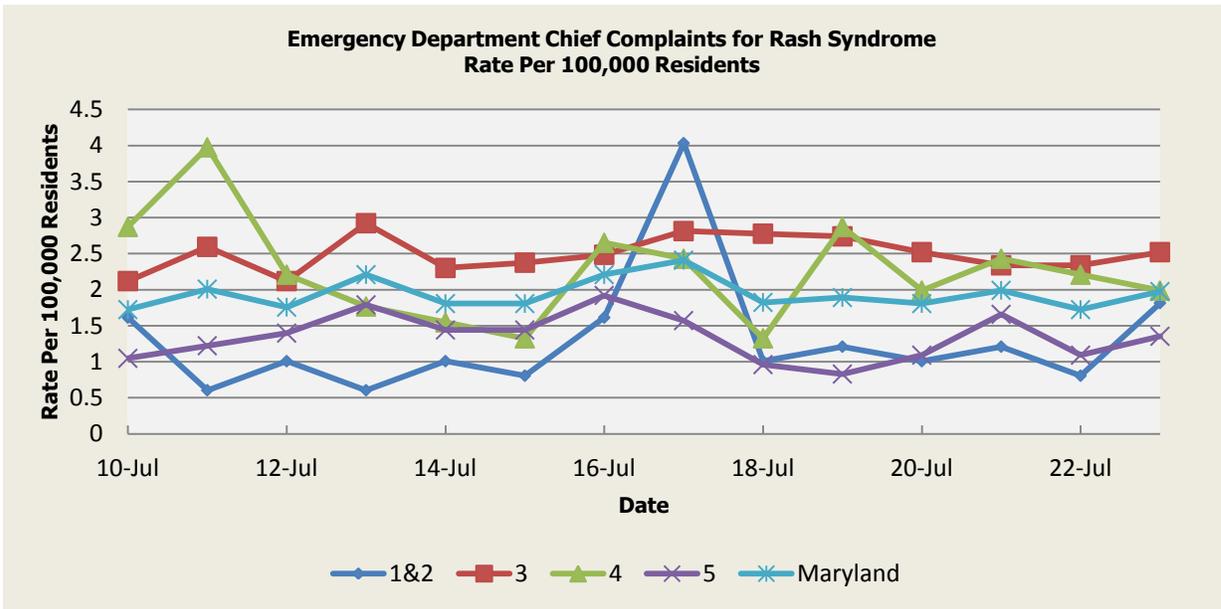
Per 100,000 Residents



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

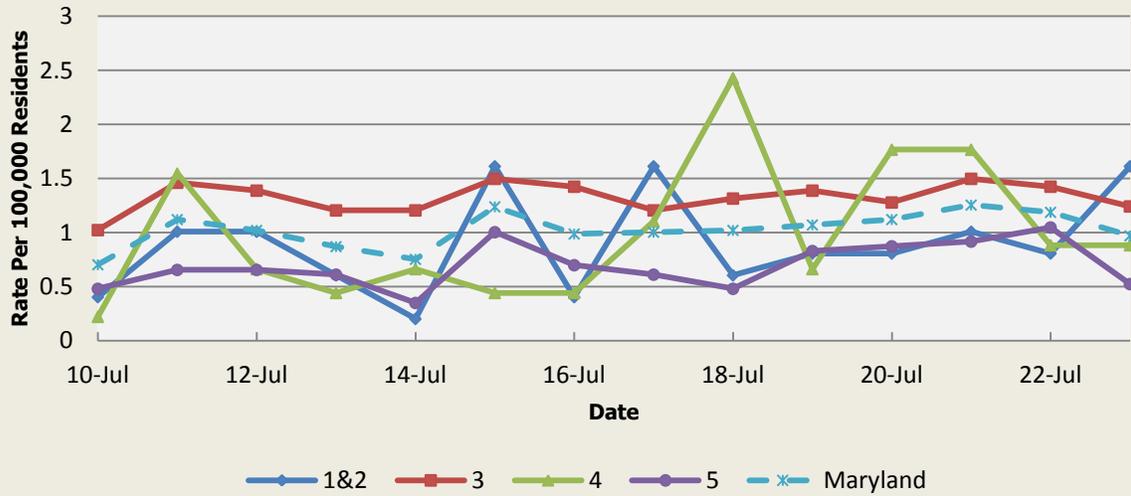


There were two (2) rash illness outbreaks reported this week: one outbreak of HAND, FOOT, AND MOUTH disease associated with a Daycare Center (Region 5); one outbreak of SCABIES in an assisted living facility (Region 5).

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

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

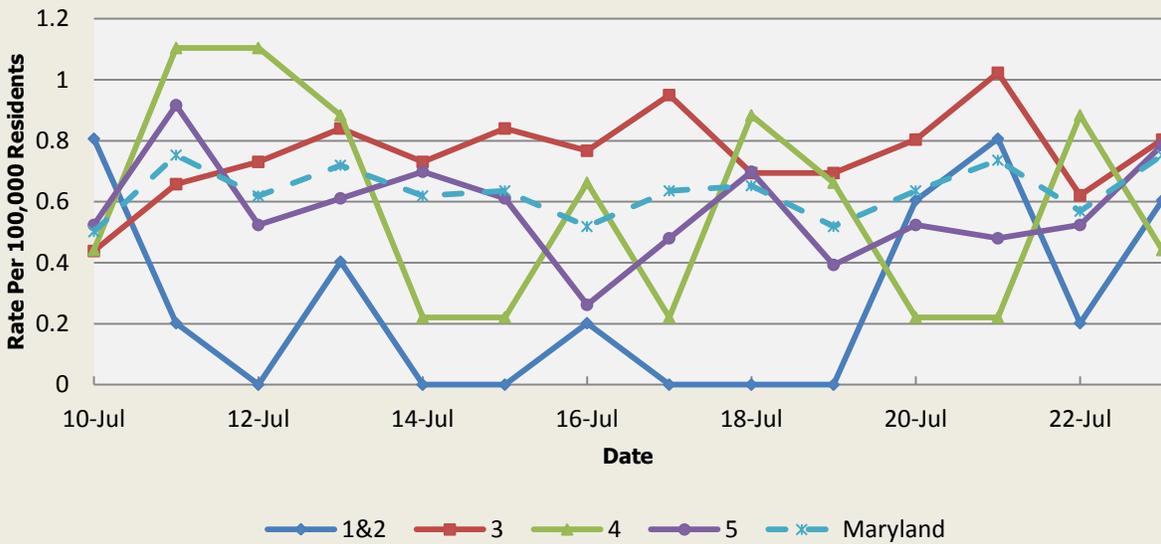


There were no neurological syndrome outbreaks reported this week.

Neurological Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.63	0.73	0.65	0.48	0.62
Median Rate*	0.60	0.66	0.66	0.44	0.57

* Per 100,000 Residents

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

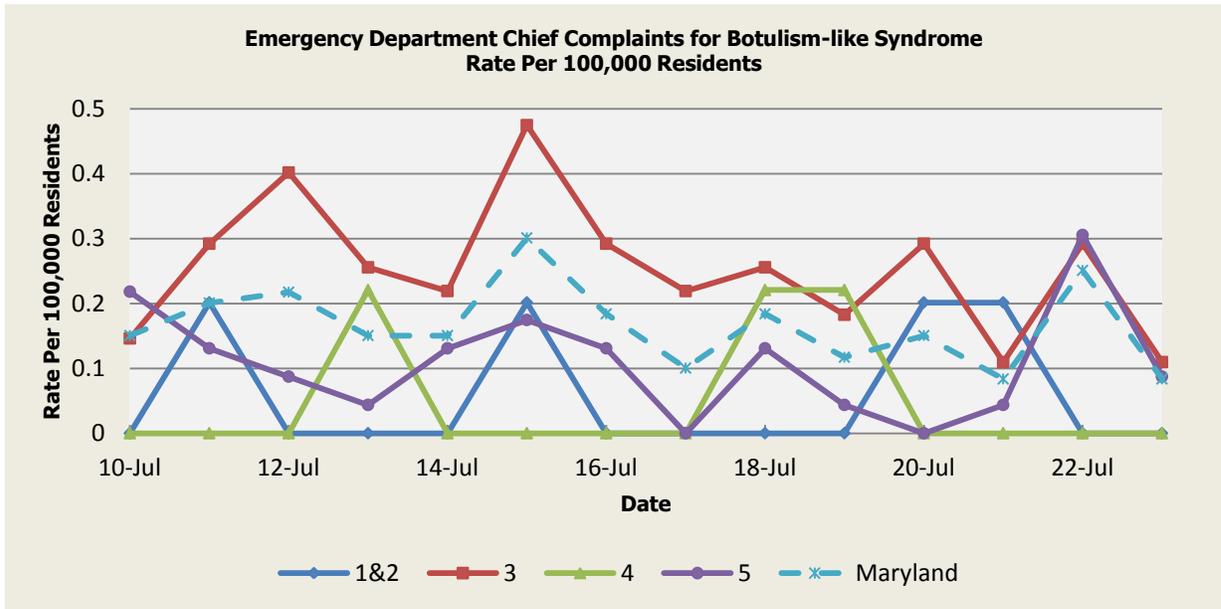


There were no severe illness or death outbreaks reported this week.

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

* Per 100,000 Residents

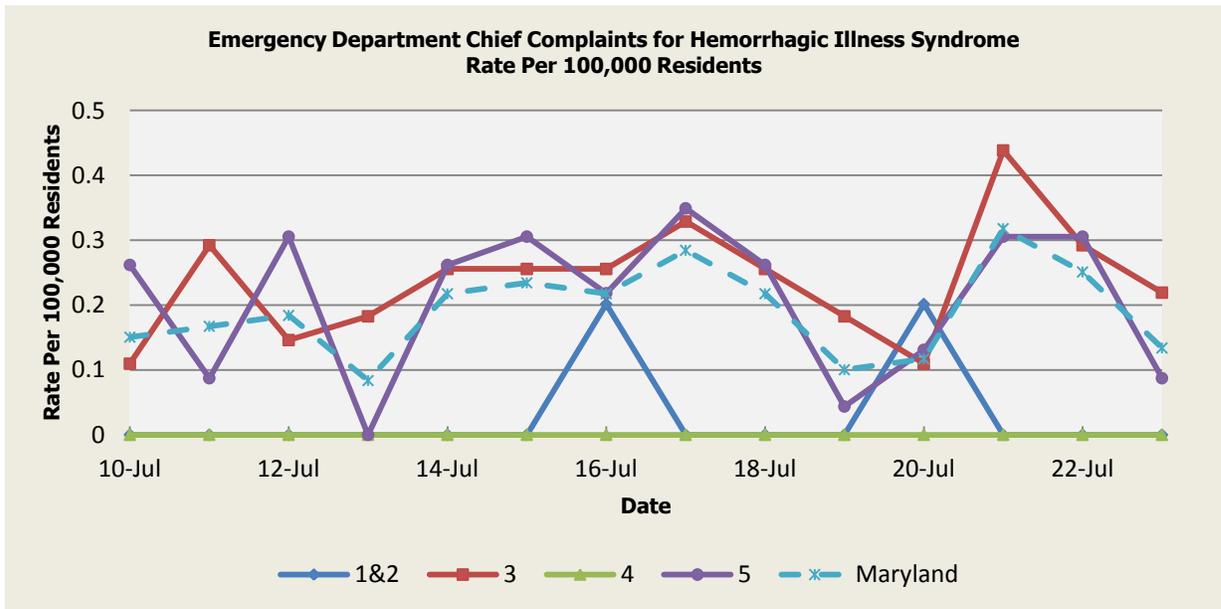
SYNDROMES RELATED TO CATEGORY A AGENTS



There was an appreciable increase above baseline in the rate of ED visits for Botulism-like Syndrome on 7/10 (Region 5), 7/11 (Region 1&2, 3, 5), 7/12 (Regions 3), 7/13 (Region 3,4), 7/14 (Regions 3,5), 7/15 (Region 1&2, 3, 5), 7/16 (Regions 3, 5), 7/17 (Region 3), 7/18 (Regions 3, 4, 5), 7/19 (Region 3,4), 7/20 (Regions 1&2, 3), 7/21 (Regions 1&2), and 7/22 (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	0.08	0.04	0.05	0.06
Median Rate*	0.00	0.04	0.00	0.04	0.05

* Per 100,000 Residents

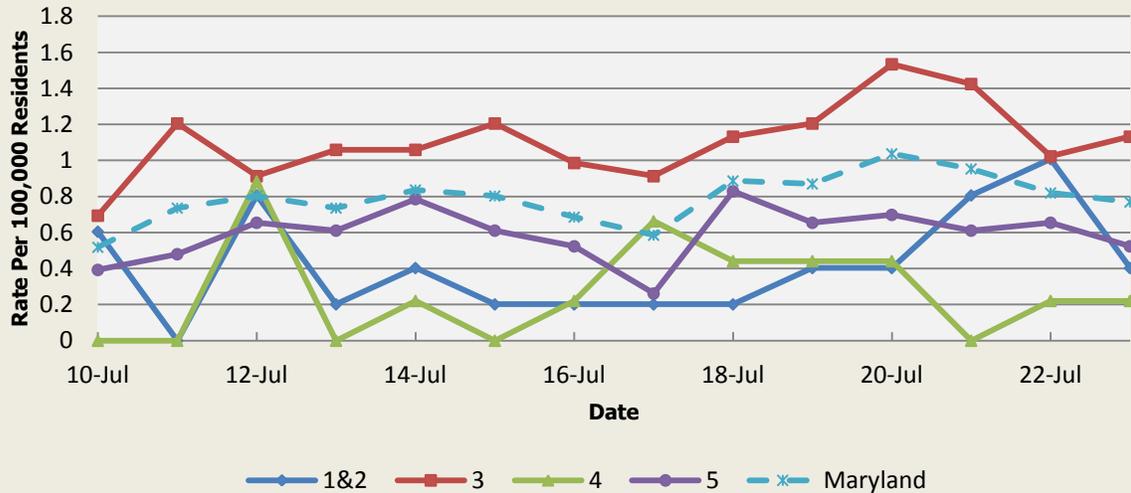


There was an appreciable increase above baseline in the rate of ED visits for Hemorrhagic Illness Syndrome on 7/10 (Region 5), 7/11 (Region 3), 7/12 (Regions 5), 7/14 (Regions 3,5), 7/15 (Regions 3, 5), 7/16 (Region 1&2, 3,5), 7/17 (Region 3, 5), 7/18 (Region 3, 5), 7/20 (Region 1&2), 7/21 (Regions 3,5), 7/22 (Regions 3,5) and 7/23 (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

**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 7/11 (Region 3), 7/12 (Region 1&2, 4, 5), 7/13 (Regions 3,5), 7/14 (Regions 3,5), 7/15 (Region 3, 5), 7/16 (Regions 3), 7/18 (Region 3,5), 7/19 (Regions 3,5), 7/20 (Regions 3,5), 7/21 (Regions 1&2,3,5), 7/22 (Regions 1&2,3,5) and 7/23 (Regions 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

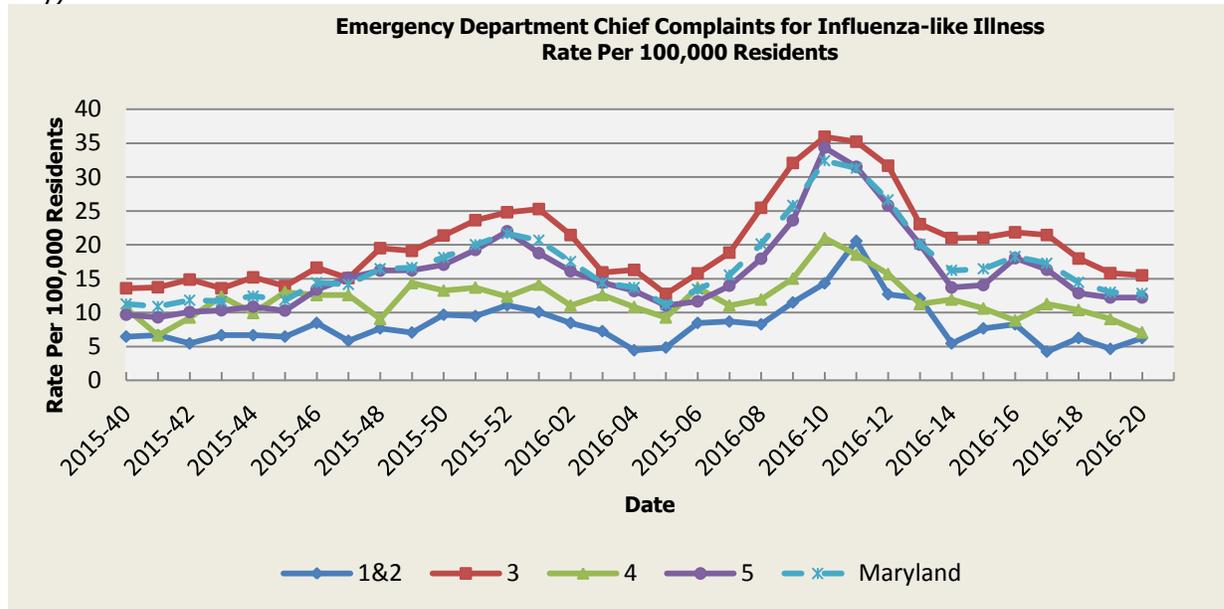
Condition	Counts of Reported Cases‡					
	July			Cumulative (Year to Date)**		
	2016	Mean*	Median*	2016	Mean*	Median*
Vaccine-Preventable Diseases						
Aseptic meningitis	17	38.8	35	171	219.2	228
Meningococcal disease	0	0.4	0	2	4.8	4
Measles	0	0	0	3	2.6	2
Mumps	0	0.6	0	8	30.8	9
Rubella	0	0	0	1	1.8	2
Pertussis	5	18.4	18	101	145.2	163
Foodborne Diseases						
Salmonellosis	41	95.4	92	331	458.4	473
Shigellosis	13	10.4	11	70	99.2	123
Campylobacteriosis	35	74.4	73	380	380.4	388
Shiga toxin-producing Escherichia coli (STEC)	8	11.8	12	74	67.8	61
Listeriosis	2	2.4	2	8	7.6	7
Arboviral Diseases						
West Nile Fever	0	0.6	0	0	1.4	2
Lyme Disease	125	205	204	839	897.4	981
Emerging Infectious Diseases						
Chikungunya	0	2.2	0	3	7	0
Dengue Fever	2	0.8	1	20	7.2	8
Zika Virus***	9	0	0	48	0.2	0
Other						
Legionellosis	17	16.2	10	77	82.4	87

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

*** As of July 20, 2016, the total Maryland Confirmed Zika Virus Infections is 48.

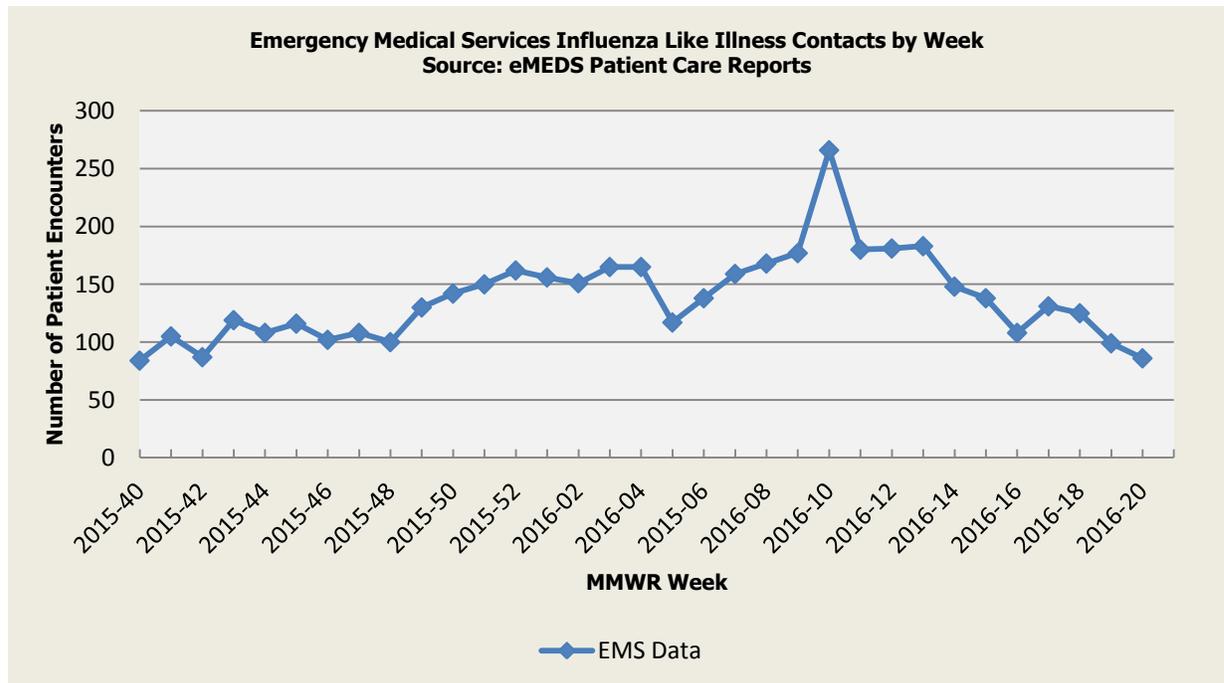
SYNDROMIC INFLUENZA SURVEILLANCE

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

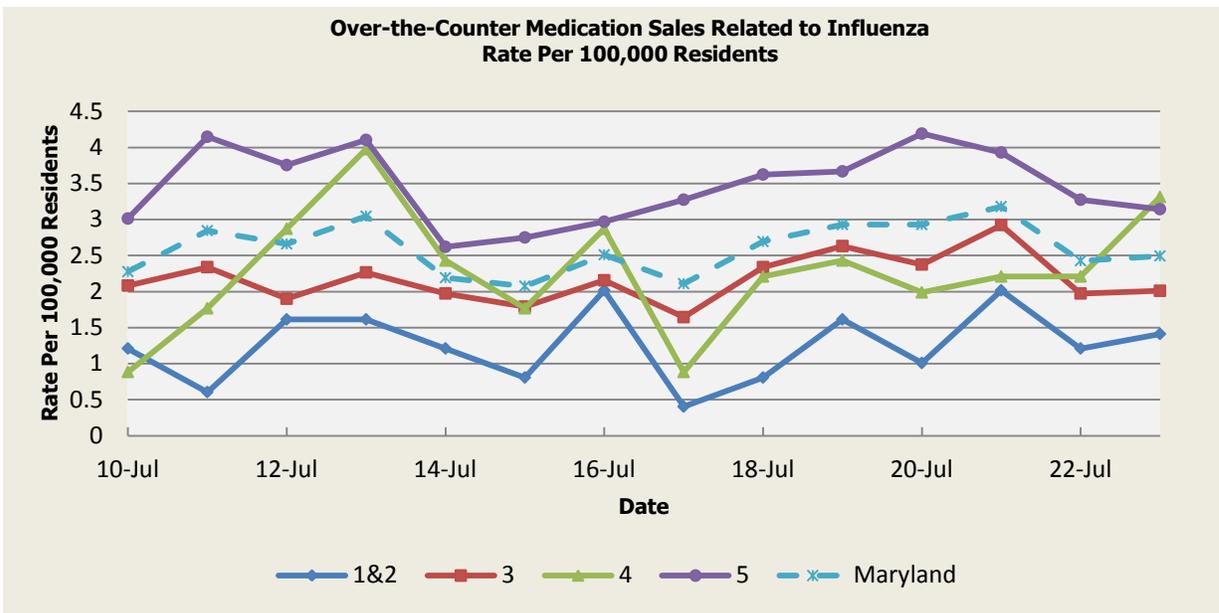


Influenza-like Illness Baseline Data Week 1 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	9.26	11.58	10.78	10.43	10.88
Median Rate*	7.66	8.99	9.05	8.03	8.72

* Per 100,000 Residents



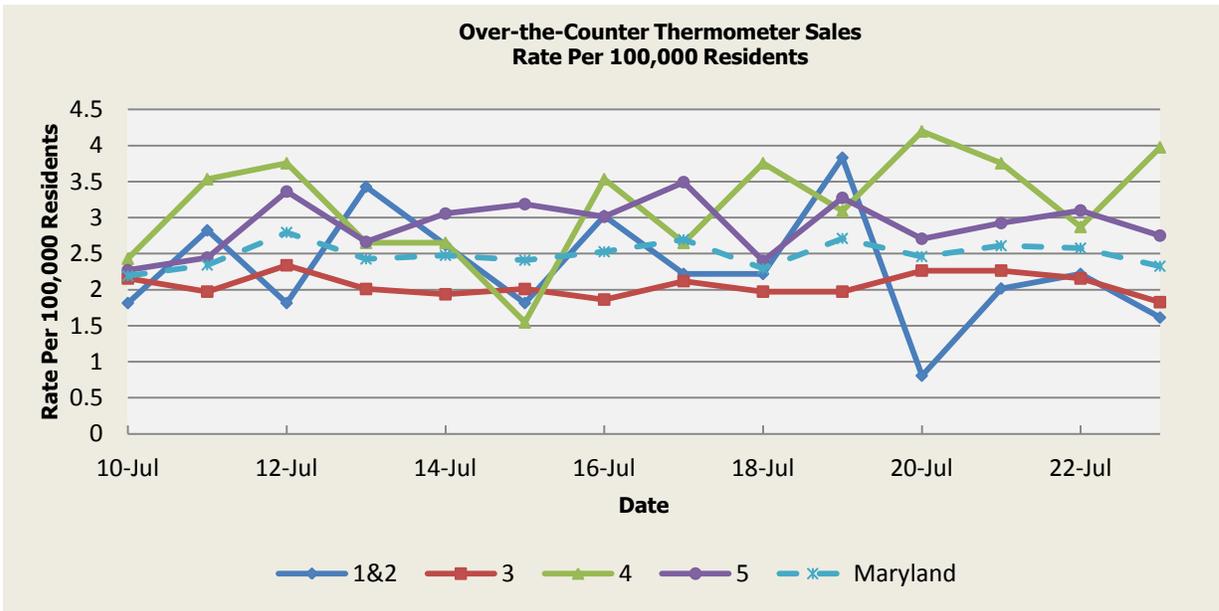
Disclaimer on eMEDS flu related data: This data is based on EMS Pre-hospital care reports where the EMS provider has selected "flu like illness" as a primary or secondary impression of a patient's illness. This impression is solely based on the signs and symptoms seen by the provider, not on any diagnostic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

H7N9 (CHINA): 22 Jul 2016, On 12 Jul 2016, the National Health and Family Planning Commission (NHFPC) of China notified WHO of 7 additional laboratory confirmed cases of human infection with avian influenza A(H7N9) virus, including 4 deaths. Read More:

<http://www.promedmail.org/post/4370565>

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:

H5N1 (Egypt): 25 Jul 2016, On Tue 12 Jul 2016, Egypt reported 3 new H5N1 avian flu cases, all in people who had been exposed to poultry or their environments, according to a monthly update from the World Health Organization (WHO) on animal-to-human flu transmission events for the middle of June through the middle of July 2016. Read more: <http://www.promedmail.org/post/4345054>

HPAI H5 (BAGHDAD, WASIT): On Mon 25 2016, the World Animal Health Information Database provided an update on the continuing avian influenza outbreak with weekly reported cases of bird flu in a number of poultry farms in the areas north of the province and directed the concerned authorities to destroy more than 2.5 million chickens. They also called on the Ministry of Health to take urgent measures to control the spread of the disease. Read more:

<http://www.promedmail.org/post/4368321>

HPAI H5N8 (TAIWAN): On 25 Jul 2016, three new outbreaks of H5N8 highly pathogenic avian influenza [HPAI] have been found in Taiwan. the 3 outbreaks were detected in chickens in an abattoir in Taipei City and in Kaohsiung City, and geese on a farm in Tainan City. Nearly 3000 birds died or were destroyed in total as a result of the outbreak. Read more:

<http://www.promedmail.org/post/4368474>

NATIONAL DISEASE REPORTS

MENINGITIS (CALIFORNIA): 27 Jul 2016, On 25 July 2016, The California Department of Public Health is reporting an increase of meningococcal disease in Southern California, particularly in Orange and Los Angeles Counties. A cluster of cases in the last several months has disproportionately affected men who have sex with men (MSM). Meningococcal disease is caused by *Neisseria meningitidis* bacteria, which are transmitted from person-to-person through respiratory droplets, during face-to-face or prolonged contact, or by sharing utensils, drinks, or cigarettes. It is a serious infection that can cause meningitis (brain infection) and/or bacteremia (blood infection), and can lead to death. To date, Orange County has had 4 cases that are part of the cluster in Southern California; 3 of these cases have occurred since 1 Jun 2016, including 1 death. On average, Orange County has only 5 meningococcal cases each year. Read more: <http://www.promedmail.org/post/4371802>

E. COLI EHEC (NEW HAMPSHIRE): 25 Jul 2016, On 22 July 2016, New Hampshire public health officials are working to find the source of ground beef that has caused a dozen people to be infected with *E. coli*. Authorities said in a statement Fri 22 Jul 2016, that since June 2016, 12 people have come down with the same strain of *E. coli* after eating ground beef. Those people ate ground beef at several different places, and state and federal officials are working to identify the specific source. Read more: <http://www.promedmail.org/post/4367732>

TULAREMIA (NEW MEXICO): 12 Jul 2016, On 12 July 2016, The City of Albuquerque Environmental Health Department, the New Mexico Department of Health, and the Bernalillo County Health Protection Section announced today that 2 cases of human tularemia have been confirmed from Bernalillo County, with one of the individuals likely being exposed in the bosque. These are the 1st 2 laboratory confirmed human cases in New Mexico in 2016. Read more: <http://www.promedmail.org/post/4342491>

ZIKA VIRUS (AMERICAS): 22 Jul 2016, A routine investigation by the New York City (NYC) Department of Health and Mental Hygiene (DOHMH) identified a nonpregnant woman in her 20s who reported she had engaged in a single event of condomless vaginal intercourse with a male partner the day she returned to NYC (day 0) from travel to an area with ongoing Zika virus transmission. She had headache and abdominal cramping while in the airport awaiting return to NYC. The following day (day 1) she developed fever, fatigue, a maculopapular rash, myalgia, arthralgia, back pain, swelling of the extremities, and numbness and tingling in her hands and feet. In addition, on day 1, the woman began menses that she described as heavier than usual...The woman's male partner, also in his 20s, developed fever, a maculopapular rash, joint pain, and conjunctivitis 7 days after sexual intercourse (day 6). Read More: <http://www.promedmail.org/post/4361791>

INTERNATIONAL DISEASE REPORTS

MEASLES UPDATE (BRAZIL, SOUTH SUDAN): 28 Jul 2016, On 26 July 2016, The World Health Organization (WHO) declared Brazil free of measles, after no case of the disease was registered in the last year. The eradication of measles is the conclusion of work spanning several years. – In Warrap [South Sudan], at least 5 people have died from measles and 280 cases have been reported. Local health officials also say that there is a low turnout of children being vaccinated. The disease remains one of the leading causes of death among young children globally, despite the availability of a safe and effective vaccine. Approximately 114 900 people died from measles in 2014 -- mostly children under the age of 5. Read more: <http://www.promedmail.org/post/4377021>

ANTHRAX (RUSSIA): On 28 July 2016, a reported anthrax outbreak in the Yamal Peninsula, the Arctic part of Russia, is believed to be the largest for 75 years. The outbreak has killed 1500 northern deer and, with the figure set to rise, fears over exports of venison have begun to surface. Besides, so far there are 13 people that have been hospitalized related to anthrax. Scientists said it was probable that this last outbreak was connected to abnormal heat, which resulted in melting the permafrost where spores of anthrax can live for decades. At the moment, temperatures in the region are going over 30 deg C [approx. 86 deg F], very unusual for this area of Russia. Read more: <http://www.promedmail.org/post/4376306>

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

