



August 19, 2016

**Public Health Preparedness and Situational Awareness Report: #2016:32
Reporting for the week ending 8/13/16 (MMWR Week #32)**

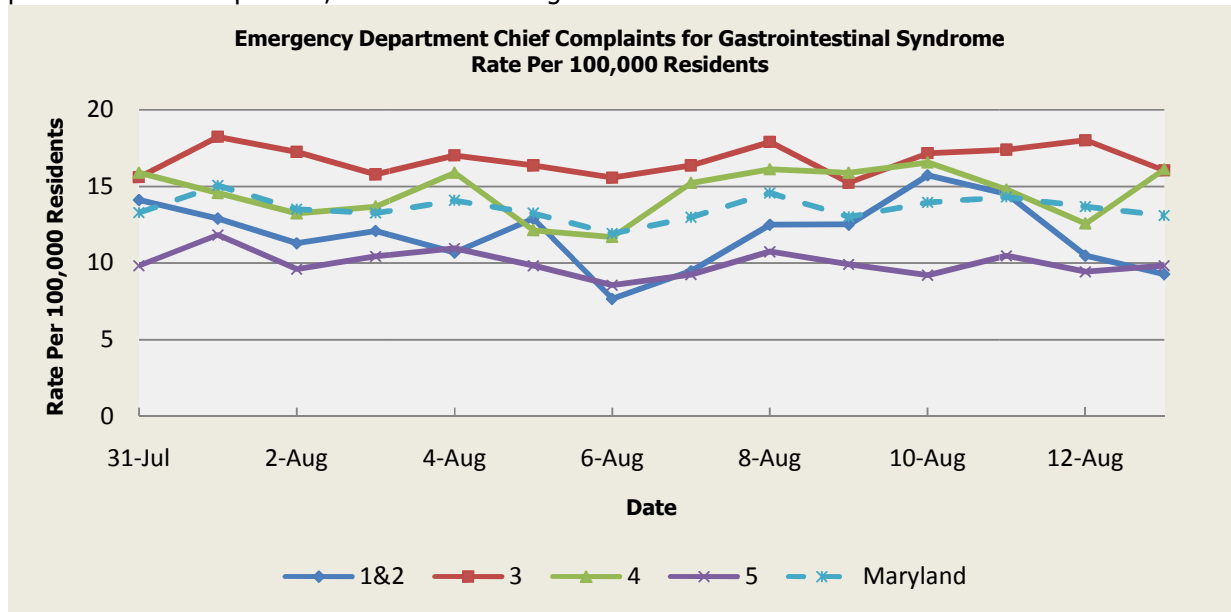
CURRENT HOMELAND SECURITY THREAT LEVELS

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

SYNDROMIC SURVEILLANCE REPORTS

ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):

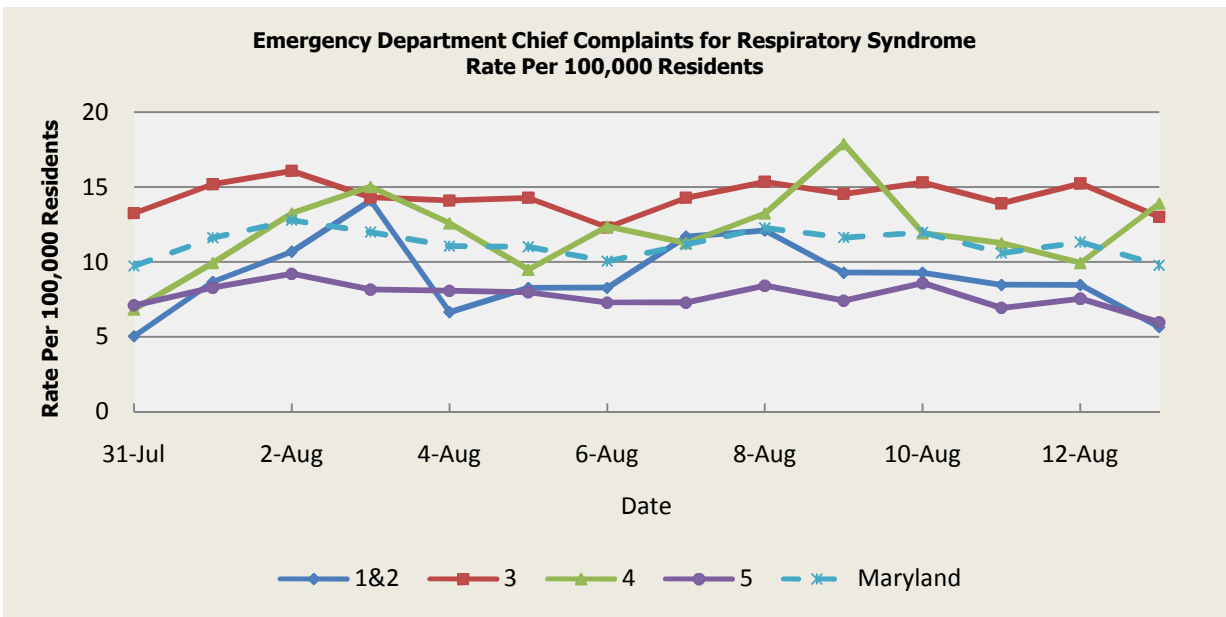
Graphical representation is provided for all syndromes (excluding the "Other" category; see Appendix 1) by Health and Medical Regions (See Appendix 2). Emergency department chief complaint data is presented as rates per 100,000 residents using data from the 2010 census.



There was one (1) gastroenteritis/foodborne outbreak reported this week: 1 outbreak of gastroenteritis associated with an Assisted Living Facility (Region 5).

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

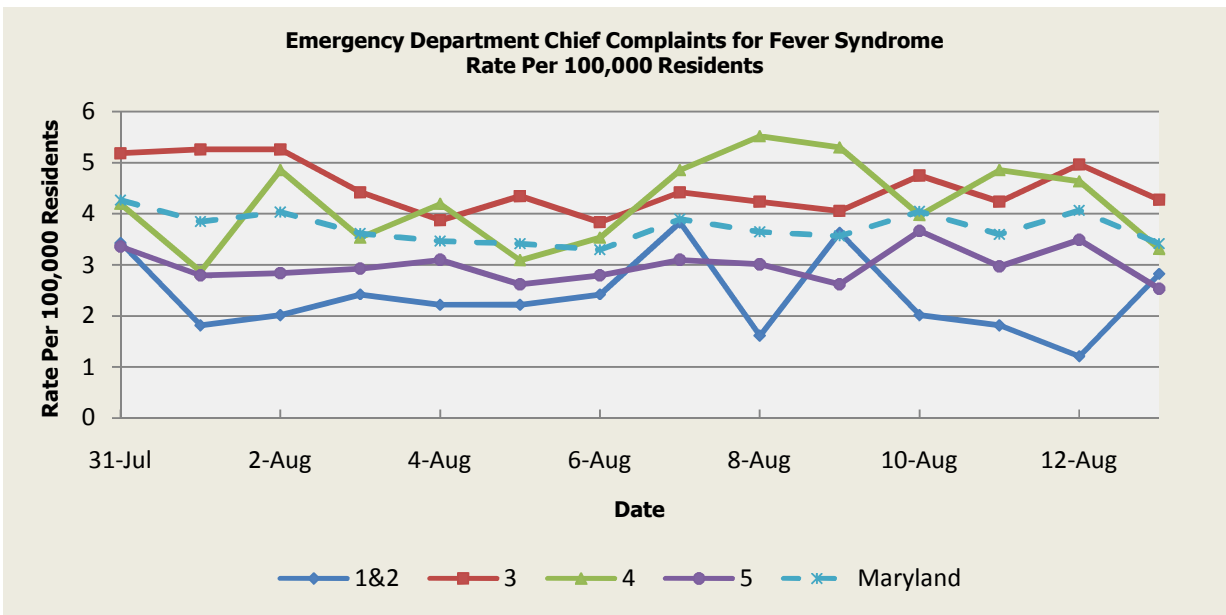
* Per 100,000 Residents



There was one (1) respiratory illness outbreak reported this week: 1 outbreak of Legionellosis in an Assisted Living Facility (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

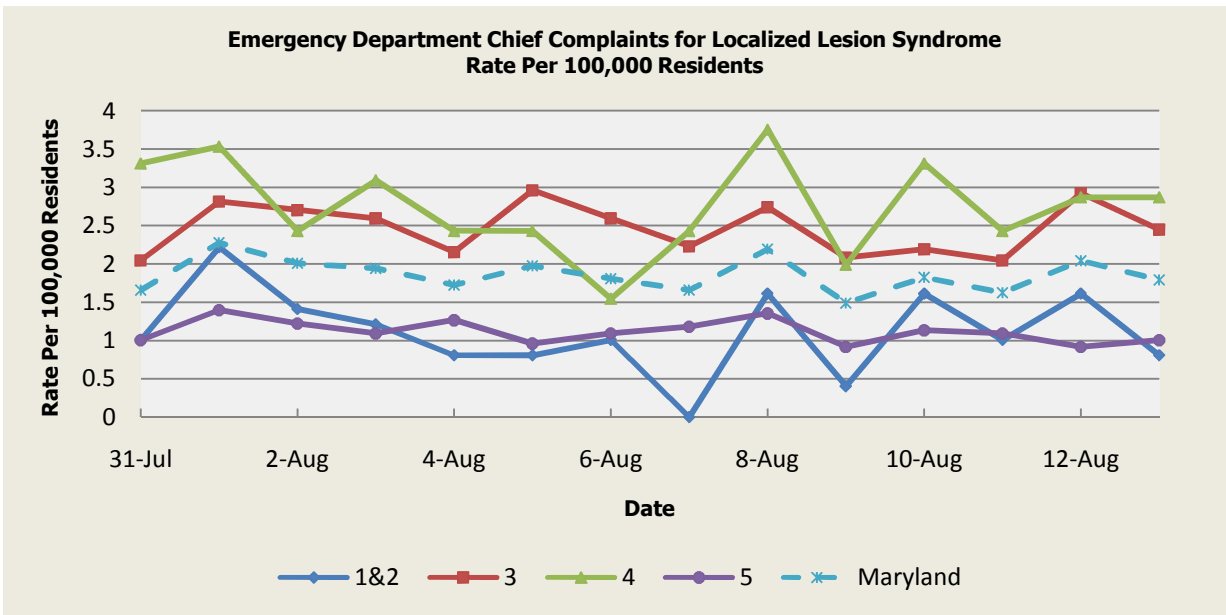
* Per 100,000 Residents



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

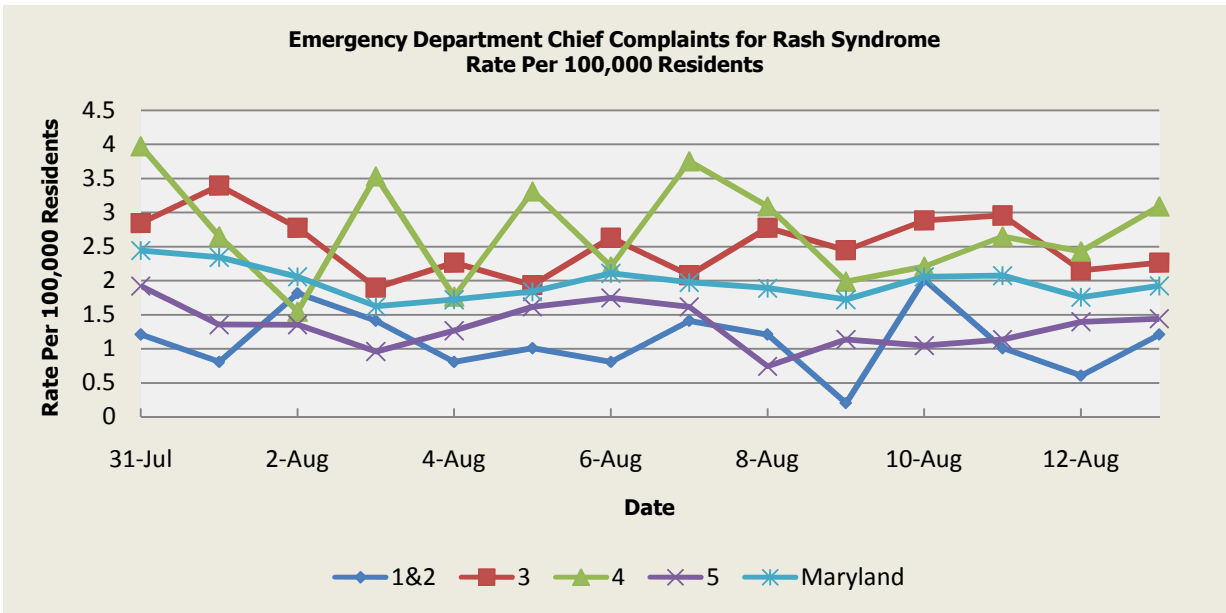
Per 100,000 Residents



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

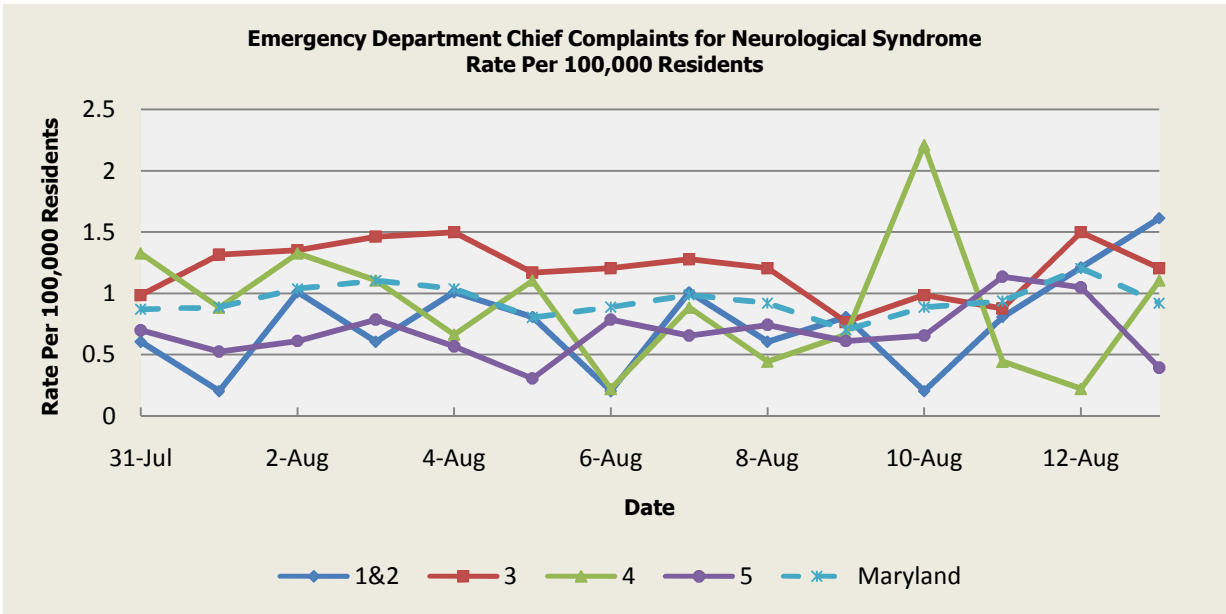
* Per 100,000 Residents



There was one (1) rash illness outbreak reported this week: 1 outbreak of hand, foot and mouth disease associated with a Daycare Center (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

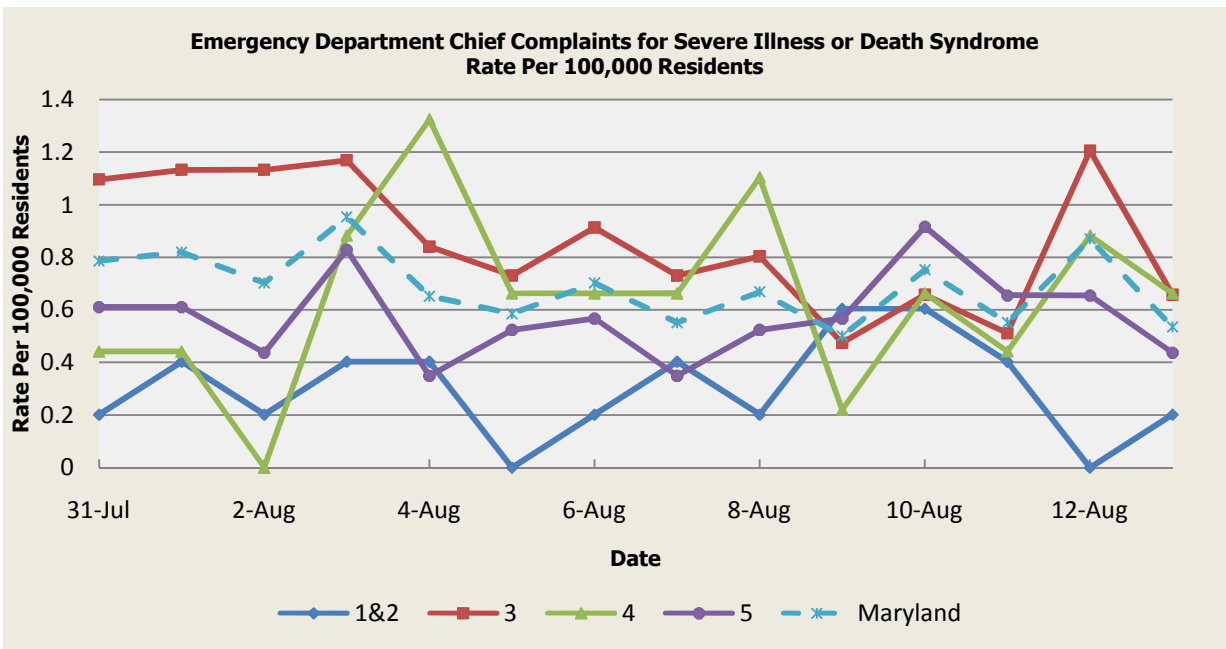
* Per 100,000 Residents



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

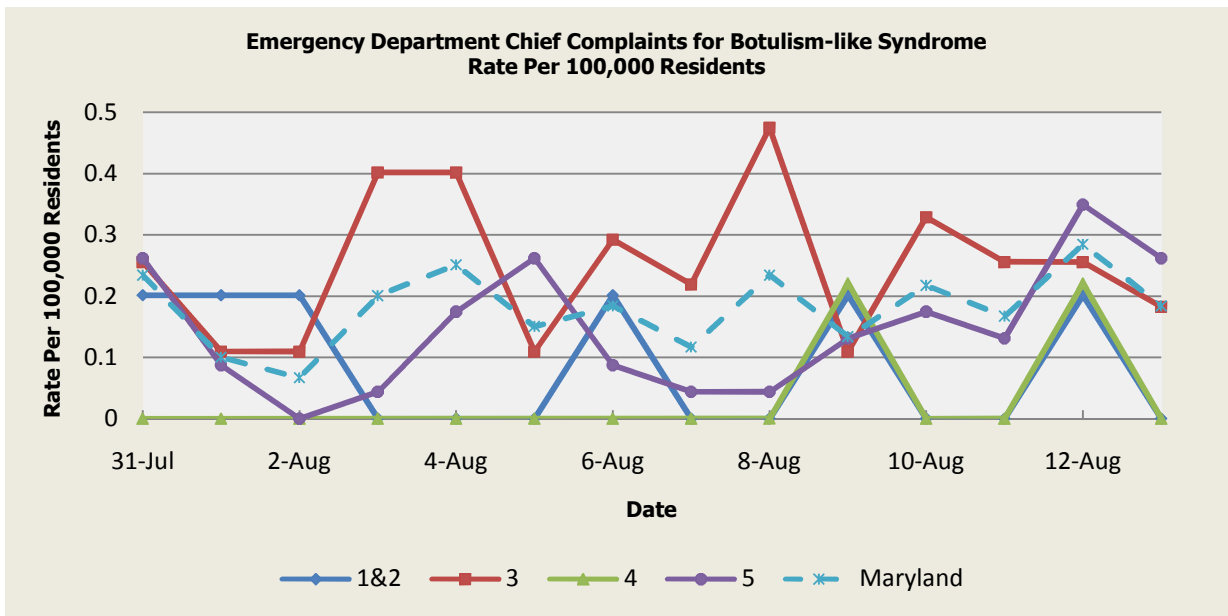


There were no severe illness or death outbreaks reported this week.

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

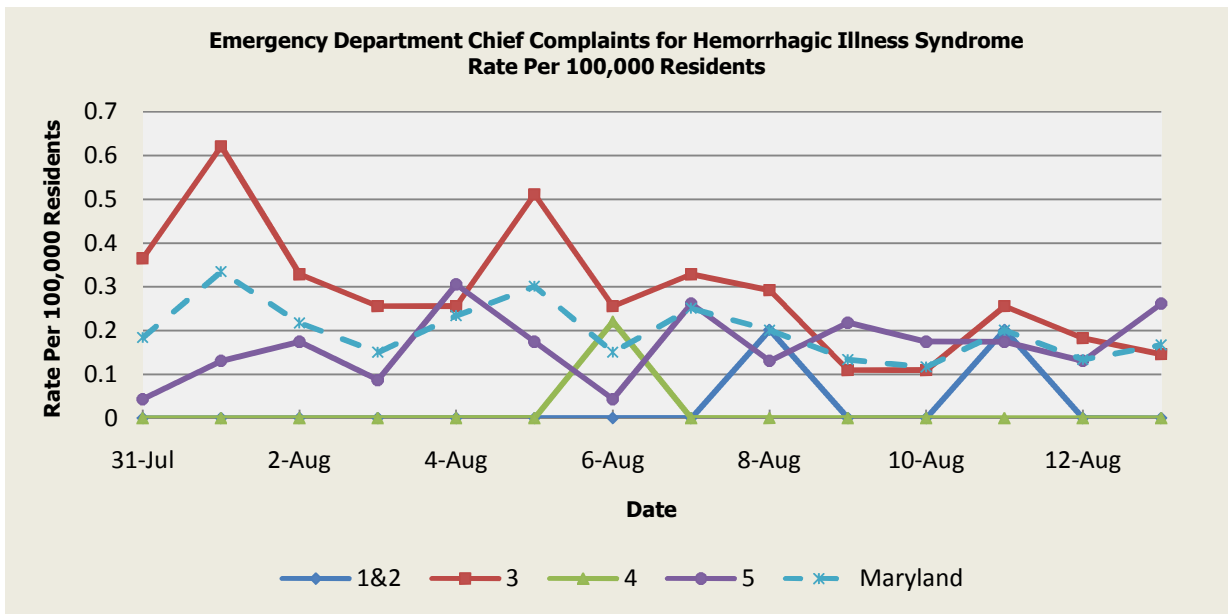
SYNDROMES RELATED TO CATEGORY A AGENTS



There was an appreciable increase above baseline in the rate of ED visits for Botulism-like Syndrome on 7/31 (Region 1&2, 3, 5), 8/01 (Region 1&2), 8/02 (Regions 1&2), 8/03 (Region 3), 8/04 (Regions 3, 5), 8/05 (Region 5), 8/06 (Regions 1&2, 3), 8/07 (Region 3), 8/08 (Regions 3), 8/09 (Region 1&2, 4, 5), 8/10 (Regions 3, 5), 8/11 (Regions 3, 5), 8/12 (Regions 1&2, 3, 4, 5) and 8/13 (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

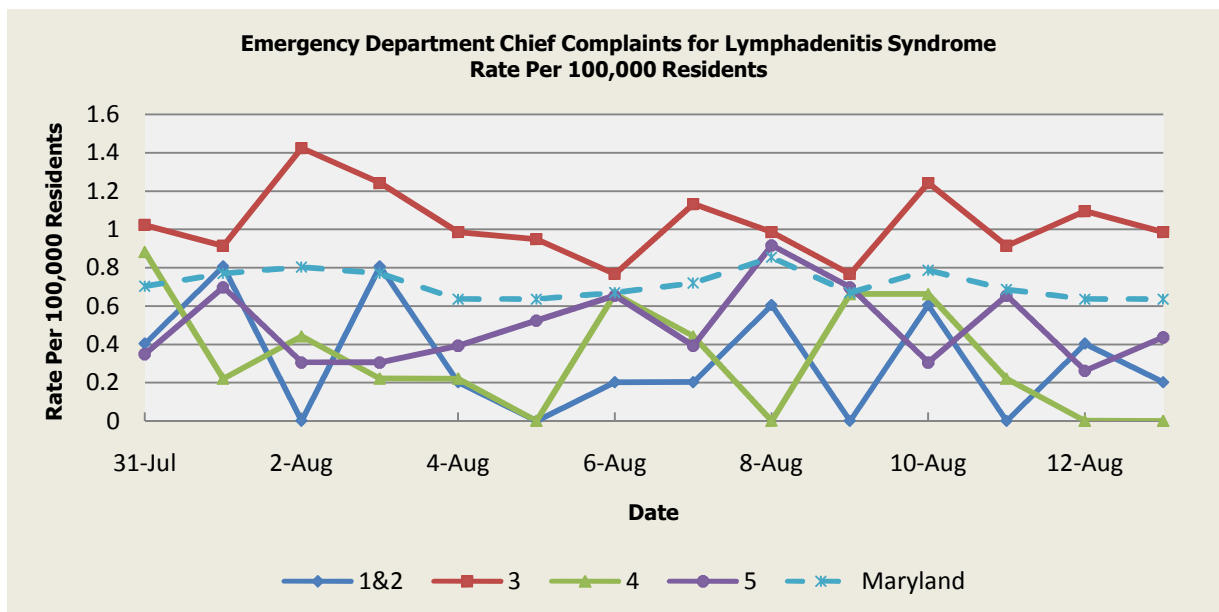
* Per 100,000 Residents



There was an appreciable increase above baseline in the rate of ED visits for Hemorrhagic Illness Syndrome on 7/31 (Region 3), 08/01 (Region 3, 5), 8/02 (Regions 3, 5), 8/03 (Regions 3), 8/04 (Regions 3, 5), 8/05 (Region 3, 5), 8/06 (Region 3, 4), 8/07 (Region 3, 5), 8/08 (Region 1&2, 3, 5), 8/09 (Region 5), 8/10 (Region 5), 8/11 (Regions 1&2, 3, 5), and 8/13 (Region 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 7/31 (Region 3, 4), 8/01 (Region 1&2, 5), 8/02 (Regions 3), 8/03 (Regions 1&2, 3), 8/04 (Region 3), 8/06 (Regions 4, 5), 8/07 (Region 3), 8/08 (Region 5), 8/09 (Regions 4, 5), 8/10 (Regions 3, 4), 8/11 (Regions 5) and 8/12 (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

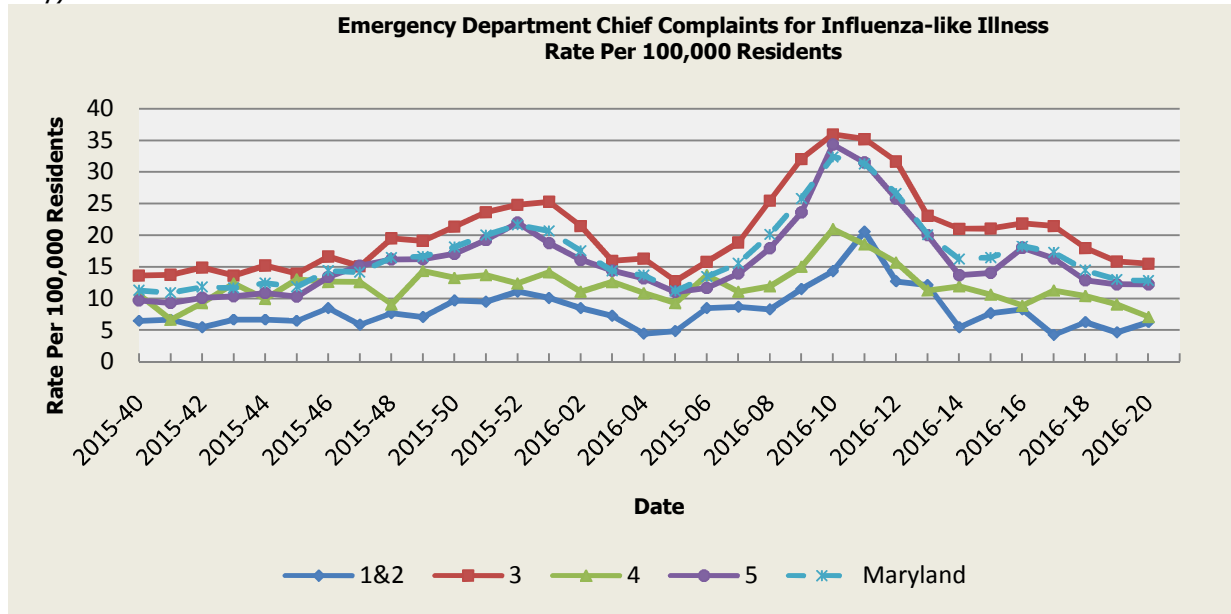
Condition	Counts of Reported Cases‡					
	August			Cumulative (Year to Date)**		
	2016	Mean*	Median*	2016	Mean*	Median*
Vaccine-Preventable Diseases						
Aseptic meningitis	4	26.6	28	190	259.4	274
Meningococcal disease	0	0.2	0	2	5	4
Measles	0	0.6	1	3	3.2	2
Mumps	0	1	1	9	32	9
Rubella	0	0.4	0	1	2.2	2
Pertussis	6	13.8	18	114	166.8	194
Foodborne Diseases						
Salmonellosis	24	59.2	58	417	551.2	555
Shigellosis	6	9.8	10	82	114.2	137
Campylobacteriosis	16	36.8	37	432	441.8	443
Shiga toxin-producing Escherichia coli (STEC)	4	5.8	5	91	79	73
Listeriosis	0	1.2	0	11	10	10
Arboviral Diseases						
West Nile Fever	0	1.8	1	0	3.8	3
Lyme Disease	26	60.2	61	1093	1007.6	1097
Emerging Infectious Diseases						
Chikungunya	0	0.4	0	5	7.8	0
Dengue Fever	0	0.8	1	25	8.6	9
Zika Virus***	4	0	0	72	0.2	0
Other						
Legionellosis	5	6.6	7	93	92	97

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

*** As of August 17, 2016, the total Maryland Confirmed Zika Virus Infections is 64.

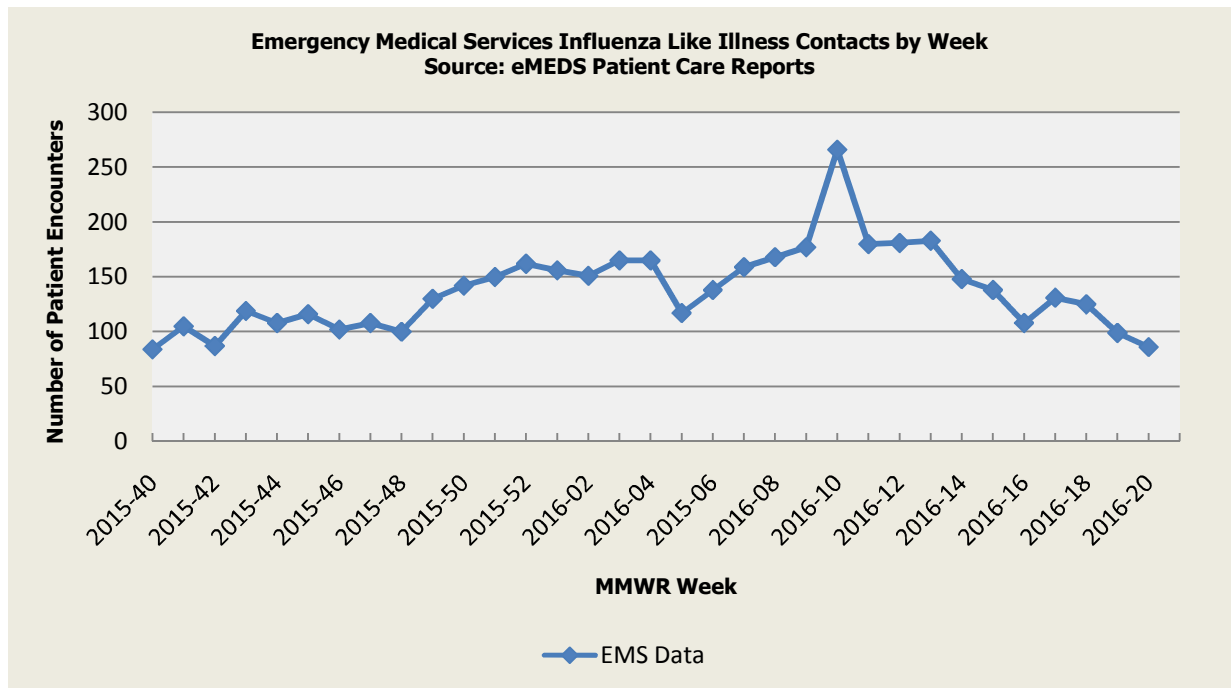
SYNDROMIC INFLUENZA SURVEILLANCE

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



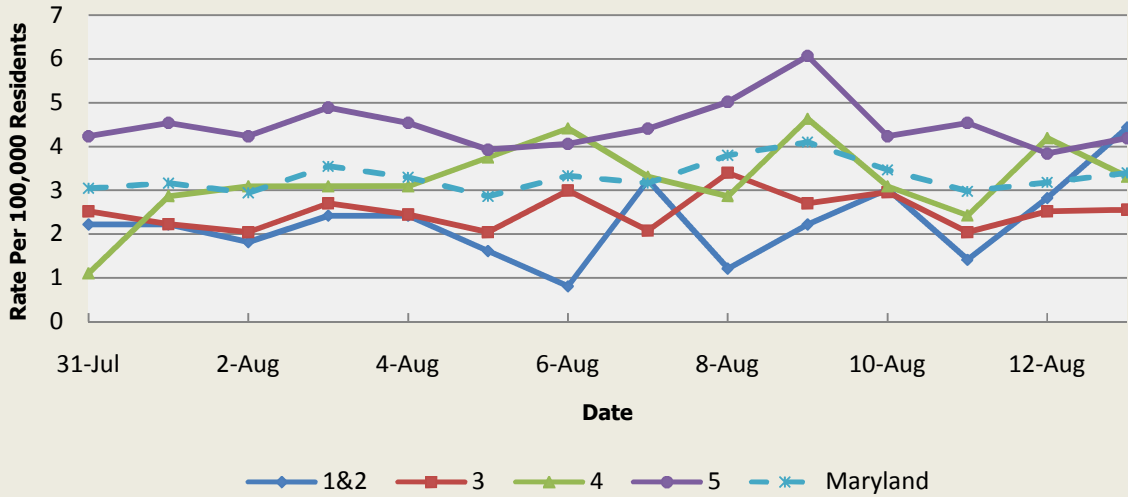
Influenza-like Illness Baseline Data Week 1 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	9.26	11.58	10.78	10.43	10.88
Median Rate*	7.66	8.99	9.05	8.03	8.72

* 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.

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

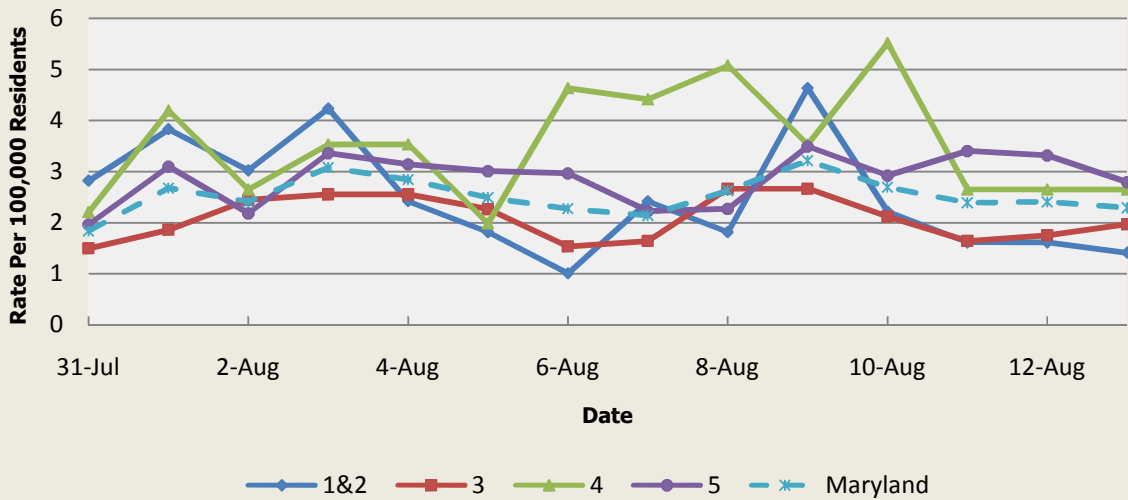


There was not an appreciable increase above baseline in the rate of OTC medication sales this week.

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

**Over-the-Counter Thermometer Sales
Rate 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 in the United States at the time that this report was compiled.

Swine Influenza in Humans:

H3N2V (MI, OH): 17 Aug 2016, On 13 Aug 2016, the CDC reported four (4) human infections with influenza viruses that normally circulate in swine (swine influenza). The 4 human infections were caused by H3N2v viruses in Ohio (2) and Michigan (2). All 4 patients reported attending fairs where they had exposure to pigs during the week preceding illness onset. Pigs at the fairs have reportedly tested positive for swine influenza A (H3N2) infection. The Ohio patients are not related other than that both of them reported having attended the same fair in Ohio. Similarly, the Michigan cases both attended the same fair in Michigan but are otherwise unrelated to each other. CDC is working with state public health officials to support their human health responses and has recommendations for the public on what steps they can take to help protect against H3N2v and other swine influenza viruses. The 2016-2017 seasonal flu vaccine is not formulated to provide protection against H3N2v. Read More: <http://www.promedmail.org/post/4420280>

Avian Influenza in Poultry:

LPAI H5N2 (DENMARK): 8 Aug 2016, On Mon 8 Aug 2016, Denmark reported a low pathogenic avian influenza outbreak in a mallard duck farm near the North Jutland town of Nibe. An entire flock of 1200 ducklings will be killed to prevent the virus from spreading. The infection was discovered during a routine inspection carried out as part of prevention efforts against Avian influenza. Just 2 weeks ago, an [LPAI H7N7] case was reported at Brenderup farm in western Funen, where 3000 ducklings had to be put down because of the virus. Read more: <http://www.promedmail.org/post/4402626>

NATIONAL DISEASE REPORTS

CRYPTOSPORIDIOSIS (OHIO): 15 Aug 2016, On 11 Aug 2016, the Columbus Public Health along with other central Ohio agencies have declared community outbreak of cryptosporidiosis after more than 100 cases have been reported in the area. There has been a recent rise over the normal threshold of cases across several jurisdictions in central Ohio, including Columbus, Franklin County and Delaware County, according to Columbus Public Health. The 3 jurisdictions have reported more than 107 cases so

9

far this year [2016], which is more than the last 3 years combined. This outbreak is not tied to any one location. A spokesperson with Columbus Public Health says there have been 62 cases in Columbus, 34 in Franklin County and 11 in Delaware County. Read more:

<http://www.promedmail.org/post/4417515>

HANTAVIRUS (COLORADO): 13 Aug 2016, On 12 Aug 2016, the Costilla Colorado County Health Department confirmed this week that a resident of Costilla County has contracted hantavirus pulmonary syndrome (HPS), bringing the number of confirmed hantavirus cases to 5 in the San Luis Valley so far in 2016. HPS is a rare but serious respiratory disease that results in death for more than one-third of those who become infected. Public Health officials in Utah county last week reported the death of a woman from a hantavirus infection as well, prompting officials to warn Utah residents to take precautions with potential rodent infestations. People may be at particular risk in previously-vacant buildings, while housekeeping, or while camping and hiking. Early symptoms of hantavirus infections include fatigue, fever, and muscle aches, as well as headaches, dizziness, chills and abdominal pain. Read more: <http://www.promedmail.org/post/4414971>

HEPATITIS A (HAWAII): 17 August 2016, On 15 Aug 2016, The Hawaii State Department of Health has ordered all Genki Sushi restaurants on Oahu and Kauai to close immediately. State health officials say imported frozen scallops served raw at Genki Sushi are likely linked to the hepatitis A outbreak that has infected 168 people since June 2016, known as the worst hepatitis A outbreak in nearly 2 decades in Hawaii. The onset of symptoms for the earliest victims was 12 Jun 2016 and the most recent is 19 Jul 2016. Read more: <http://www.promedmail.org/post/4422480>

INTERNATIONAL DISEASE REPORTS

INFLUENZA (AUSTRALIA): 17 Aug 2016, On 16 August 2016, NSW Health reports a more than 3-fold increase in influenza-related deaths so far this year [2016], including 45 people who have died while suffering from flu, which is an increase from the 13 deaths reported at the same time in 2015. The jump reflects a large increase in outbreaks in nursing homes, with 79 reported to date for the year [2016], up from 38 at the same time 12 months ago. Read more: <http://www.promedmail.org/post/4420409>

CRIMEAN-CONGO HEMORRHAGIC FEVER (PAKISTAN): 16 Aug 2016, On 13 Aug 2016, officials report another patient has died from Crimean-Congo hemorrhagic fever (CCHF), becoming the third victim in three weeks. The mortality rate from CCHF is approximately 30 percent, with death occurring in the 2nd week of illness. In patients who recover, improvement generally begins on the 9th or 10th day after the onset of illness. All state-run hospitals including rural health centers and basic health units have been asked to remain on high alert. Since 2013, 7 people have been infected with the CCHF virus in Chakwal of which 5 recovered and 2 lost their lives. Read more: <http://www.promedmail.org/post/4414856>

HAND, FOOT, AND MOUTH DISEASE (ASIA): 14 Aug 2016, On 11 Aug 2016, Malaysia Health Director reported an increase of a total of 23,454 hand, foot and mouth disease (HFMD) cases throughout the country between 3 Jan to 6 Aug [2016], an increase of 17.8 per cent from the 19,916 cases during the same period last year [2015]. The average number of cases each week increased to 757 from 642 during the corresponding period of last year. According to the World Health Organization, hand, foot and mouth disease (HFMD) is a common infectious disease that occurs most often in children, but can occur in adolescents and occasionally in adults. In most cases, the disease is mild and self-limiting, but more severe clinical presentation with neurological symptoms such as meningitis, encephalitis and polio-like paralysis may occur. Read more: <http://www.promedmail.org/post/4413599>

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

