



March 18, 2016

**Public Health Preparedness and Situational Awareness Report: #2016:10
Reporting for the week ending 3/12/16 (MMWR Week #10)**

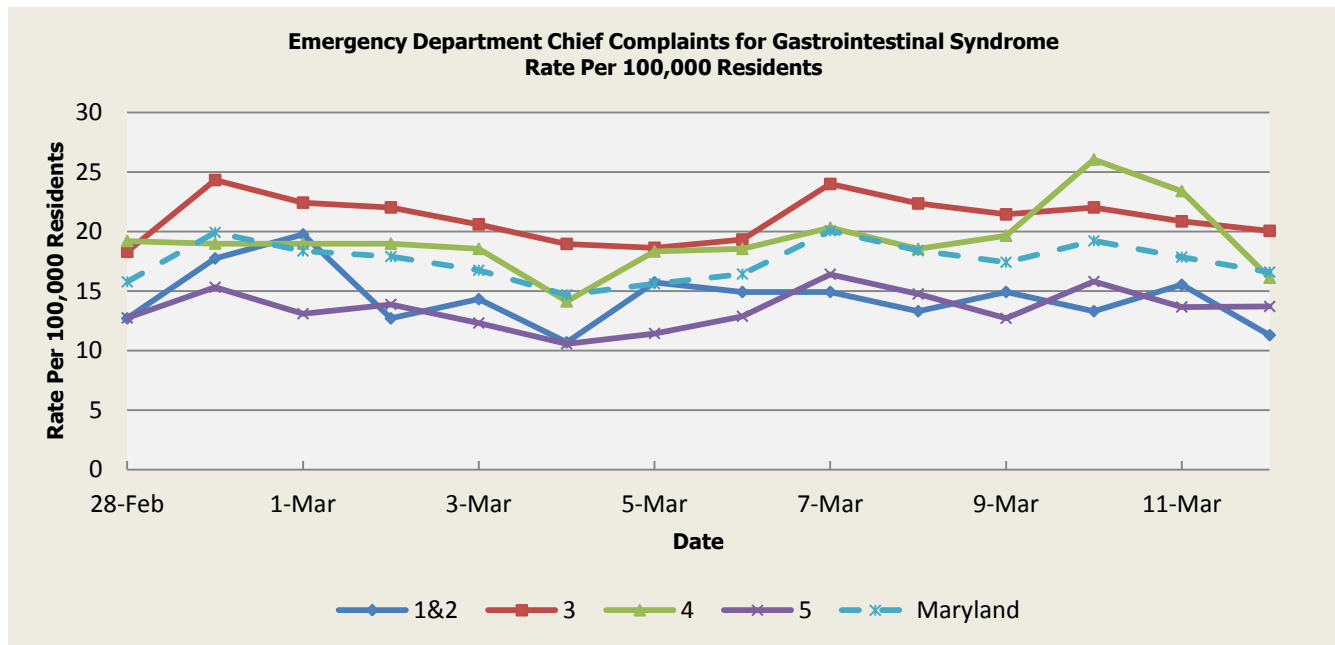
CURRENT HOMELAND SECURITY THREAT LEVELS

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.

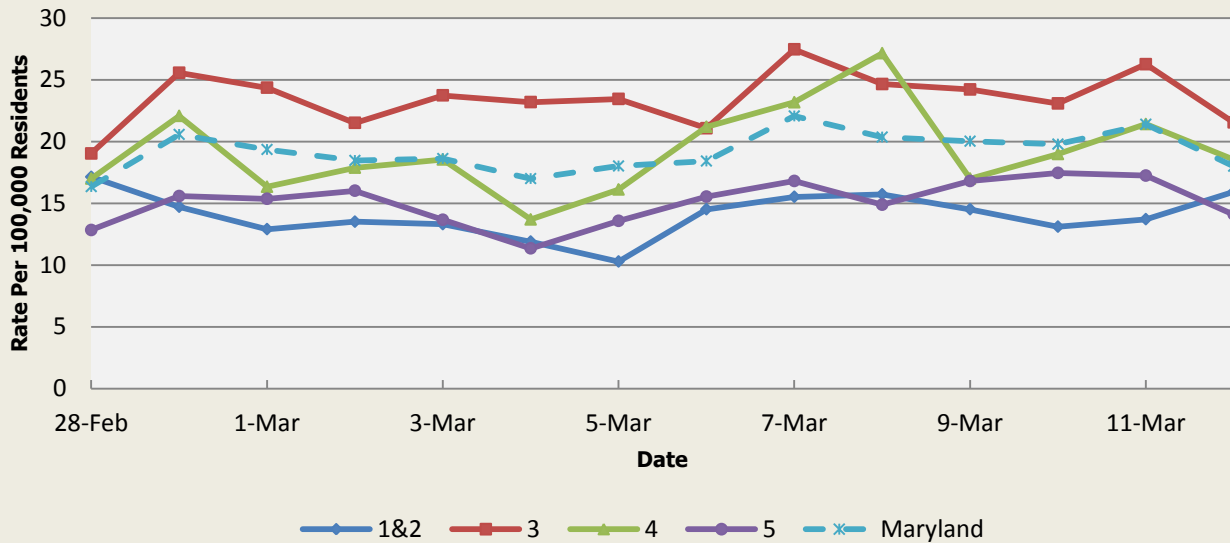


There were nine gastrointestinal illness outbreaks reported this week: 4 outbreaks of gastroenteritis associated with nursing homes (Regions 3,4). 2 outbreaks of gastroenteritis associated with daycare centers (Regions 3,4). 1 outbreak of gastroenteritis associated with a residential treatment center (Regions 1&2). 1 outbreak of gastroenteritis/foodborne associated with a restaurant (Regions 1&2). 1 outbreak of gastroenteritis/foodborne associated with a banquet hall (Region 3).

Gastrointestinal Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	12.92	14.74	15.40	10.28	12.93
Median Rate*	12.70	14.39	14.80	10.13	12.70

* Per 100,000 Residents

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

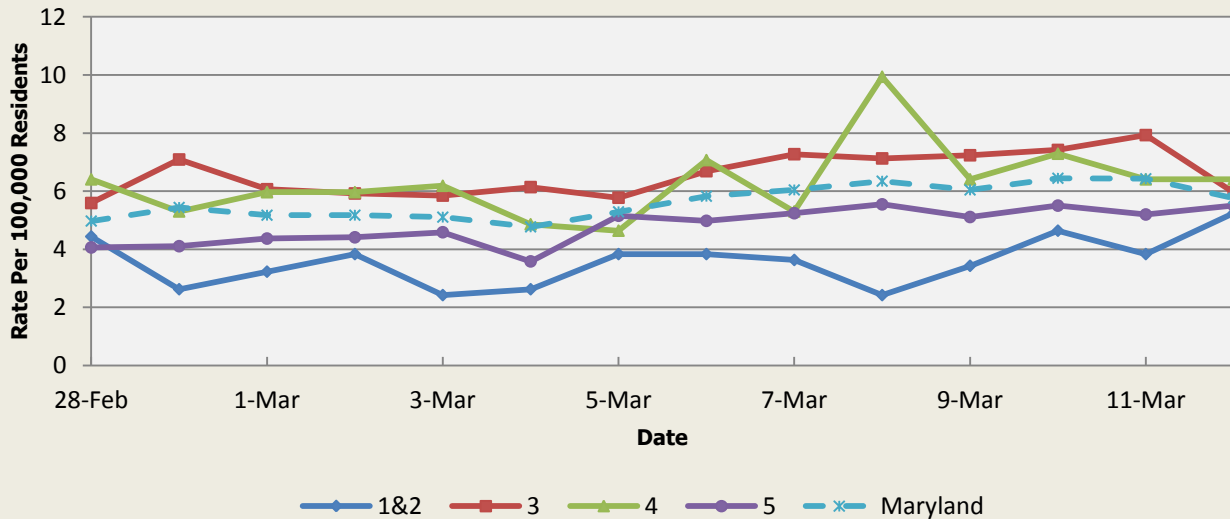


There were four respiratory outbreaks reported this week. 1 outbreak of influenza associated with an assisted living facility (Region 3). 1 outbreak of influenza associated with a nursing home (Region 3). 1 outbreak of influenza associated with a school (Regions 1&2). 1 outbreak of pneumonia associated with a nursing home (Region 5).

Respiratory Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	11.97	13.95	13.99	9.88	12.23
Median Rate*	11.49	13.26	13.47	9.43	11.70

* Per 100,000 Residents

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

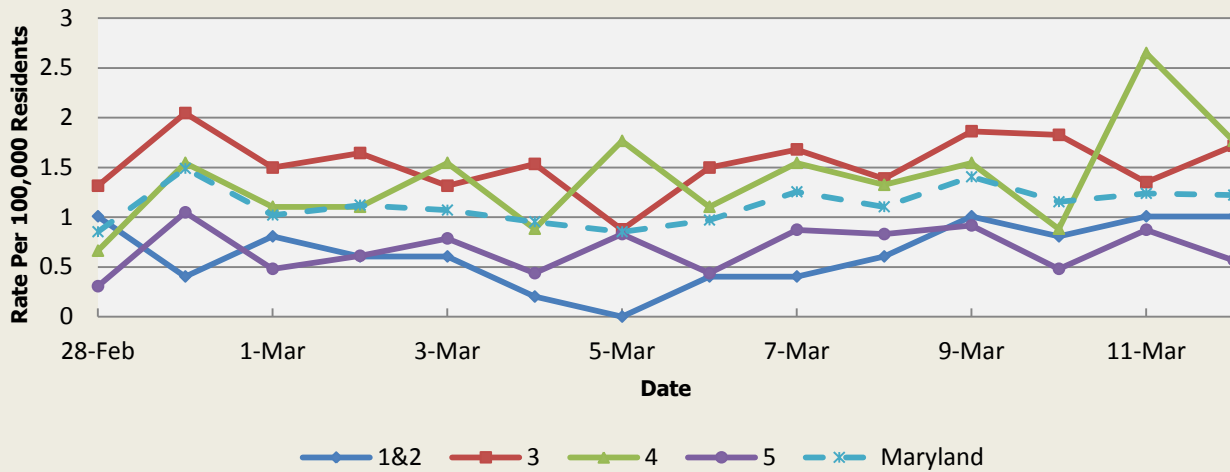


There were no fever outbreaks reported this week.

Fever Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.09	3.76	3.91	3.08	3.45
Median Rate*	3.02	3.58	3.75	2.97	3.33

Per 100,000 Residents

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

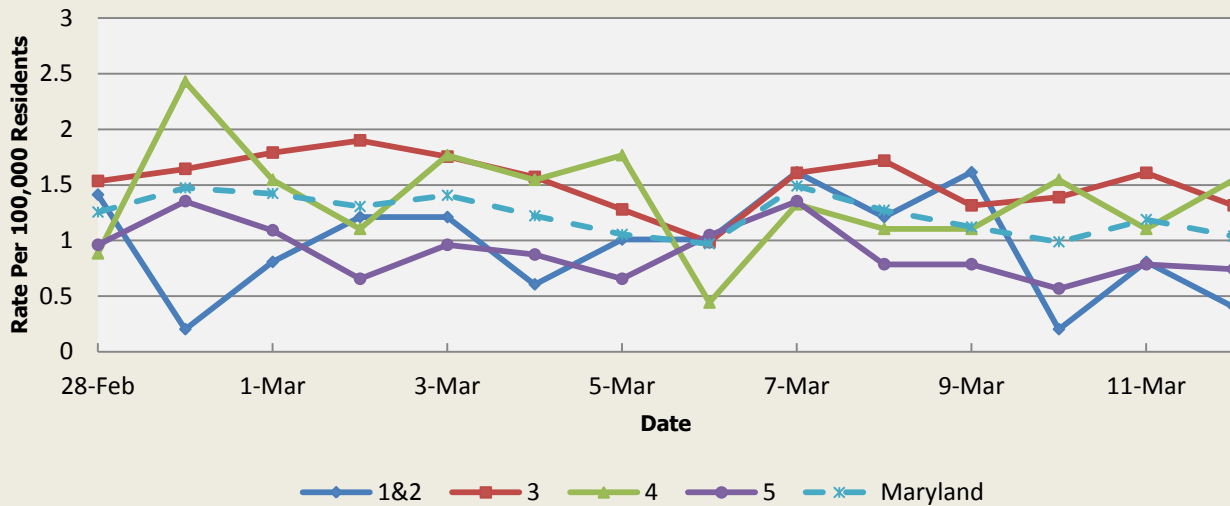


There were no localized lesion outbreaks reported this week.

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	1.44

* Per 100,000 Residents

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

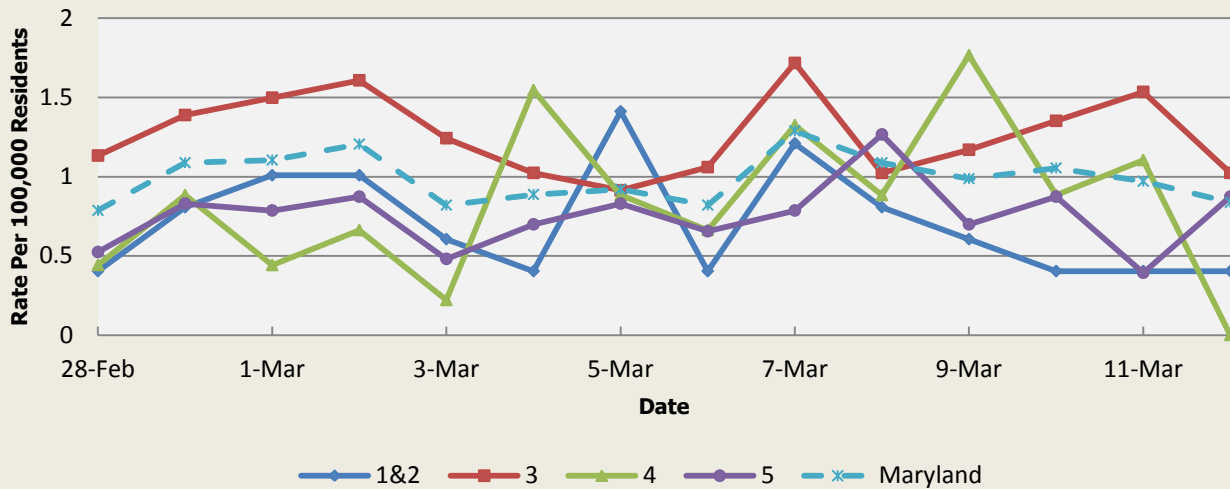


There were no rash outbreaks reported this week.

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**

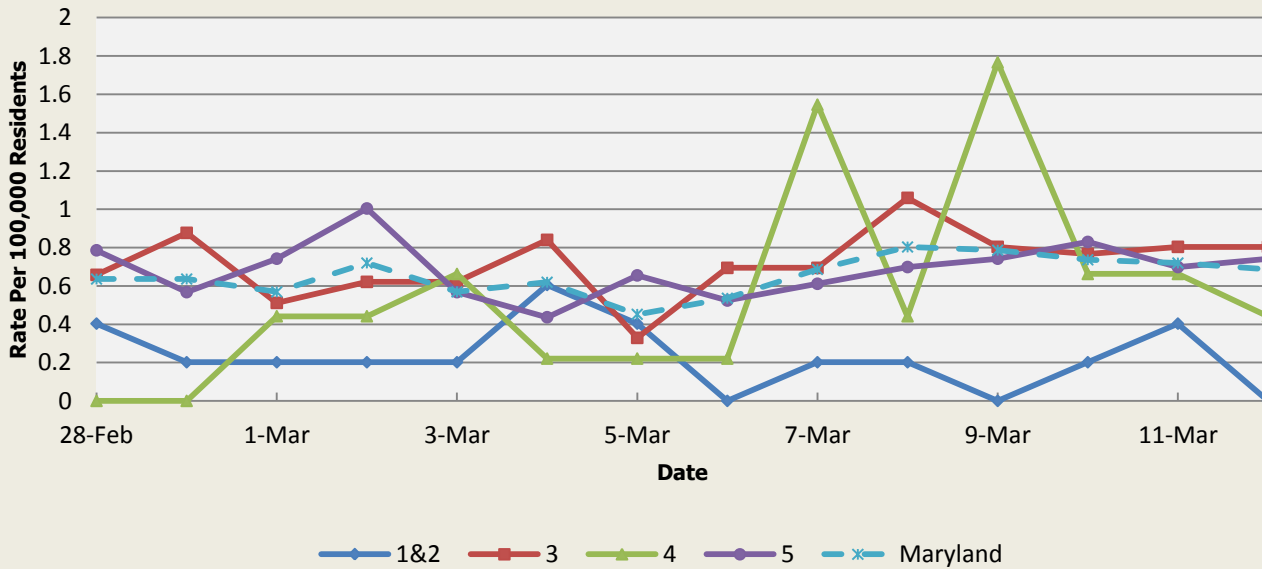


There were no neurological syndrome outbreaks reported this week.

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**



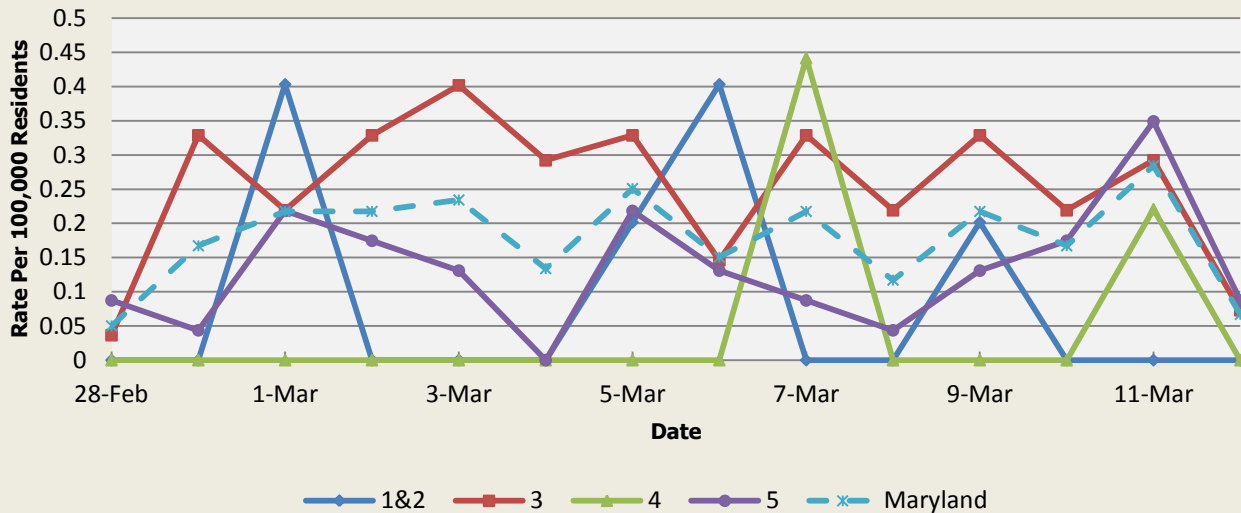
There were no severe illness or death outbreaks reported this week.

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**

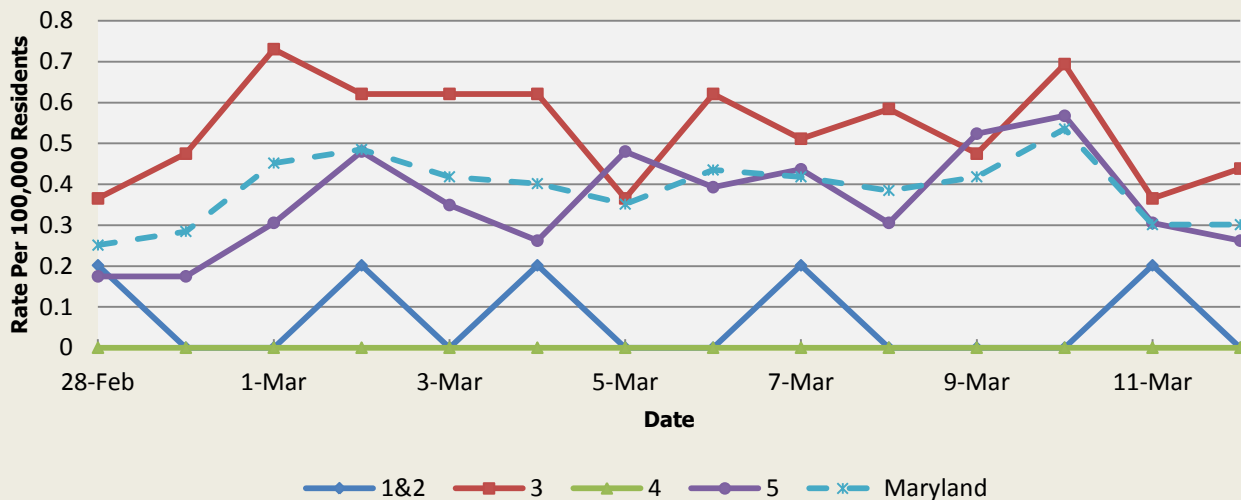


There was an appreciable increase above baseline in the rate of ED visits for Botulism-like Syndrome on 3/6 (Regions 1&2,3,5), 3/7 (Regions 3,4), 3/8 (Region 3), 3/9 (Regions 1&2,3,5), 3/10 (Regions 3,5), and 3/11 (Regions 3,4,5). These increases are not known to be associated with any outbreaks.

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**

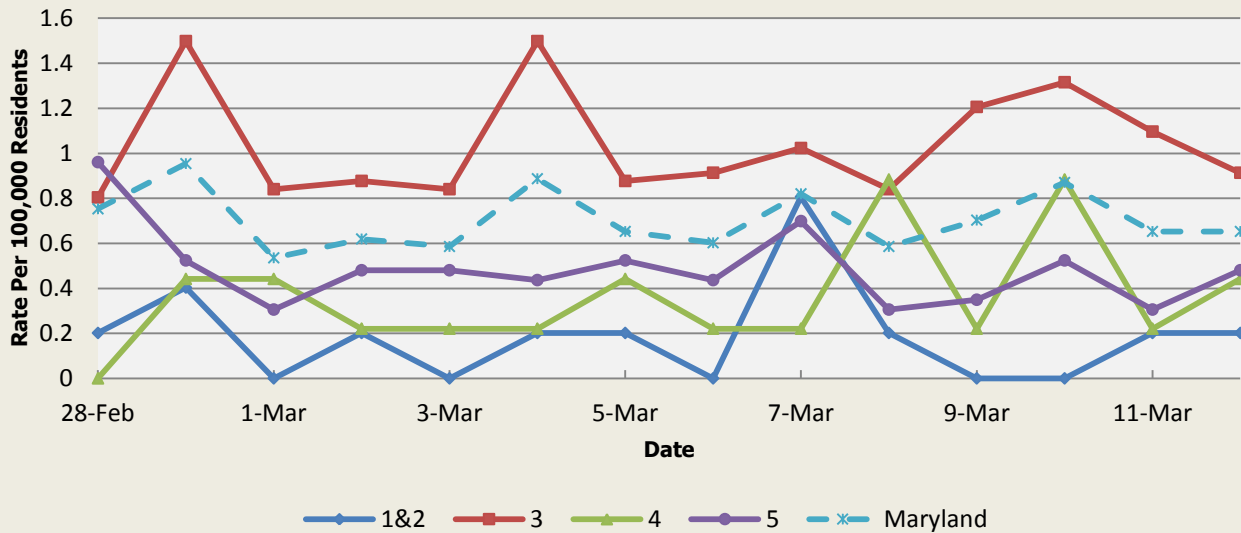


There was an appreciable increase above baseline in the rate of ED visits for Hemorrhagic Illness Syndrome on 3/6 (Regions 3,5), 3/7 (Regions 1&2,3,5), 3/8 (Regions 3,5), 3/9 (Regions 3,5), 3/10 (Regions 3,5), 3/11 (Regions 1&2,3,5), and 3/12 (Regions 3,5). These increases are not known to be associated 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 3/6 (Region 3), 3/7 (Regions 1&2,3,5), 3/8 (Region 4), 3/9 (Region 3), 3/10 (Regions 3,4), 3/11 (Region 3), and 3/12 (Region 3). These increases are not known to be associated with any outbreaks.

Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.31	0.45	0.34	0.29	0.37
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†					
	March			Cumulative (Year to Date)**		
Vaccine-Preventable Diseases	2016	Mean*	Median*	2016	Mean*	Median*
Aseptic meningitis	1	11.4	11	34	67	61
Meningococcal disease	0	0.2	0	0	1.8	2
Measles	0	0	0	0	0	0
Mumps	0	2.6	0	0	4.6	0
Rubella	0	0	0	0	0	0
Pertussis	0	4.8	5	1	32.6	28
Foodborne Diseases	2016	Mean*	Median*	2016	Mean*	Median*
Salmonellosis	4	21.6	19	59	108.2	105
Shigellosis	0	7.2	4	13	33.8	28
Campylobacteriosis	4	11.4	11	77	79	79
Shiga toxin-producing Escherichia coli (STEC)	0	0.8	1	6	8.2	9
Listeriosis	0	0	0	1	1.4	1
Arboviral Diseases	2016	Mean*	Median*	2016	Mean*	Median*
West Nile Fever	0	0	0	0	0	0
Lyme Disease	1	16.8	17	39	89	87
Emerging Infectious Diseases	2016	Mean*	Median*	2016	Mean*	Median*
Chikungunya	0	0.2	0	2	2.2	0
Dengue Fever	0	0.2	0	5	1.4	1
Zika Virus	0	0	0	1	0	0
Other	2016	Mean*	Median*	2016	Mean*	Median*
Legionellosis	1	1.8	2	12	12.6	14

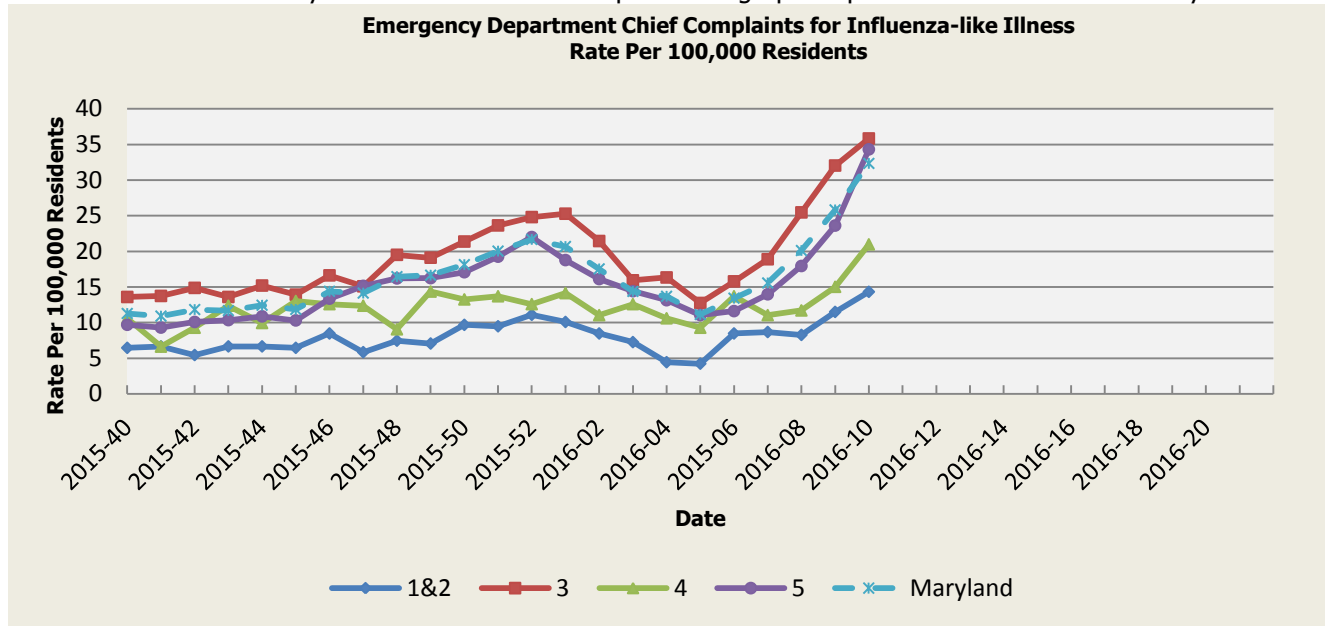
† Counts are subject to change

*Timeframe of 2011-2015

**Includes January through current month

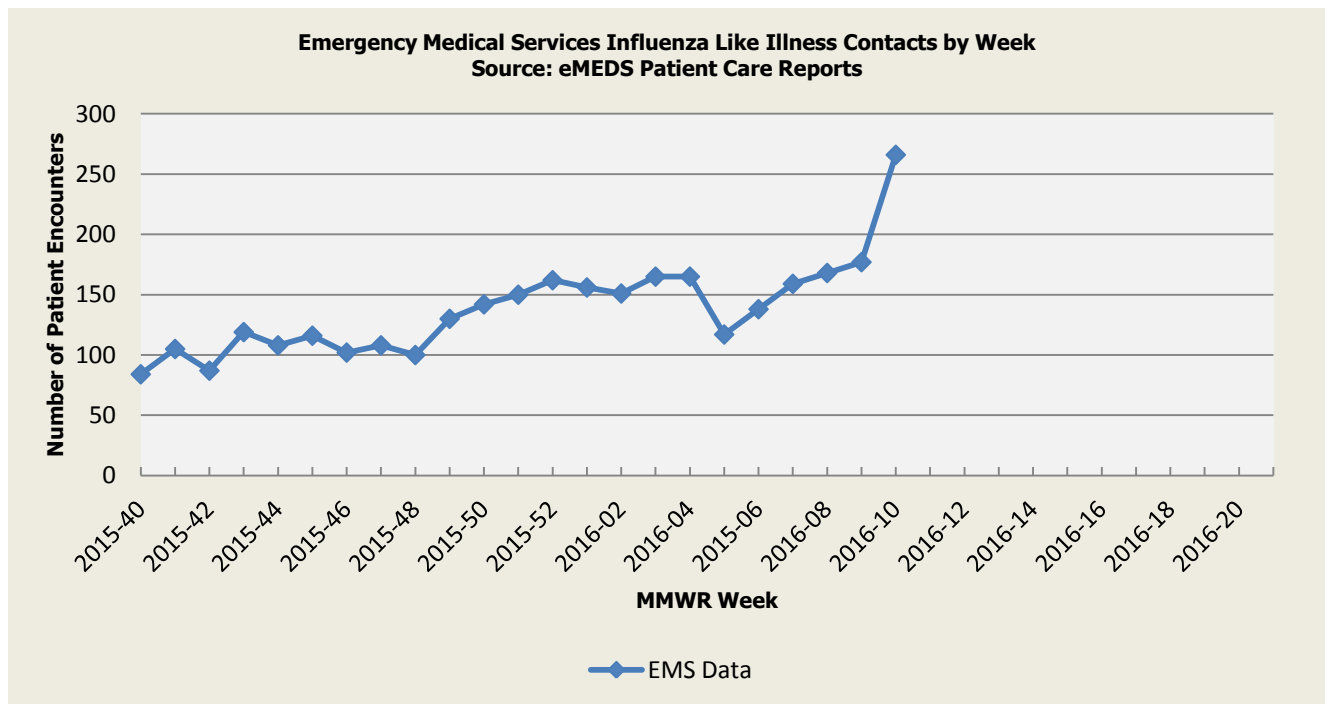
SYNDROMIC INFLUENZA SURVEILLANCE

Seasonal Influenza reporting occurs from MMWR Week 40 through MMWR Week 20 (October through May). Seasonal Influenza activity for Week 10 was: Widespread Geographic Spread with Moderate Intensity.



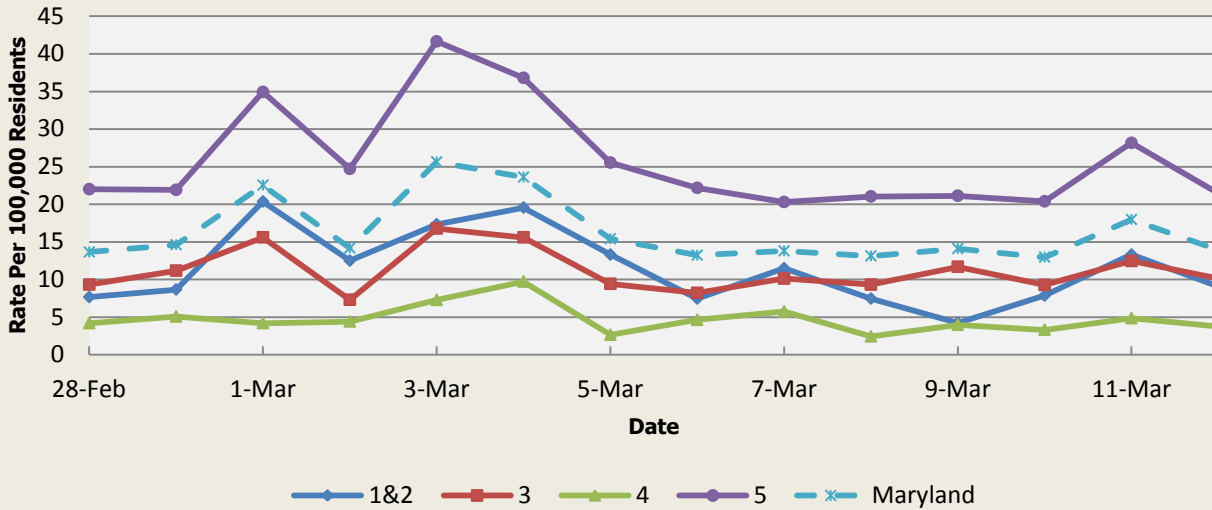
Influenza-like Illness Baseline Data Week 1 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	9.30	11.31	10.82	10.26	10.70
Median Rate*	7.66	8.84	9.05	7.95	8.53

* 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**

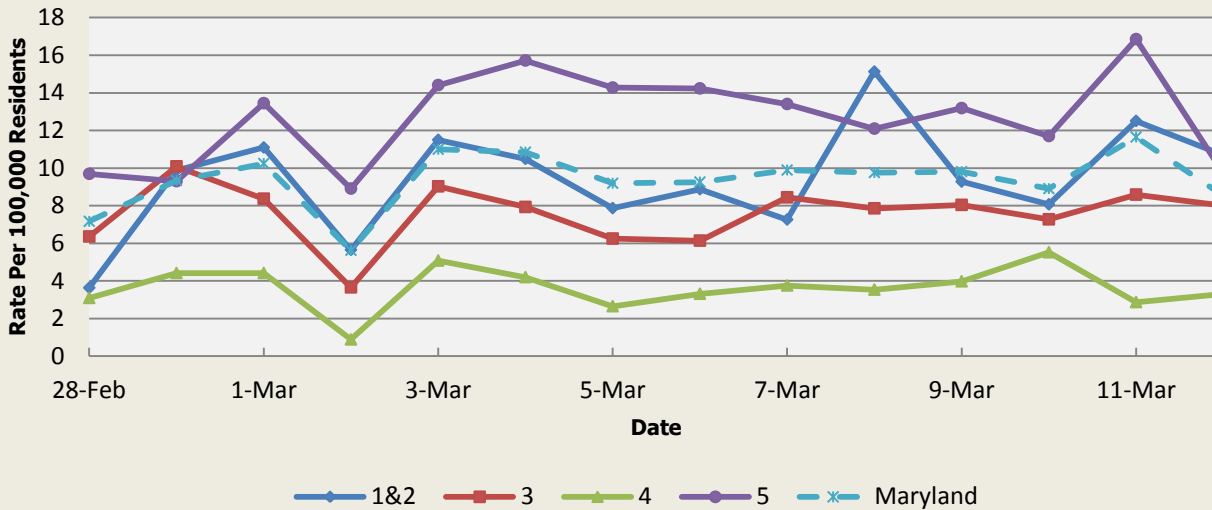


There was an appreciable increase above baseline in the rate of OTC flu medication sales on 3/11 (Regions 1&2).

	OTC Sales Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	5.80	6.43	3.23	14.36	9.18
Median Rate*	4.44	5.33	2.87	11.61	7.46

* 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 3/8 (Regions 1&2), and 3/11 (Regions 1&2,5).

	Thermometer Sales Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	5.75	4.74	3.33	7.78	5.88
Median Rate*	5.04	4.35	3.09	7.12	5.42

* 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 February 25, 2016, the WHO-confirmed global total (2003-2016) 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:

H5N1 (EGYPT): 15 Mar 2016 EMPRES reported today the 2nd case of H5N1 in Egypt in 2016, in Cairo. The case was confirmed by RT-PCR on 10 Mar 2016 after being reported on 4 Mar 2016. No additional details are provided. Read More: <http://www.promedmail.org/post/4095095>

H7N9 (CHINA): 14 Mar 2016 A human infection of the H7N9 strain of avian flu has been reported in central China's Hubei Province. Read More: <http://www.promedmail.org/post/4092108>

H7N9 (CHINA): 11 Mar 2016 China (Shanghai) confirmed an imported human H7N9 case from Anhui. The patient, female, 79 years old, came to Shanghai from Anhui, confirmed to be H7N9 positive on 11 Mar 2016, now in hospital for treatment. Read More: <http://www.promedmail.org/post/4086680>

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:

There were no reports of avian influenza in poultry this week.

NATIONAL DISEASE REPORTS

BRUCELLOSIS (TEXAS): 11 Mar 2016 City health officials are warning the public to avoid eating unpasteurized cheese after an El Paso man was hospitalized with brucellosis. Read More: <http://www.promedmail.org/post/4085659>

ELIZABETHKINGIA ANOPHELIS (WISCONSIN): 11 Mar 2016 Wisconsin's Elizabethkingia anophelis outbreak has spread to Sheboygan County, according to an updated report from the state Department of Health Services (DHS). At least 1 case has been confirmed in Sheboygan County, although the DHS could not be reached for comment to confirm if more than one case had been reported in the county. Read More: <http://www.promedmail.org/post/4083895>

INTERNATIONAL DISEASE REPORTS

EBOLA (GUINEA): 17 Mar 2016 Guinea says 2 people tested positive for Ebola. Read More: <http://www.promedmail.org/post/4101955>

PERTUSSIS (AUSTRALIA): 16 Mar 2016 There have already been more than 150 cases of whooping cough reported in Sydney in 2016, and the bulk of these have come from suburbs in the inner west. Read More: <http://www.promedmail.org/post/4097729>

CHEMICAL WEAPONS (IRAQ): 13 Mar 2016 The Islamic State group has launched 2 chemical attacks near the northern Iraqi city of Kirkuk, killing a 3-year-old girl, wounding some 600 people and causing hundreds more to flee, Iraqi officials said Saturday. Read More: <http://www.promedmail.org/post/4090543>

YELLOW FEVER (CHINA): 13 Mar 2016 China's National Health and Family Planning Commission confirmed the nation's first imported yellow fever case, in Beijing. Read More: <http://www.promedmail.org/post/4089857>

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

