



August 26, 2016

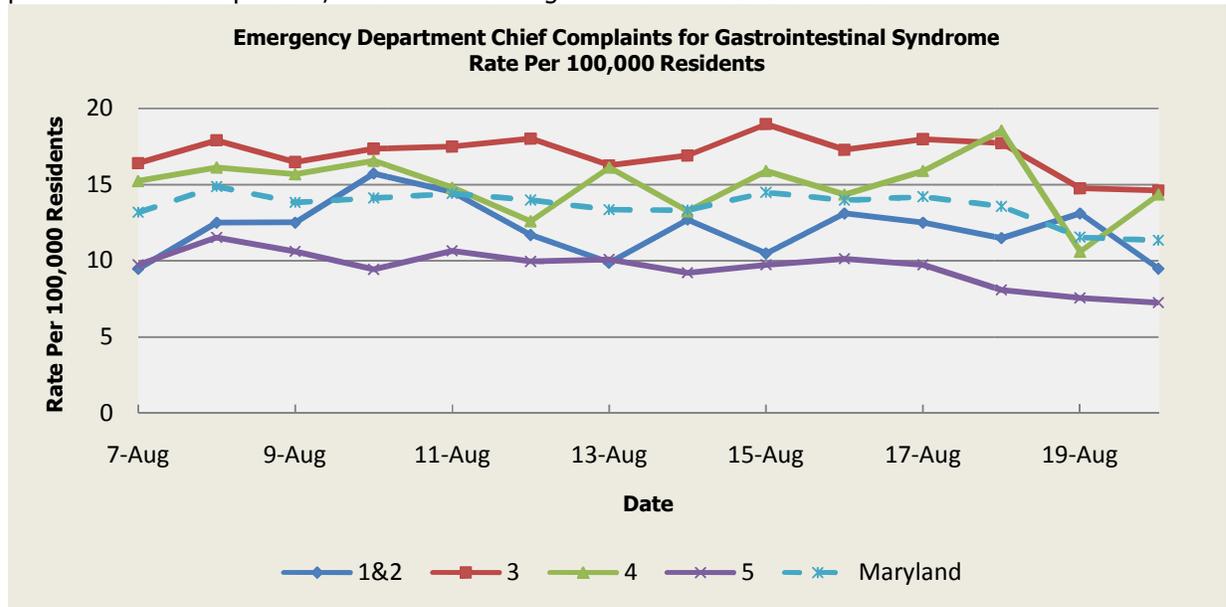
**Public Health Preparedness and Situational Awareness Report: #2016:33
Reporting for the week ending 8/20/16 (MMWR Week #33)**

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):

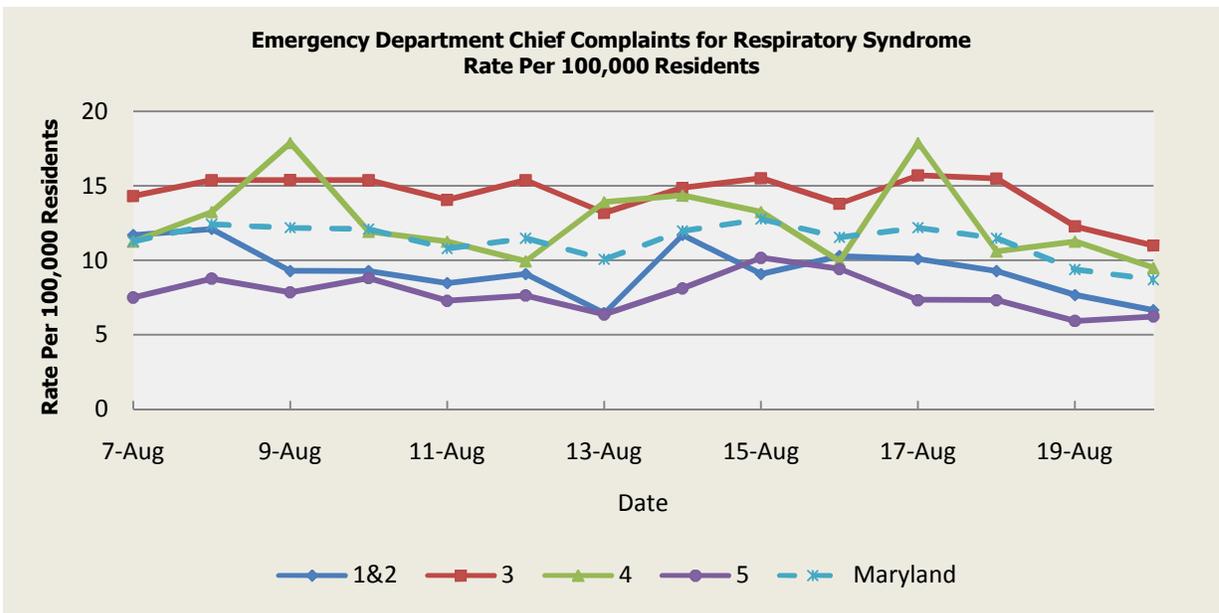
Graphical representation is provided for all syndromes (excluding the "Other" category; see Appendix 1) by Health and Medical Regions (See Appendix 2). Emergency department chief complaint data is presented as rates per 100,000 residents using data from the 2010 census.



There were two (2) gastroenteritis/foodborne outbreaks reported this week: 1 outbreak of gastroenteritis associated with an Assisted with a Fair (Region 3); 1 outbreak of ciguatera fish poisoning associated with a Market (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

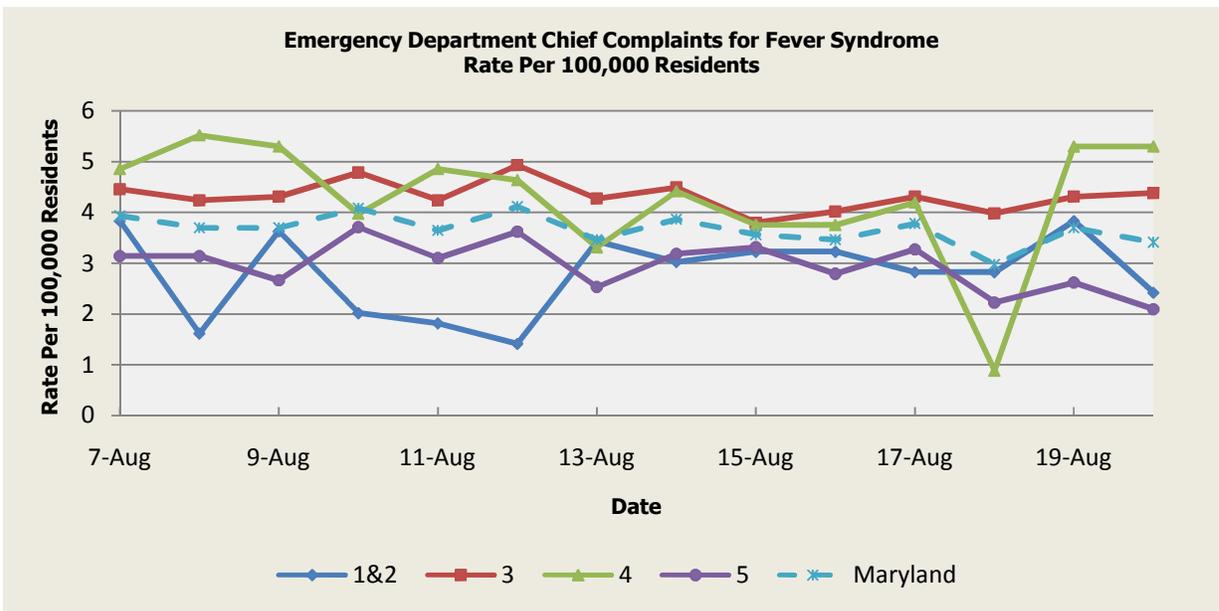
* Per 100,000 Residents



There 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

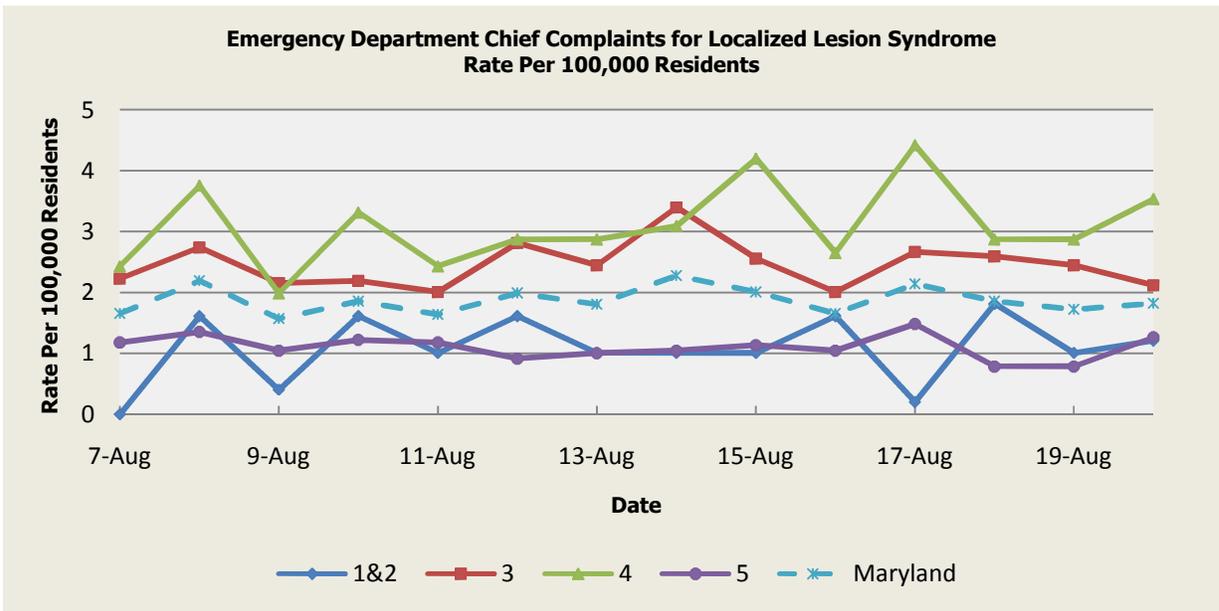
* Per 100,000 Residents



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

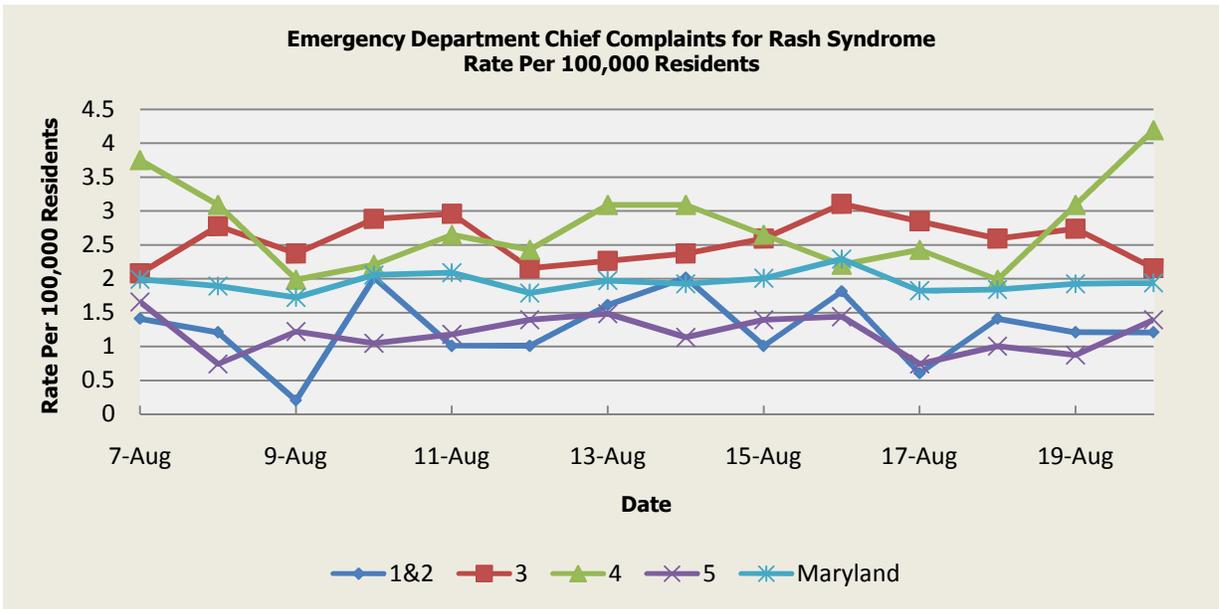
Per 100,000 Residents



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

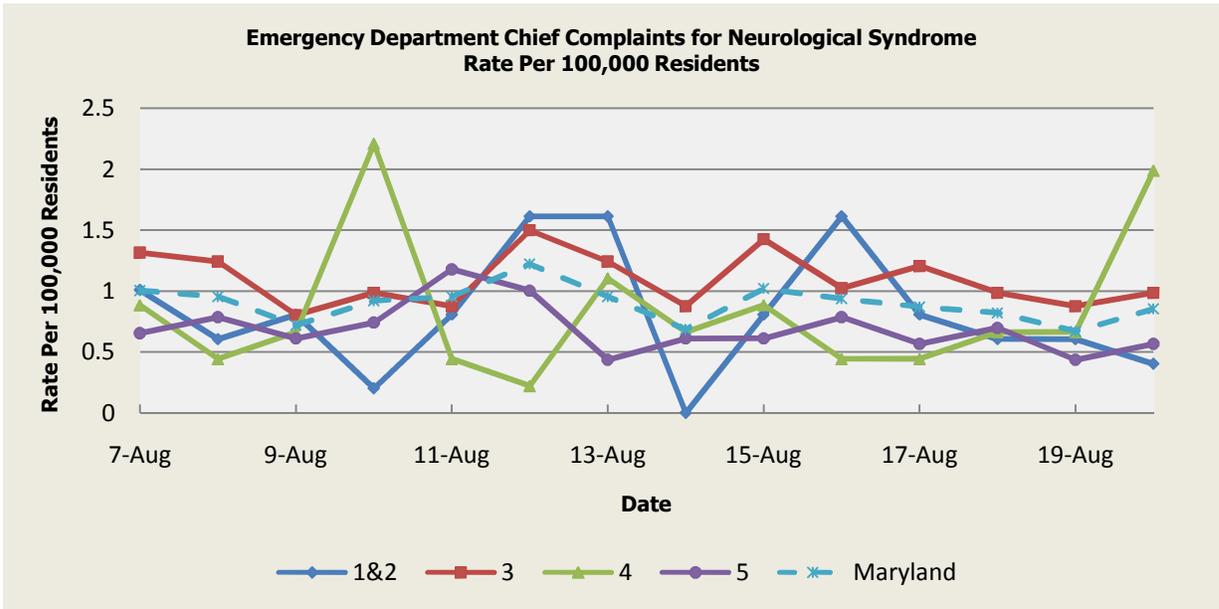
* Per 100,000 Residents



There were two (2) rash illness outbreaks reported this week: 1 outbreak of hand, foot and mouth disease associated in a Hospital (Region 3); 1 outbreak of scabies in a Nursing Home (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

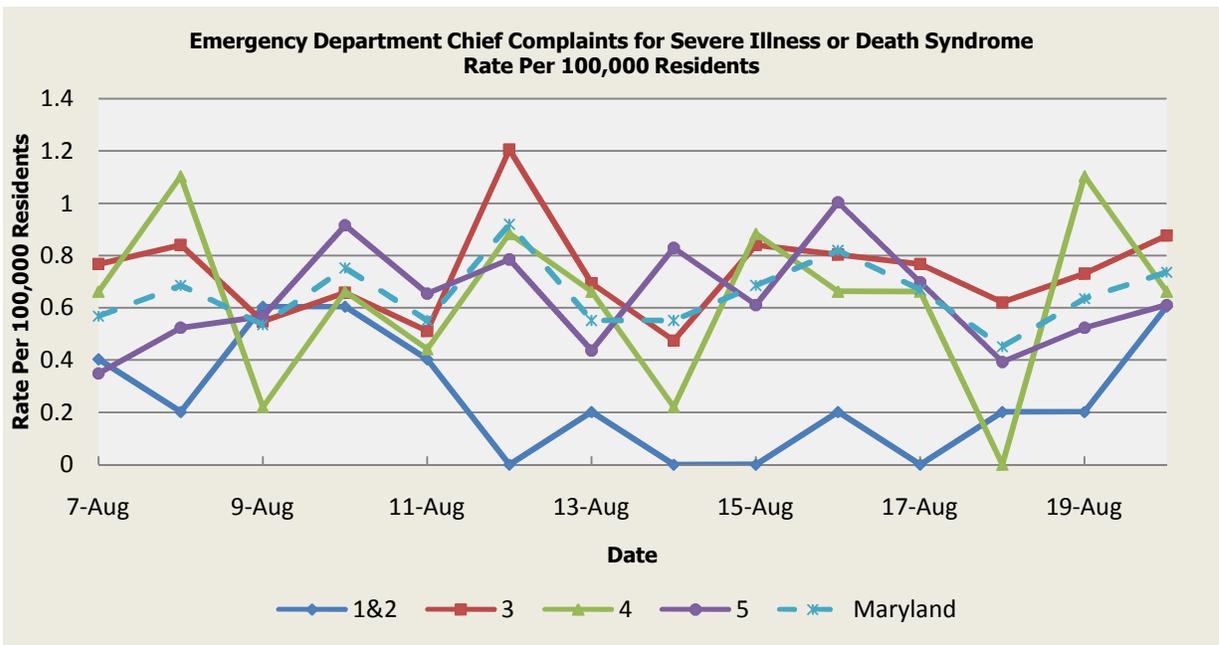
* Per 100,000 Residents



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

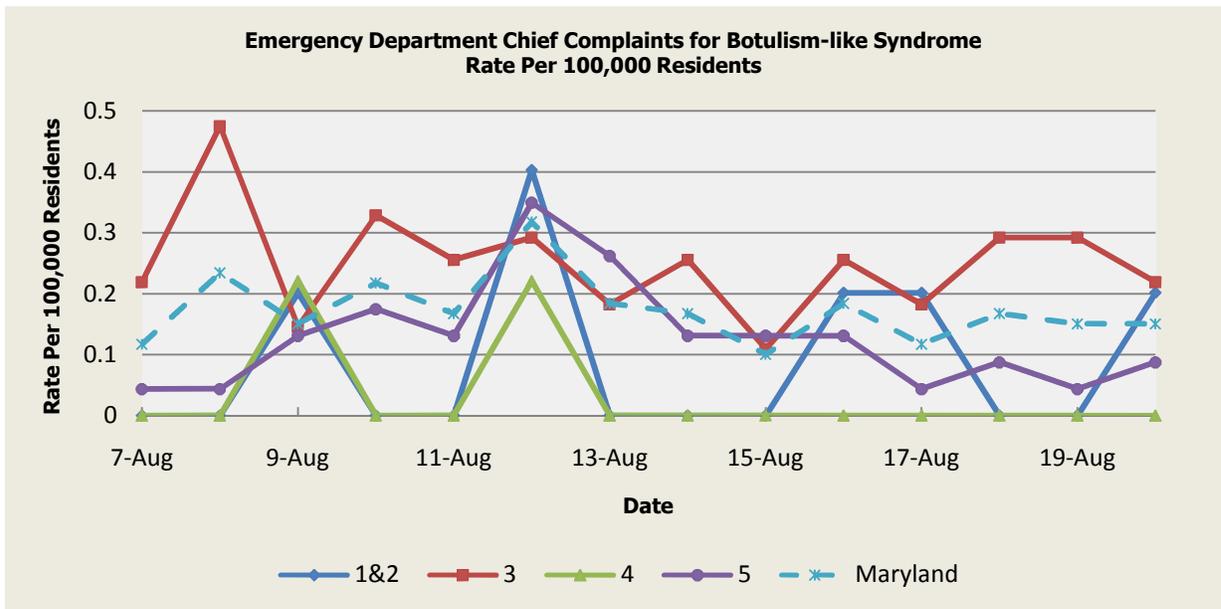


There were no severe illness or death outbreaks reported this week.

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

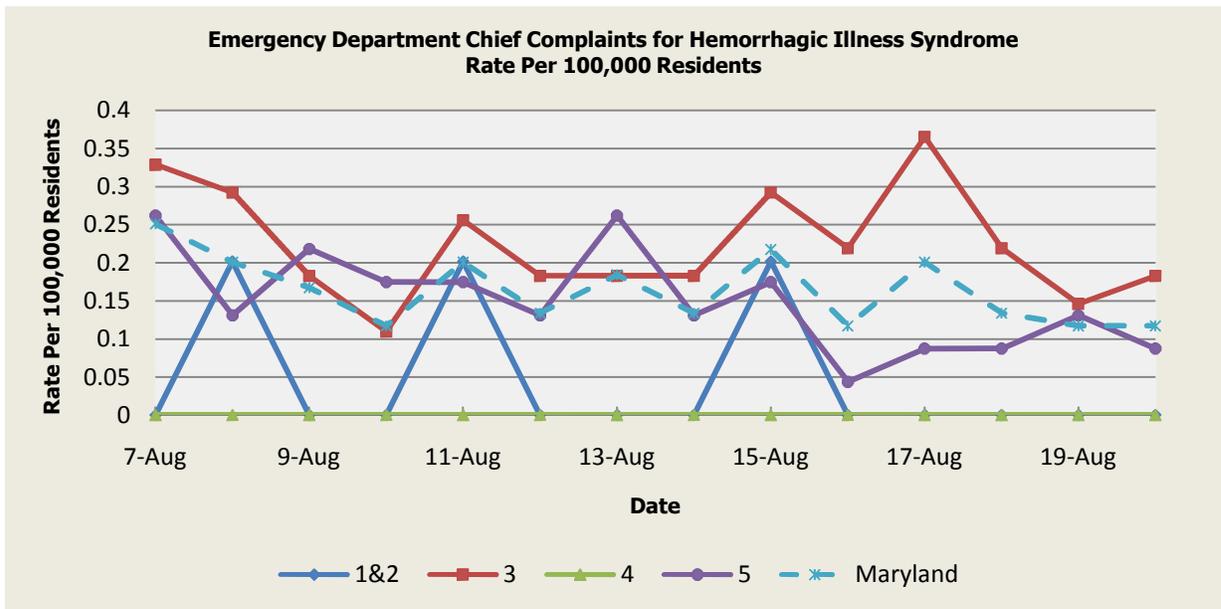
SYNDROMES RELATED TO CATEGORY A AGENTS



There was an appreciable increase above baseline in the rate of ED visits for Botulism-like Syndrome on 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), 8/13 (Regions 3, 5), 8/14 (Regions 3,5), 8/15 (Region 5), 8/16 (Regions 1&2,3,5), 8/17 (Regions 1&2,3), 8/18 (Region 3), 8/19 (Region 3) and 8/20 (Regions 1&2,3). 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

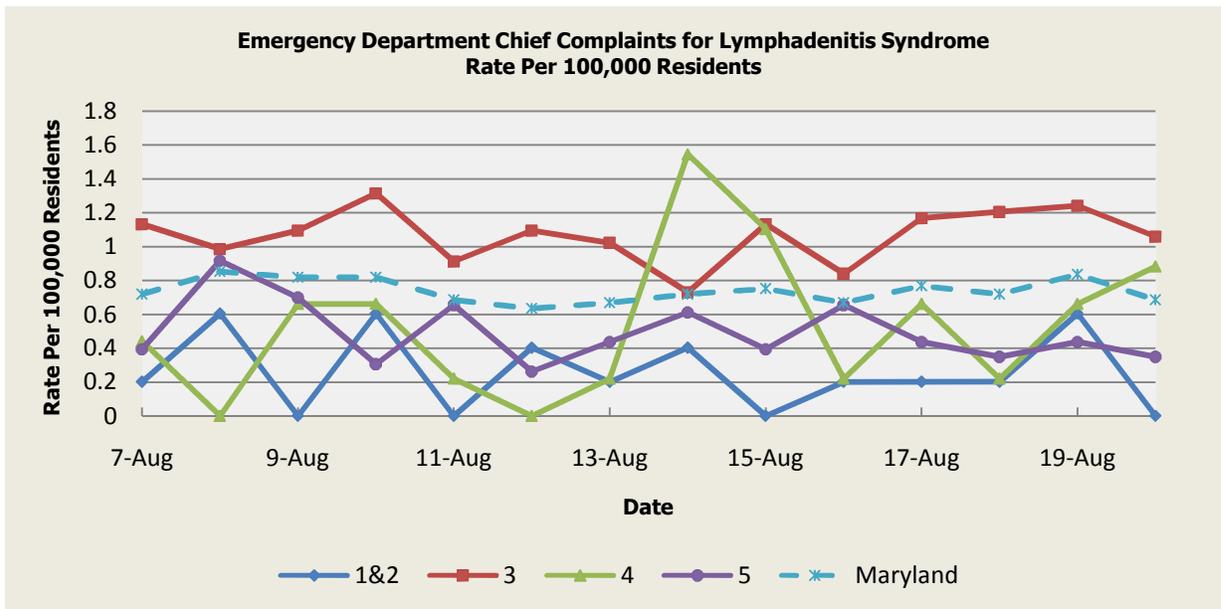
* Per 100,000 Residents



There was an appreciable increase above baseline in the rate of ED visits for Hemorrhagic Illness Syndrome on 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), 8/13 (Region 5), 8/15 (Regions 1&2,3,5), 8/16 (Region 3), 8/17 (Region 3), and 8/18 (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 8/14 (Regions 4,5), 8/15 (Regions 3,4), 8/16 (Region 5), 8/17 (Region 3), 8/18 (Region 3), 8/19 (Region 3) and 8/20 (Regions 3,4). 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

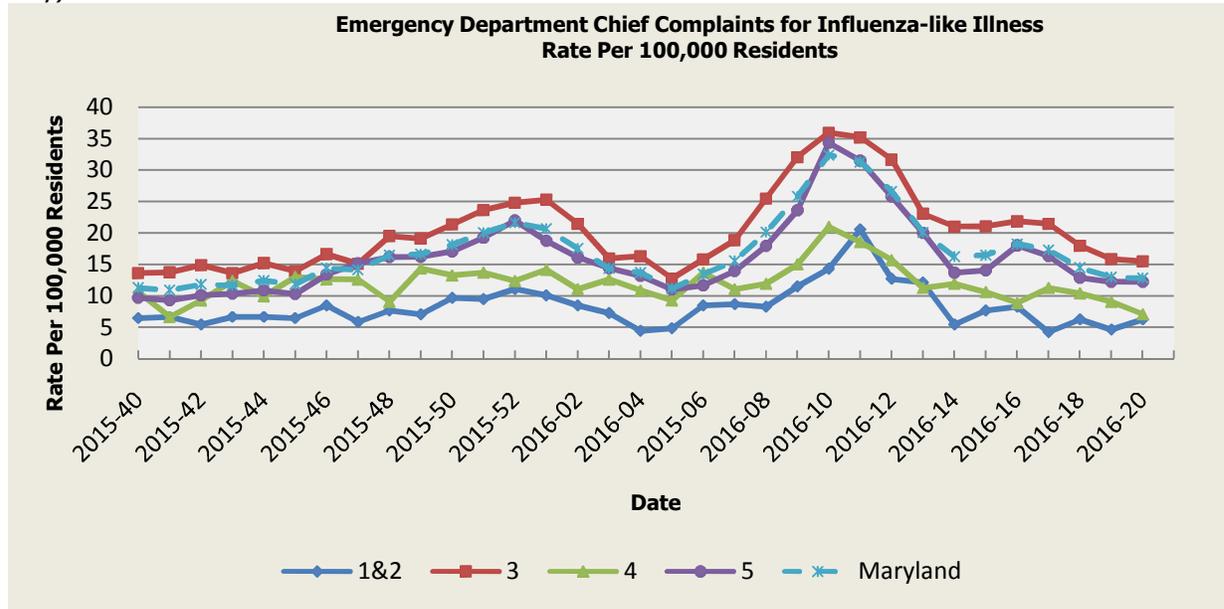
Condition	Counts of Reported Cases‡					
	August			Cumulative (Year to Date)**		
	2016	Mean*	Median*	2016	Mean*	Median*
Vaccine-Preventable Diseases						
Aseptic meningitis	9	38.4	45	195	271.2	288
Meningococcal disease	0	0.2	0	2	5	4
Measles	0	0.6	1	3	3.2	2
Mumps	0	1.2	1	12	32.2	9
Rubella	0	0.4	0	1	2.2	2
Pertussis	8	20.8	26	117	173.8	207
Foodborne Diseases						
Salmonellosis	50	91.2	86	447	583.2	580
Shigellosis	8	13.4	12	85	117.8	140
Campylobacteriosis	25	54	56	444	459.2	451
Shiga toxin-producing Escherichia coli (STEC)	8	9	9	96	82.2	75
Listeriosis	0	1.6	0	11	10.4	10
Arboviral Diseases						
West Nile Fever	0	3.4	3	0	5.4	5
Lyme Disease	43	94	91	1131	1041.4	1126
Emerging Infectious Diseases						
Chikungunya	0	1.4	0	5	8.8	0
Dengue Fever	0	1.2	1	25	9	10
Zika Virus***	7	0	0	75	0.2	0
Other						
Legionellosis	6	12.6	11	94	98	103

‡ 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.

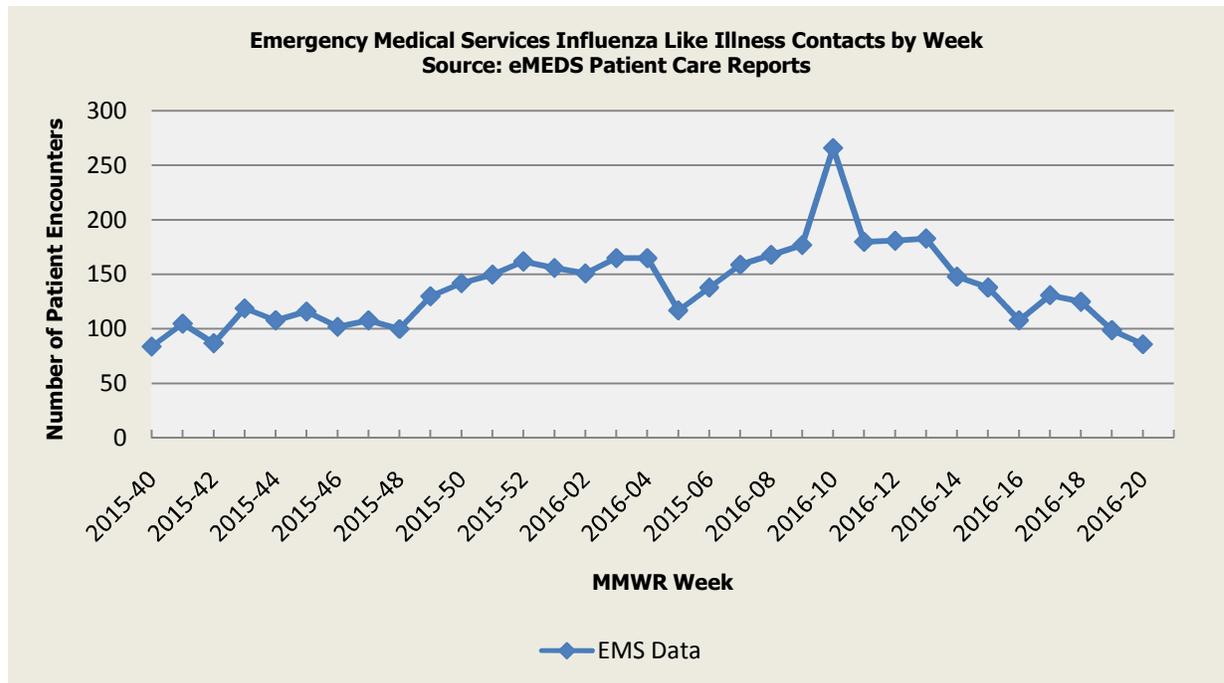
SYNDROMIC INFLUENZA SURVEILLANCE

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



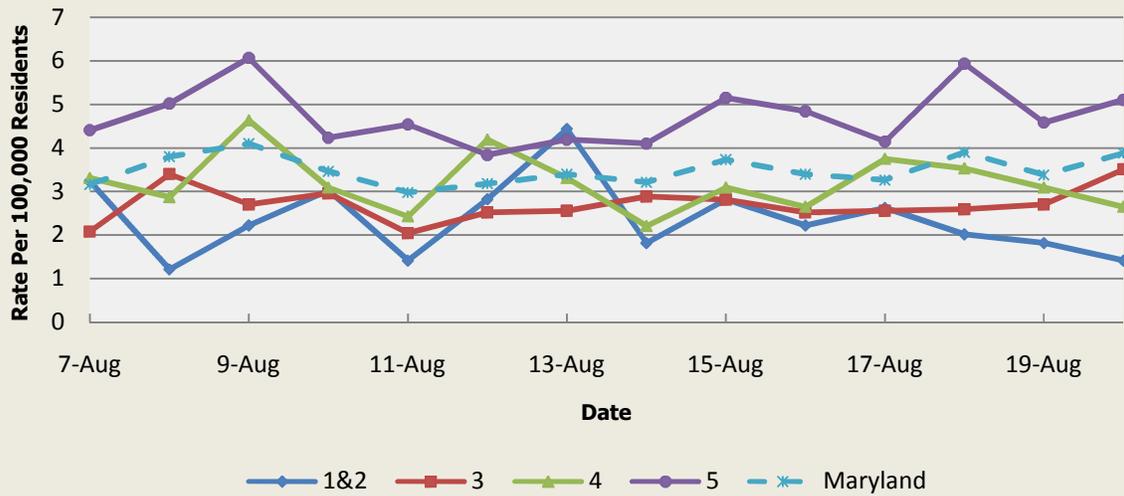
Influenza-like Illness Baseline Data Week 1 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	9.26	11.58	10.78	10.43	10.88
Median Rate*	7.66	8.99	9.05	8.03	8.72

* 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**

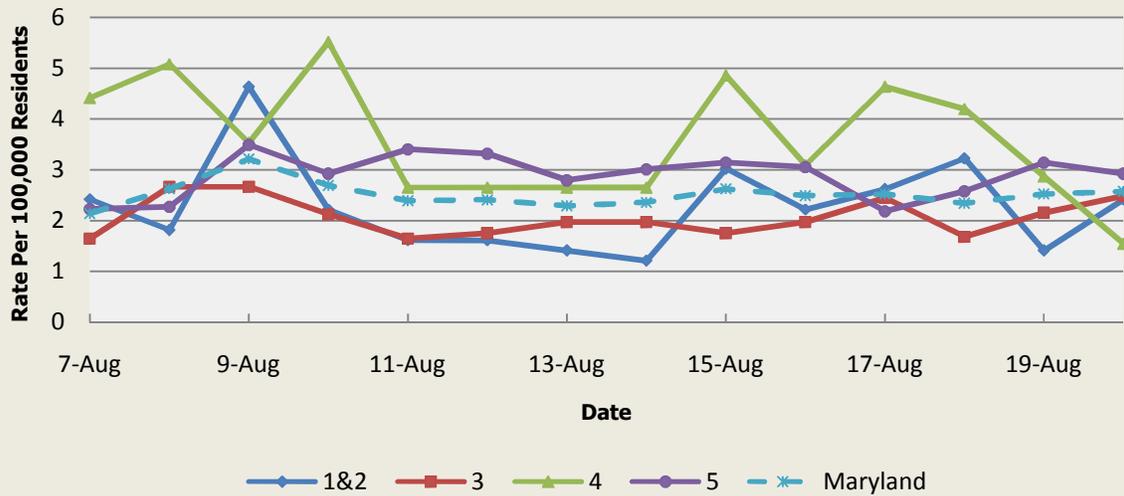


There was not an appreciable increase above baseline in the rate of OTC medication sales this week.

OTC Sales Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.56	4.69	2.60	8.21	5.79
Median Rate*	2.82	3.98	2.21	7.60	5.19

* 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*	3.48	3.30	2.54	4.50	3.72
Median Rate*	3.23	3.07	2.43	4.10	3.46

* 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 July 19, 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.

H7N9 (CHINA): 22 Aug 2016, The Centre for Health Protection (CHP) of the Department of Health (DH) today [12 Aug 2016] received notification of 5 additional human cases of avian influenza A(H7N9) from the National Health and Family Planning Commission (NHFPC), and again urged the public to maintain strict personal, food, and environmental hygiene both locally and during travel. Read More: <http://www.promedmail.org/post/4422893>

Swine Flu in Humans:

H3N2V (MICHIGAN): 19 Aug 2016, The Michigan Departments of Health and Human Services [MDHHS] and Agriculture and Rural Development [MDARD] today [19 Aug 2016] announced that there have been 8 human cases of influenza A variant viruses reported in Michigan. They have tested positive for influenza A H3N2 variant (H3N2v) and one person has been hospitalized and since released. All of the confirmed cases had exposure to swine at county fairs in Muskegon, Cass, and Ingham counties during July and August [2016], where sick pigs had also been identified. Read More: <http://www.promedmail.org/post/4431010>

NATIONAL DISEASE REPORTS

VIBRIO VULNIFICUS (FLORIDA): 24 Aug 2016, According to the Florida Department of Health, 2 Tampa-area residents did get infected with *Vibrio vulnificus* and died in 2016. One resident was from Citrus County, the other resided in Sarasota County. The bacterium occurs naturally in Gulf Coast waters. You can also get infected if you go into water with an open cut or sore. So far in 2016, 23 people have been infected by the bacterium across the USA. A total of 5 people have died from the infection. Read more: <http://www.promedmail.org/post/4441084>

CRYPTOSPORIDIOSIS (ARIZONA): 23 Aug 2016, More than 100 people in the Phoenix area [Maricopa County, Arizona] have been sickened in an outbreak of the diarrhea-causing parasite *Cryptosporidium parvum*, and Maricopa County officials have identified more than 20 recreational water facilities -- including splash pads, water parks, and public pools -- that may have been contaminated.

INTERNATIONAL DISEASE REPORTS

SCOMBROID FISH POISONING (INDIA): 24 Aug 2016, Histamine (which causes allergy and food intolerance) forming in fish species like tuna, Indian mackerel and sardine -- recently listed by Food Safety Authority of India under the category of "fish species having potential to cause histamine poisoning" -- is making its way into homes due to improper refrigeration and preservation in cities in Telangana including Hyderabad and in Visakhapatnam in Andhra Pradesh. Read more: <http://www.promedmail.org/post/4439217>

Q FEVER (AUSTRALIA): 24 Aug 2016, Health officials are investigating an outbreak of a rare and potentially serious infectious disease among meat workers in Melbourne's western suburbs. People working in and around Vic Wide Meat Brokers and WJ Drever in Laverton North are being tested for Q fever after 6 employees of the 2 meat [processing] businesses fell ill with it. Read more: <http://www.promedmail.org/post/4437074>

CHOLERA, DIARRHEA & DYSENTERY (SOUTH KOREA): 25 Aug 2016, A Gwangju man has tested positive for cholera, health authorities said Tue 23 Aug 2016. It is the first outbreak of the deadly disease on Korean soil in 15 years. The man, 59, was hospitalized early this month [Aug 2016] with the disease's typical symptoms of diarrhea and abdominal pain and confirmed to have cholera. He was discharged from hospital after receiving antibiotics at an isolation facility. He is now in a stable condition, according to the Korea Centers for Disease Control and Prevention (KCDC). His family has no cholera symptoms, it said. Read more: <http://www.promedmail.org/post/4441081>

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

