



March 11, 2016

**Public Health Preparedness and Situational Awareness Report: #2016:09
Reporting for the week ending 3/5/16 (MMWR Week #9)**

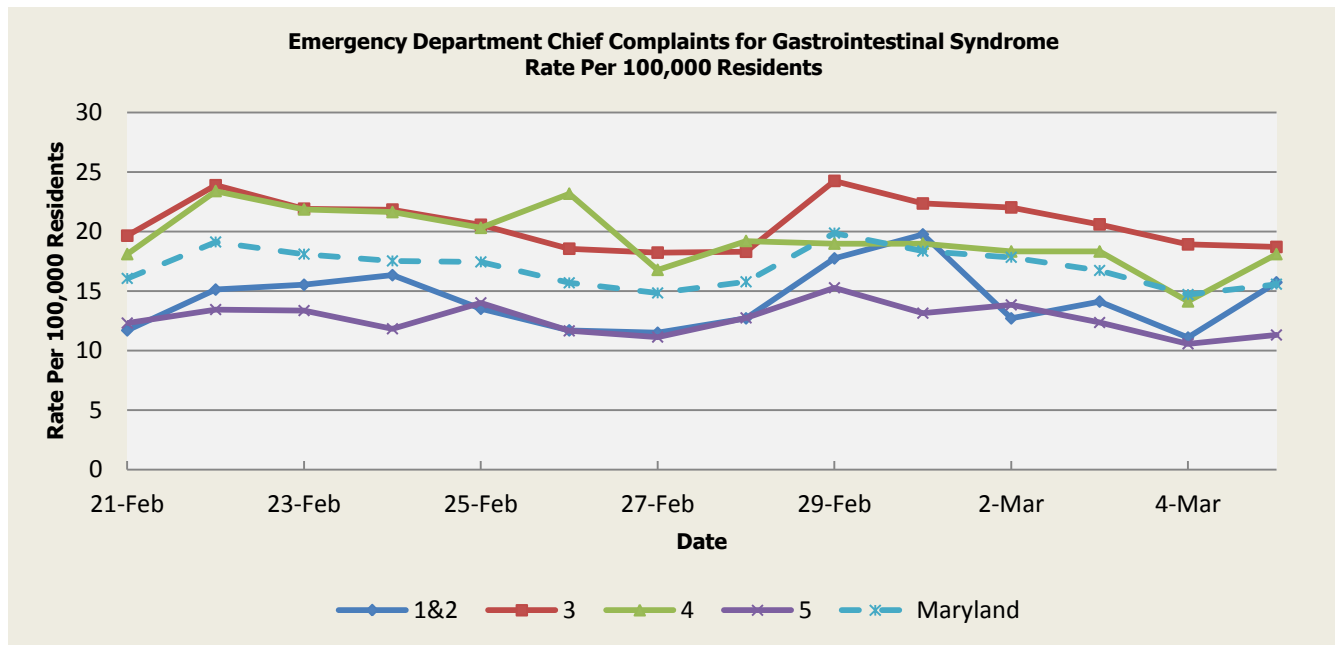
CURRENT HOMELAND SECURITY THREAT LEVELS

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.

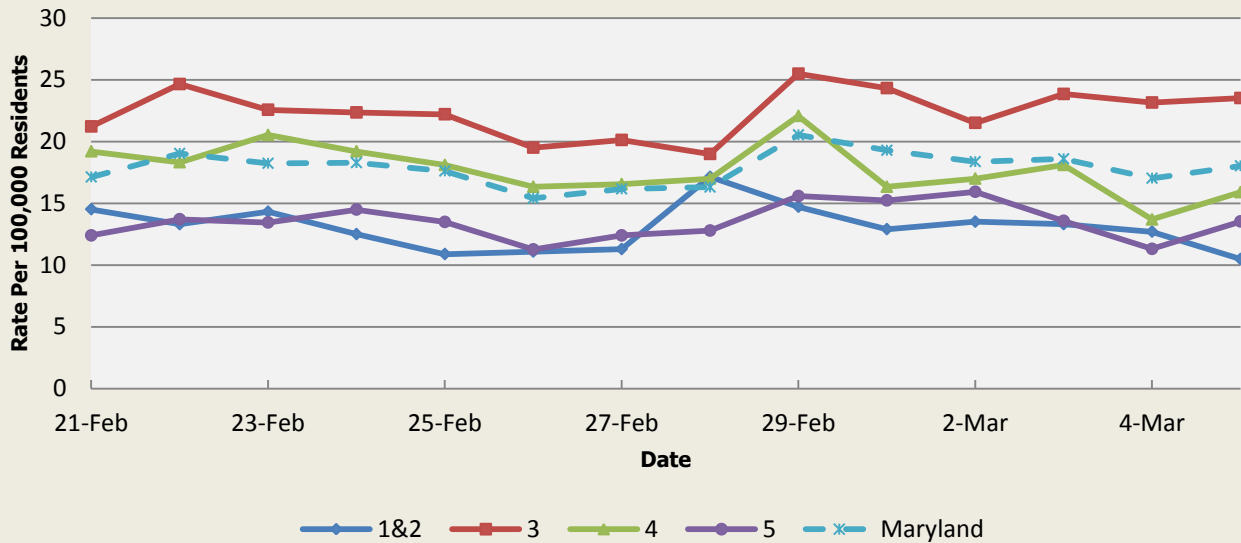


There were two gastrointestinal illness outbreaks reported this week: 1 outbreak of gastroenteritis associated with a nursing home (Region 3). 1 outbreak of gastroenteritis/foodborne associated with a restaurant (Region 3).

Health Region	Gastrointestinal Syndrome Baseline Data January 1, 2010 - Present				
	1&2	3	4	5	Maryland
Mean Rate*	12.92	14.72	15.39	10.27	12.91
Median Rate*	12.70	14.36	14.80	10.13	12.68

* Per 100,000 Residents

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

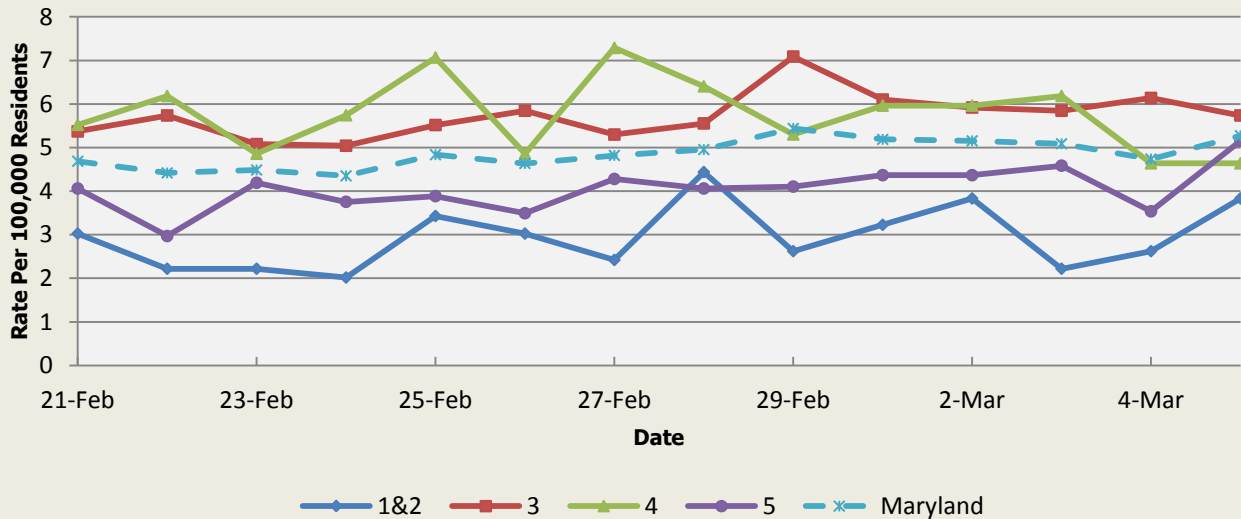


There were two respiratory outbreaks reported this week. 1 outbreak of influenza associated with an assisted living facility (Region 3). 1 outbreak of influenza associated with a daycare center (Region 4).

Respiratory Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	11.96	13.91	13.97	9.86	12.20
Median Rate*	11.49	13.26	13.47	9.43	11.68

* Per 100,000 Residents

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

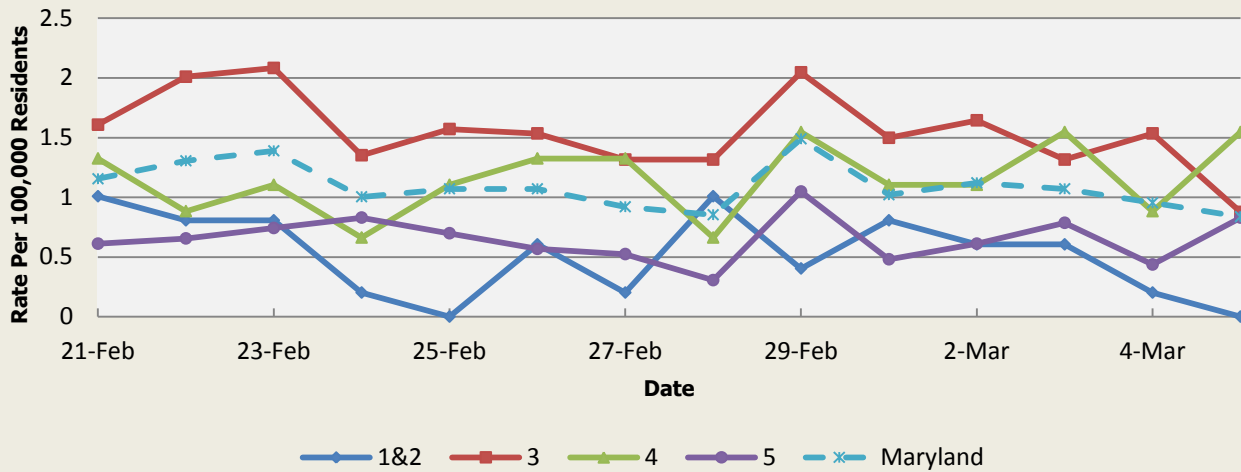


There were no fever outbreaks reported this week.

Fever Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.09	3.75	3.90	3.07	3.45
Median Rate*	3.02	3.58	3.75	2.97	3.31

Per 100,000 Residents

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

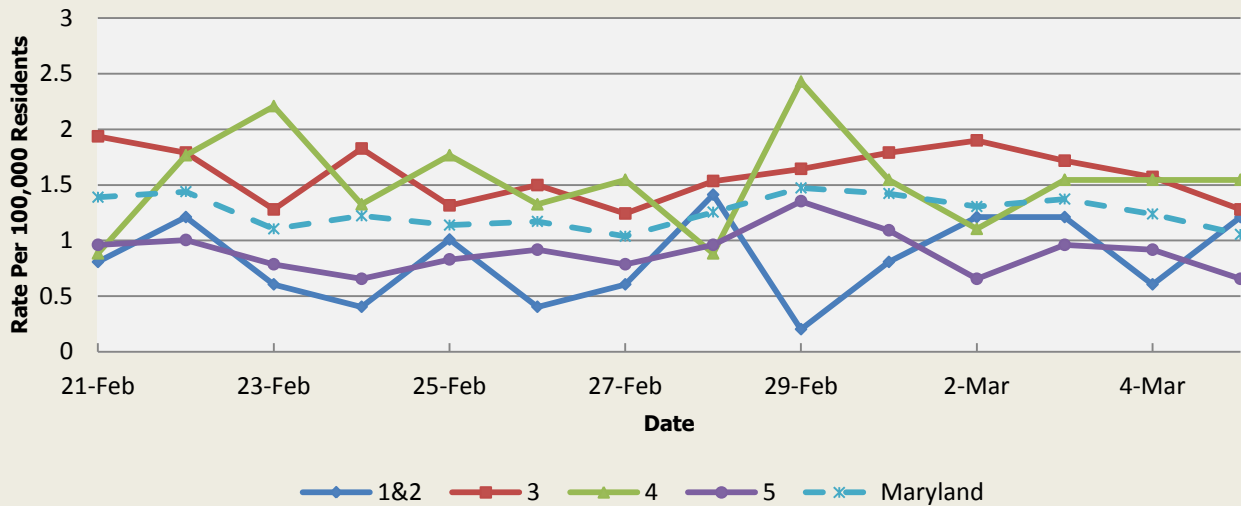


There were no localized lesion outbreaks reported this week.

Localized Lesion Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	1.08	1.92	2.03	0.99	1.50
Median Rate*	1.01	1.86	1.99	0.96	1.45

* Per 100,000 Residents

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

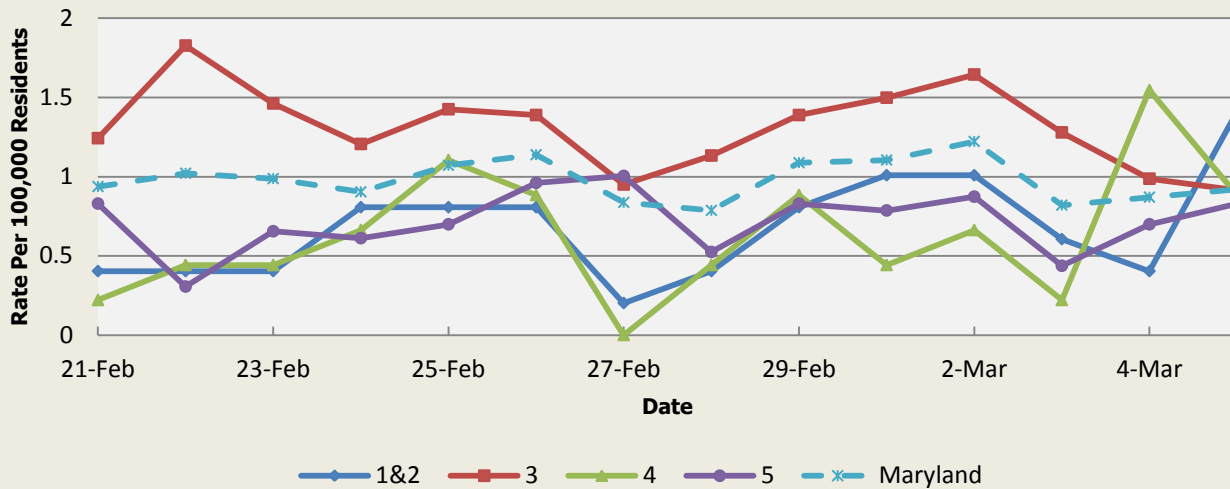


There were no rash outbreaks reported this week.

Rash Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	1.31	1.74	1.76	1.05	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**

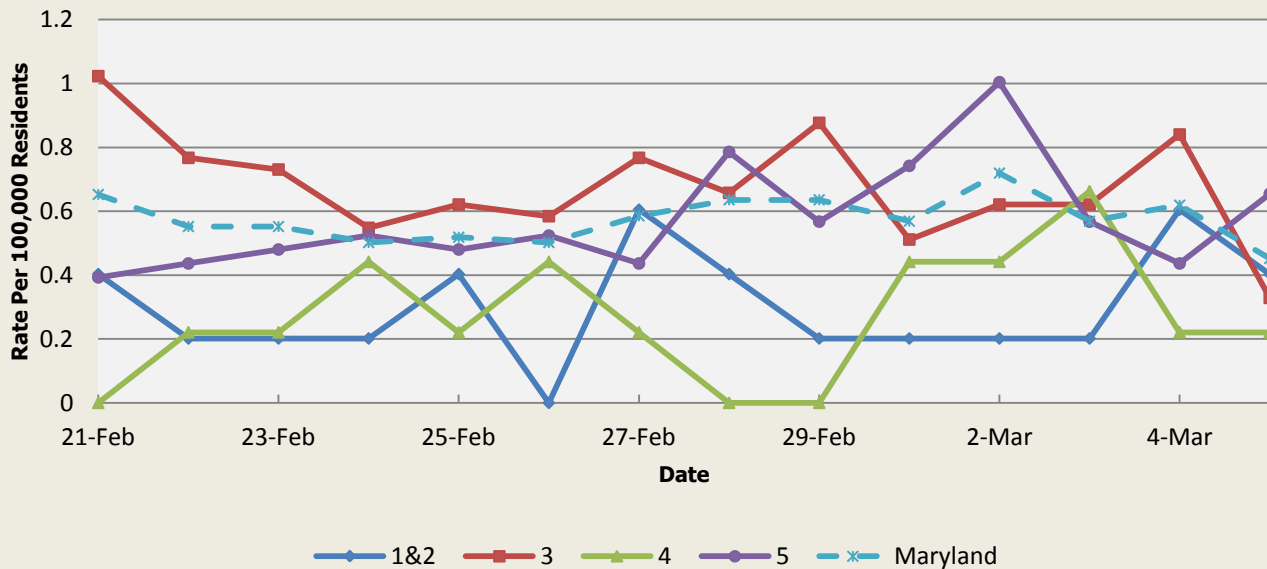


There were no neurological syndrome outbreaks reported this week.

Neurological Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.63	0.72	0.64	0.47	0.61
Median Rate*	0.60	0.66	0.66	0.44	0.55

* Per 100,000 Residents

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



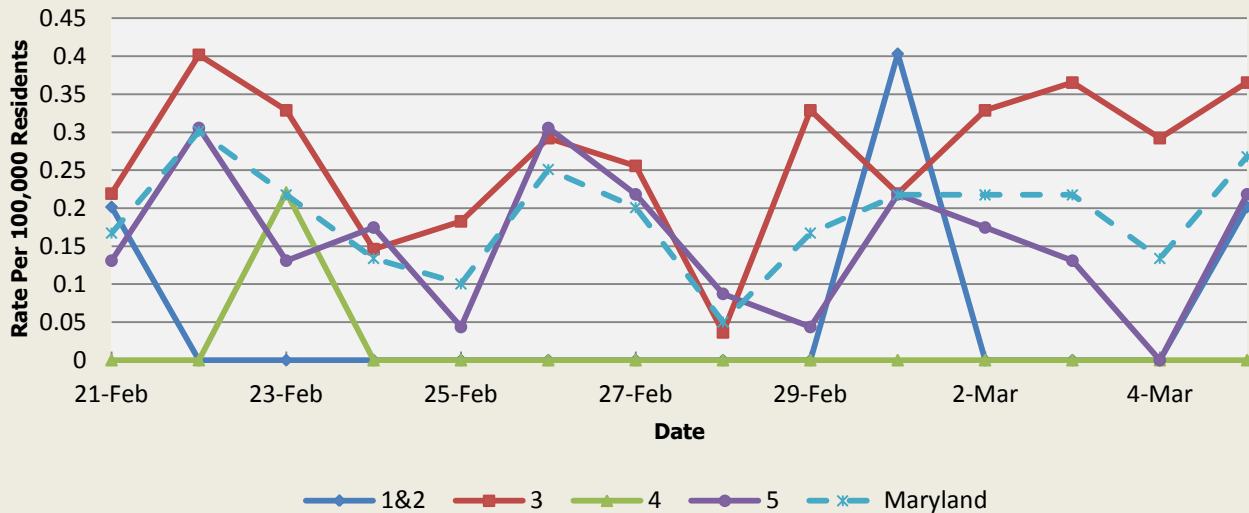
There were no severe illness or death outbreaks reported this week.

Severe Illness or Death Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.71	0.96	0.86	0.44	0.73
Median Rate*	0.60	0.95	0.88	0.44	0.72

* Per 100,000 Residents

SYNDROMES RELATED TO CATEGORY A AGENTS

**Emergency Department Chief Complaints for Botulism-like Syndrome
Rate Per 100,000 Residents**

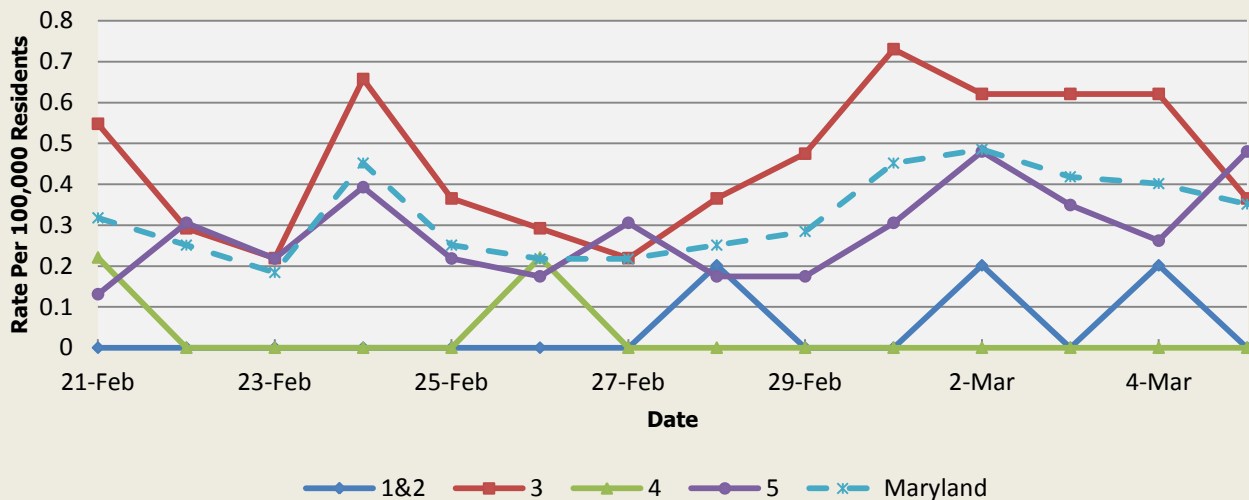


There was an appreciable increase above baseline in the rate of ED visits for Botulism-like Syndrome on 2/29 (Region 3), 3/1 (Regions 1&2,3,5), 3/2 (Regions 3,5), 3/3 (Regions 3,5), 3/4 (Region 3) and 3/5 (Regions 1&2,3,5). These increases are not known to be associated with any outbreaks.

Botulism-like Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.06	0.07	0.04	0.05	0.06
Median Rate*	0.00	0.04	0.00	0.04	0.05

* Per 100,000 Residents

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

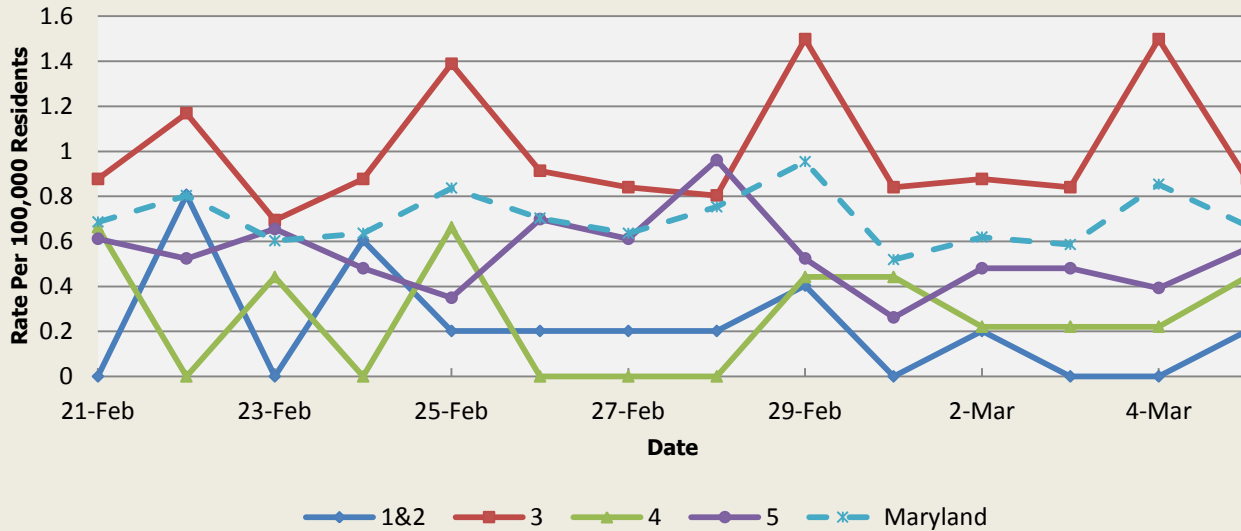


There was an appreciable increase above baseline in the rate of ED visits for Hemorrhagic Illness Syndrome on 2/28 (Regions 1&2,3,5), 2/29 (Regions 3,5), 3/1 (Regions 3,5), 3/2 (Regions 1&2,3,5), 3/3 (Regions 3,5), 3/4 (Regions 1&2,3,5), and 3/5 (Regions 3,5). These increases are not known to be associated with any outbreaks.

Hemorrhagic Illness Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.03	0.09	0.03	0.07	0.07
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 2/28 (Region 5), 2/29 (Region 3), 3/4 (Region 3), and 3/5 (Region 5). 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	0.45	0.34	0.28	0.36
Median Rate*	0.20	0.37	0.22	0.26	0.32

* Per 100,000 Residents

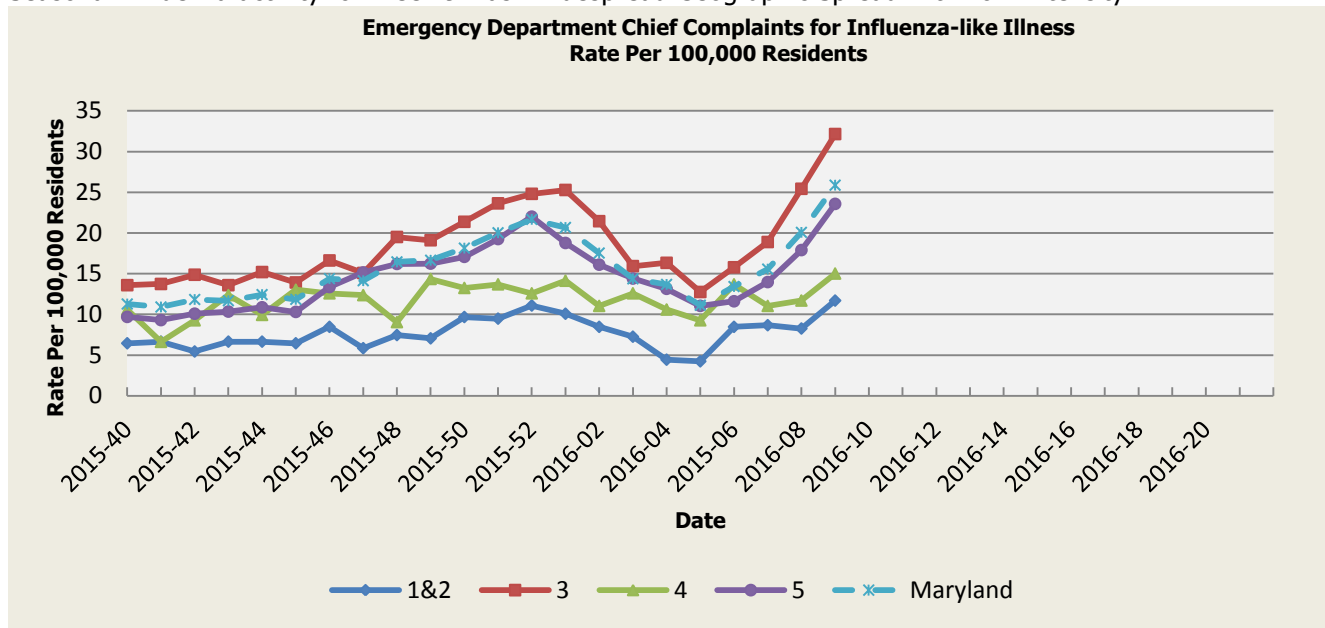
MARYLAND REPORTABLE DISEASE SURVEILLANCE

Condition	Counts of Reported Cases†					
	February			Cumulative (Year to Date)**		
	2016	Mean*	Median*	2016	Mean*	Median*
Vaccine-Preventable Diseases						
Aseptic meningitis	0	4.6	4	33	60.2	53
Meningococcal disease	0	0.2	0	0	1.8	2
Measles	0	0	0	0	0	0
Mumps	0	1.8	0	0	3.8	0
Rubella	0	0	0	0	0	0
Pertussis	0	2.6	2	1	30.4	26
Foodborne Diseases						
Salmonellosis	2	10.6	10	56	97.2	94
Shigellosis	0	3.6	2	13	30.2	26
Campylobacteriosis	3	3.4	3	74	71	72
Shiga toxin-producing Escherichia coli (STEC)	0	0	0	5	7.4	7
Listeriosis	0	0	0	1	1.4	1
Arboviral Diseases						
West Nile Fever	0	0	0	0	0	0
Lyme Disease	0	9.8	10	33	82	79
Emerging Infectious Diseases						
Chikungunya	0	0	0	1	2	0
Dengue Fever	0	0	0	3	1.2	1
Zika Virus	0	0	0	1	0	0
Other						
Legionellosis	0	0.8	1	11	11.6	13

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

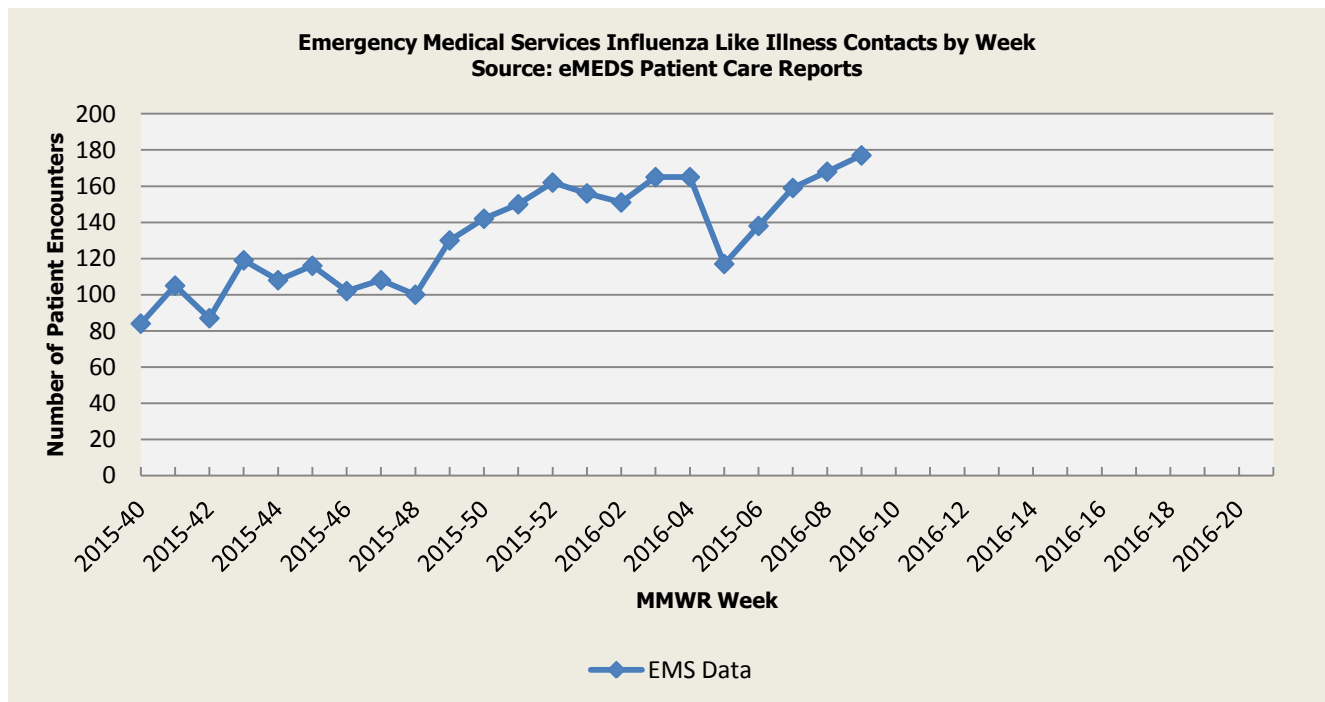
SYNDROMIC INFLUENZA SURVEILLANCE

Seasonal Influenza reporting occurs from MMWR Week 40 through MMWR Week 20 (October through May). Seasonal Influenza activity for Week 9 was: Widespread Geographic Spread with Low Intensity.



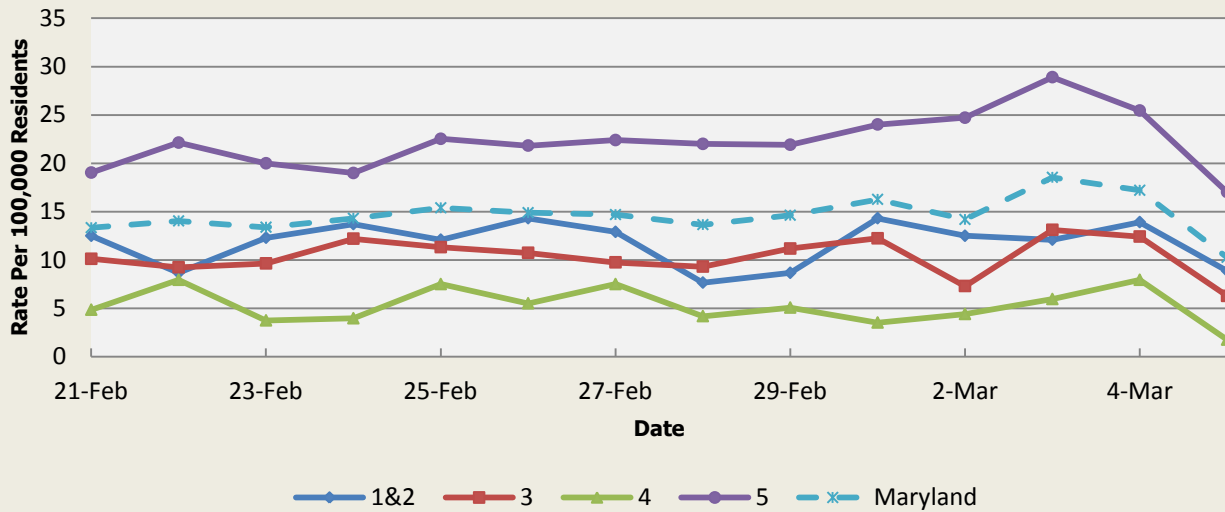
Influenza-like Illness Baseline Data Week 1 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	9.27	11.24	10.79	10.18	10.64
Median Rate*	7.66	8.84	8.94	7.88	8.50

* 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**

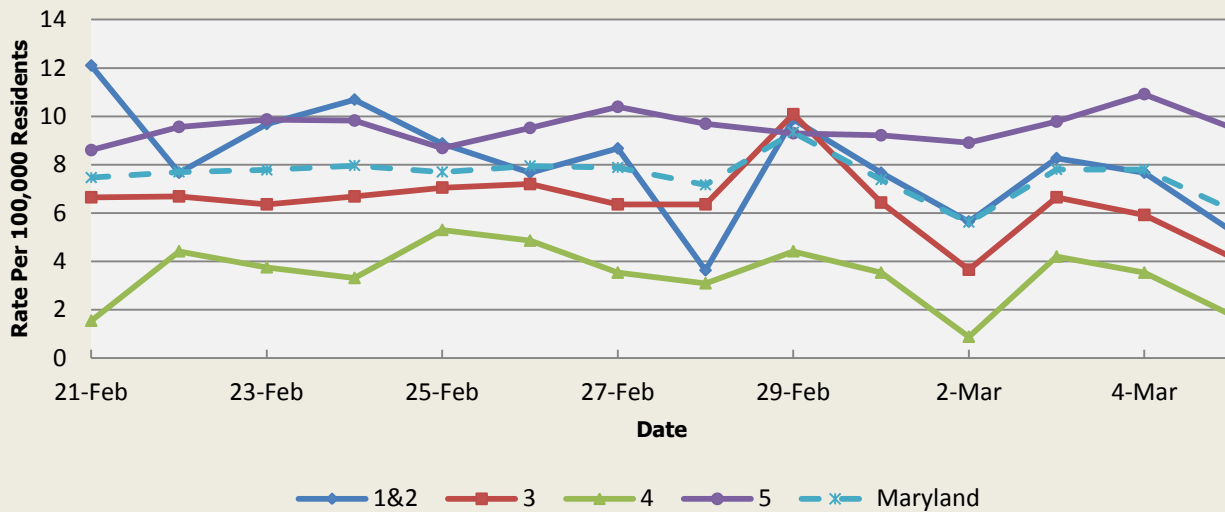


There was an appreciable increase above baseline in the rate of OTC flu medication sales on 3/1 (Regions 1&2), 3/2 (Regions 1&2), 3/3 (Regions 1&2,3,5), and 3/4 (Regions 1&2,4).

	OTC Sales Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	5.78	6.41	3.23	14.32	9.15
Median Rate*	4.44	5.30	2.87	11.57	7.45

* Per 100,000 Residents

**Over-the-Counter Thermometer Sales
Rate Per 100,000 Residents**



There was an appreciable increase above baseline in the rate of OTC thermometer sales on 2/29 (Region 3).

	Thermometer Sales Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	5.73	4.73	3.33	7.75	5.86
Median Rate*	5.04	4.35	3.09	7.12	5.41

* 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 January 20, 2016, the WHO-confirmed global total (2003-2015) of human cases of H5N1 avian influenza virus infection stands at 846, of which 449 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 53%.

Avian Influenza in Humans:

H7N9 (CHINA): 10 Mar 2016 The Centre for Health Protection (CHP) of the Department of Health (DH) received notification of an additional human case of avian influenza A(H7N9) from the Health and Family Planning Commission of Guangdong Province and again urged the public to maintain strict personal, food and environmental hygiene both locally and during travel. The patient is a 37-year-old man who lives in Jieyang. Read More: <http://www.promedmail.org/post/4083565>

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 Mar 2016 On 3 Mar 2016, Mexico reported 4 new HPAI H7N3 outbreaks affecting 3 commercial and 1 backyard farm in 2 states: Puebla and Jalisco. Read More: <http://www.promedmail.org/post/4078738>

SUSPECTED OUTBREAK (NORWAY): 07 Mar 2016 An outbreak of avian influenza is suspected on a turkey farm in Ostfold after routine surveillance detected antibodies. No clinical symptoms have been detected, however. Read More: <http://www.promedmail.org/post/4078211>

H5N1 (VIETNAM): 04 Mar 2016 Another outbreak of highly pathogenic avian influenza has been discovered in village poultry in Viet Nam. Read More: <http://www.promedmail.org/post/4068066>

NATIONAL DISEASE REPORTS

MYCOBACTERIUM BOVIS (NEBRASKA): 10 Mar 2016 Contact investigations of 2 pulmonary tuberculosis cases resulting from Mycobacterium bovis infection suggest multiple instances of potential airborne transmission may have contributed to the bacterium's spread among Nebraskan residents. Read More: <http://www.promedmail.org/post/4083566>

MUMPS (MASSACHUSETTS): 08 Mar 2016 Administrators at the college, Harvard University Health Services and Cambridge Public Health Department are working to contain the spread of mumps and care for students who have been affected by the virus by relocating them to isolated housing for an extended period of time. Read More: <http://www.promedmail.org/post/4078373>

HAND, FOOT, AND MOUTH DISEASE (CALIFORNIA): 06 Mar 2016 A 24 Hour Fitness club in Southern California is the site of an alleged outbreak of hand, foot and mouth disease. Read More: <http://www.promedmail.org/post/4072937>

INTERNATIONAL DISEASE REPORTS

LEGIONELLOSIS (AUSTRALIA): 10 Mar 2016 New South Wales Health is urging anyone who has visited the Town Hall area in the Sydney Central Business District and has symptoms such as fever, chills, a cough, and shortness of breath to see their doctor after an outbreak of legionnaires' disease. Read More: <http://www.promedmail.org/post/4083155>

TOXOPLASMOSIS (BRAZIL): 07 Mar 2016 According to epidemiological surveillance, 20 cases of toxoplasmosis were confirmed in the Londrina unit of the Brazilian Agricultural Research Corporation (Embrapa). Read More: <http://www.promedmail.org/post/4074495>

ORGANOPHOSPHATE POISONING (MALAYSIA): 05 Mar 2016 A total of 37 people, aged between 2 to 71 years old, were admitted with 4 in a critical situation following a food poisoning incident in Batu Gajah, Perak. Read More: <http://www.promedmail.org/post/4071884>

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.dhmm.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.dhmm.maryland.gov/influenza/fluwatch/Pages/Home.aspx>

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

