



October 28, 2016

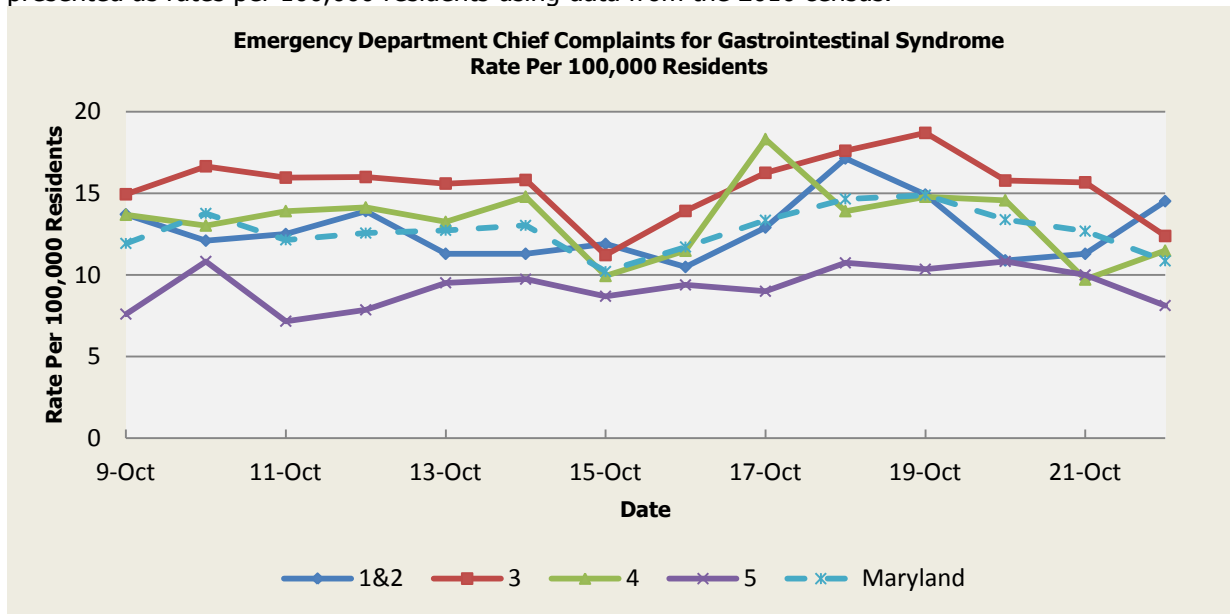
**Public Health Preparedness and Situational Awareness Report: #2016:42
Reporting for the week ending 10/28/16 (MMWR Week #42)**

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):

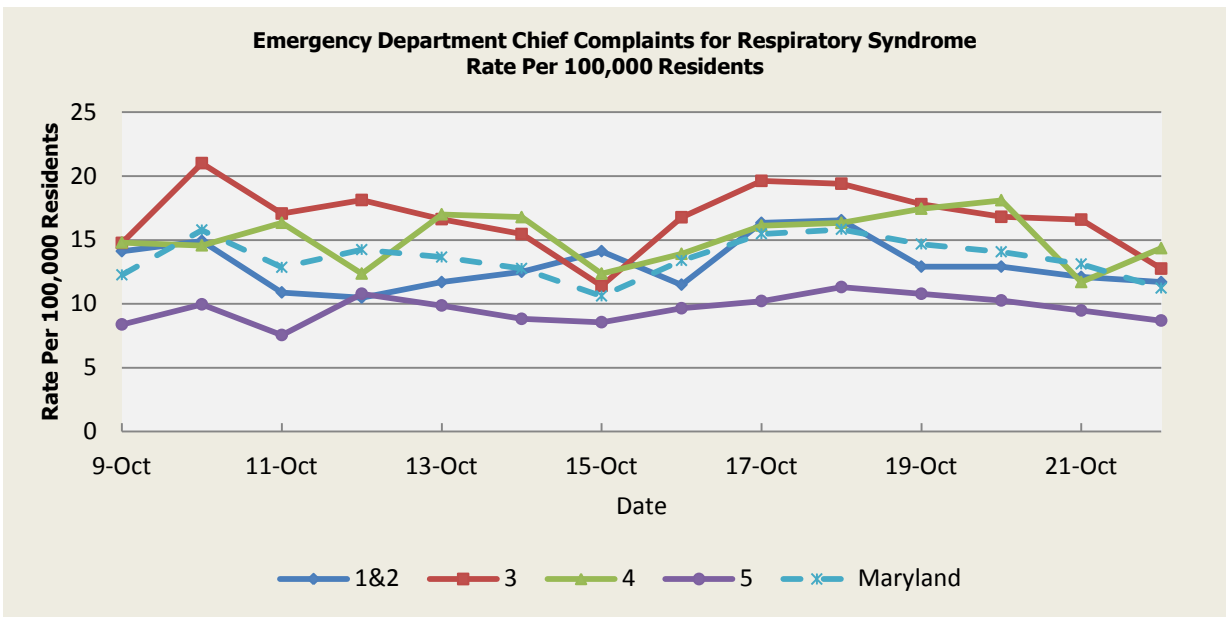
Graphical representation is provided for all syndromes (excluding the "Other" category; see Appendix 1) by Health and Medical Regions (See Appendix 2). Emergency department chief complaint data is presented as rates per 100,000 residents using data from the 2010 census.



There was one (1) foodborne outbreak reported this week: 1 outbreak of SCOMBROID poisoning associated with a restaurant (Region 3).

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

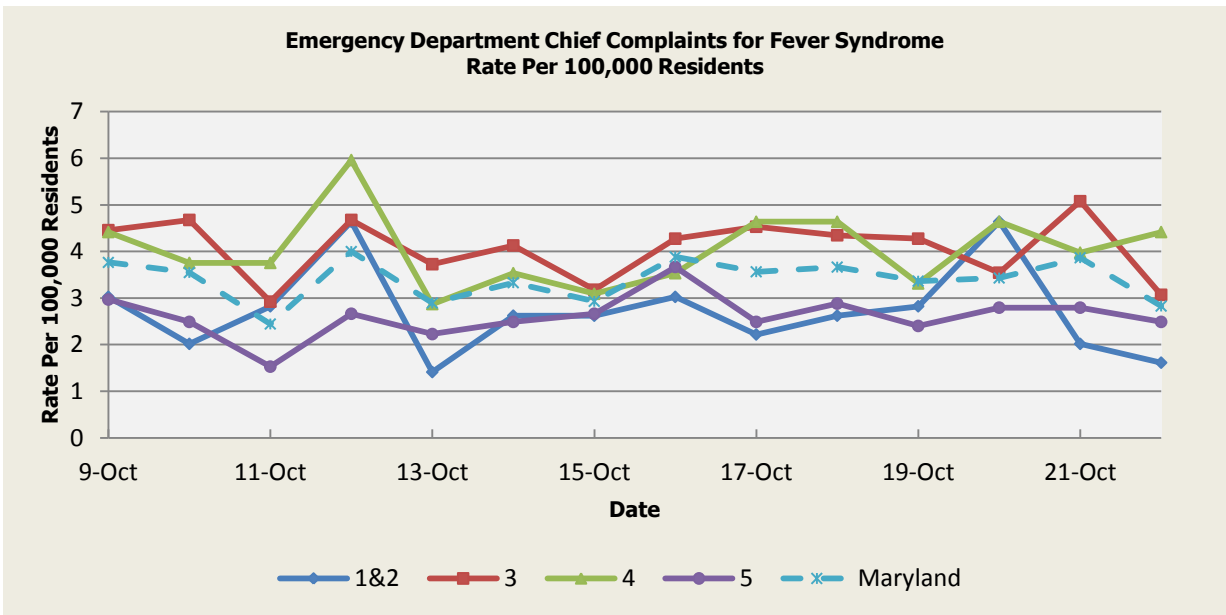
* Per 100,000 Residents



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

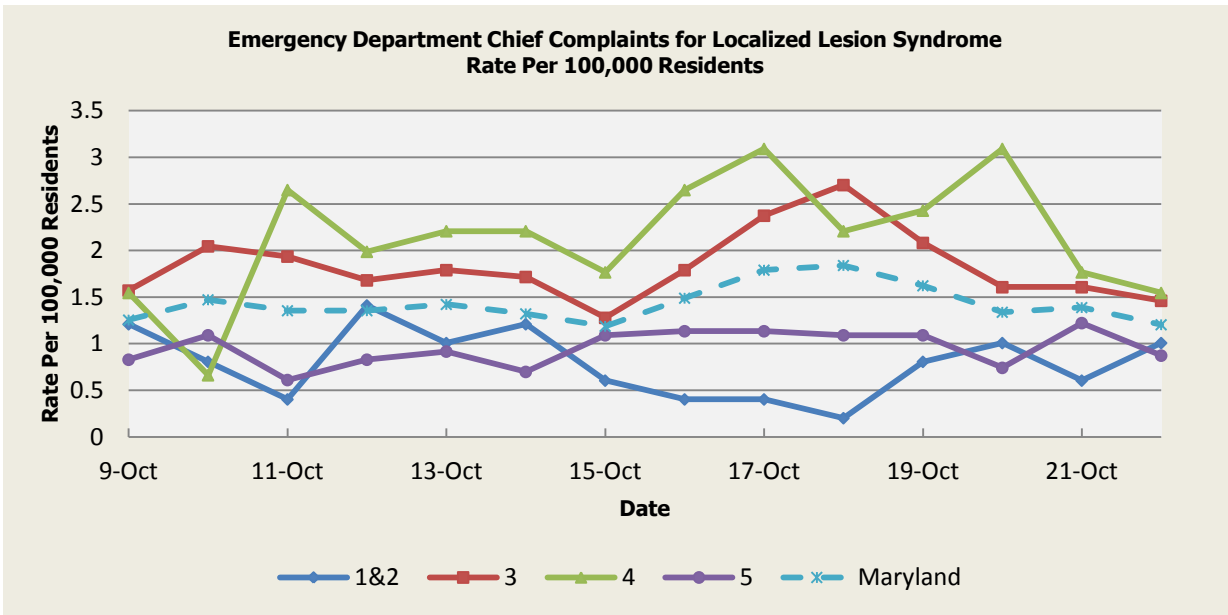
* Per 100,000 Residents



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

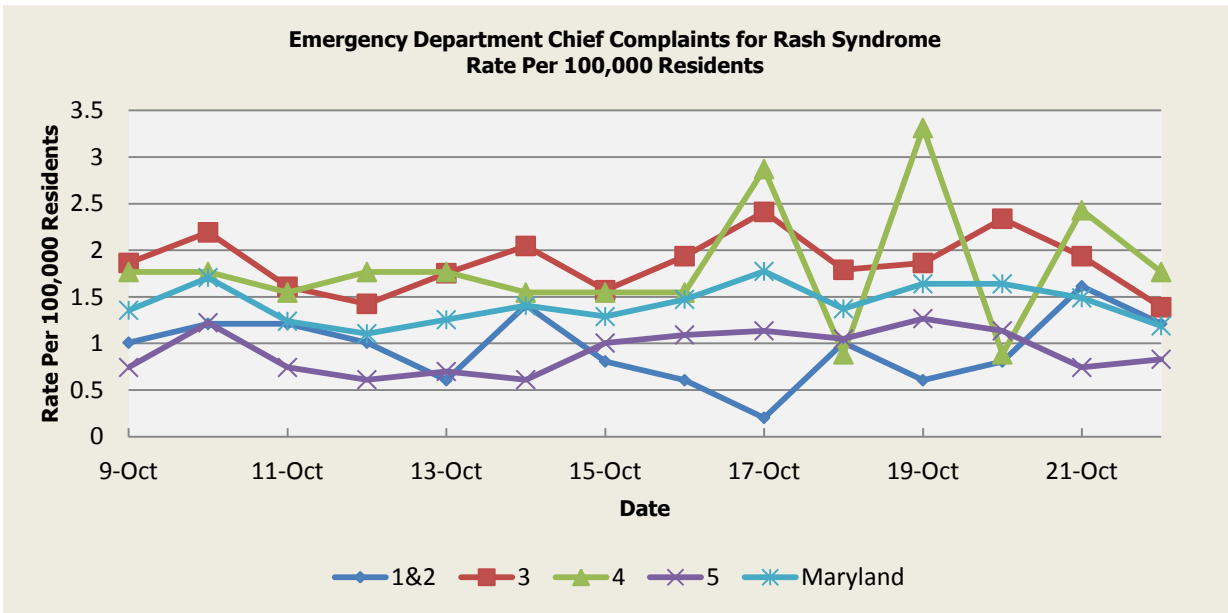
Per 100,000 Residents



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

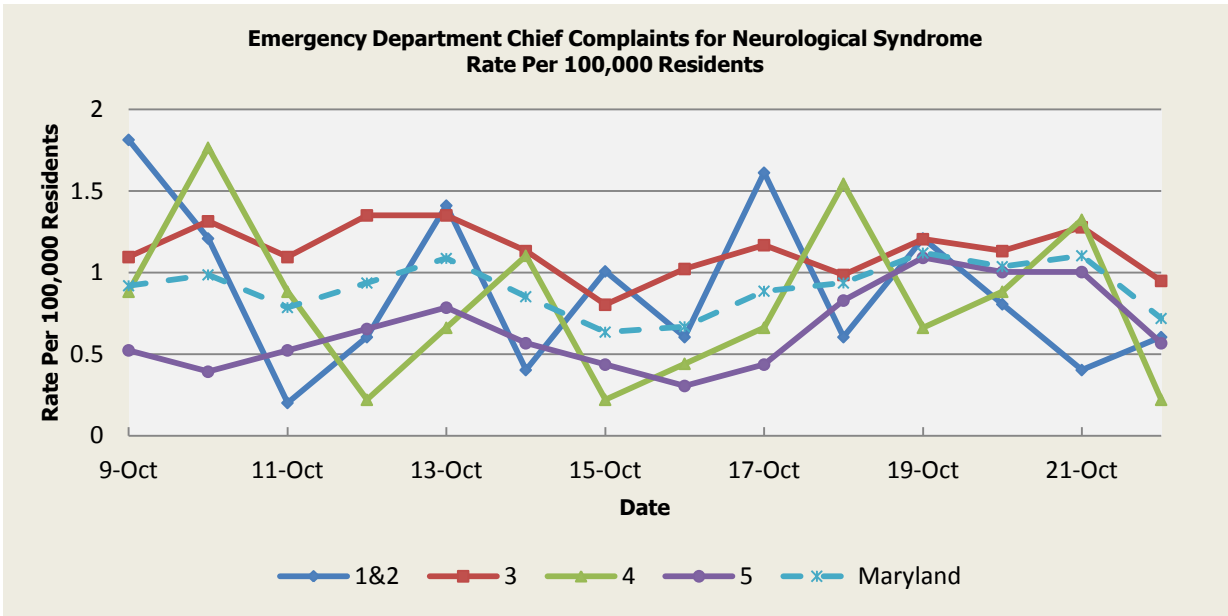
* Per 100,000 Residents



There were two (2) rash illness outbreaks reported this week: 2 outbreaks of HAND, FOOT, AND MOUTH DISEASE associated with Schools (Regions 3 and 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

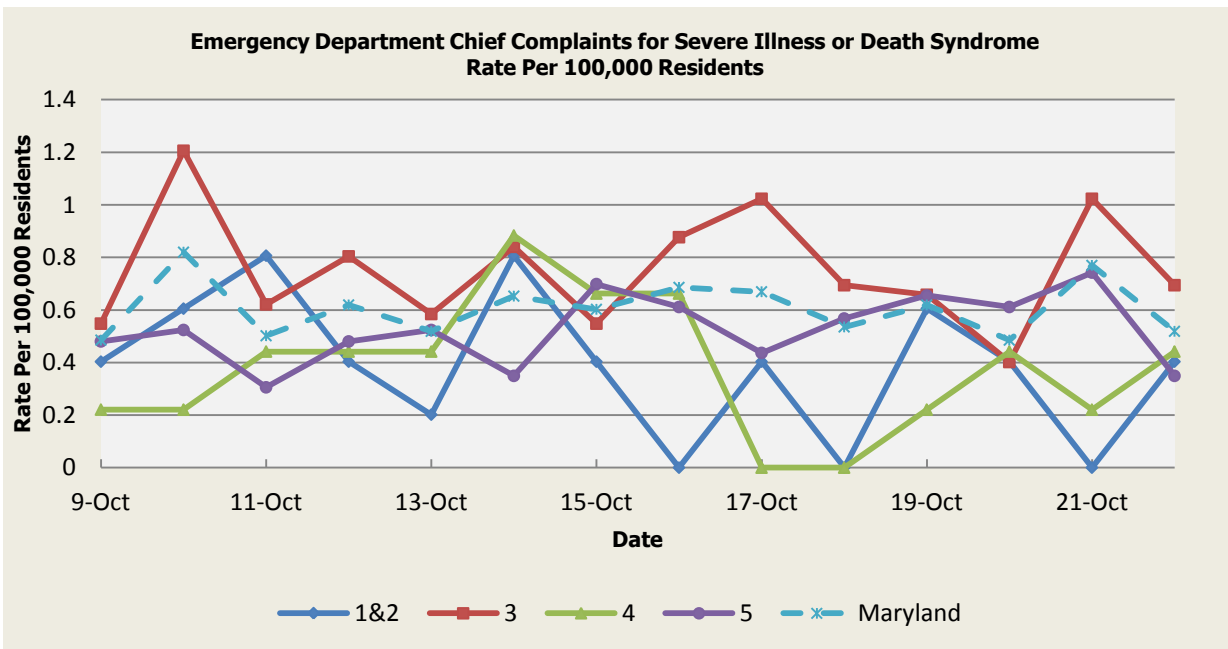
* Per 100,000 Residents



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

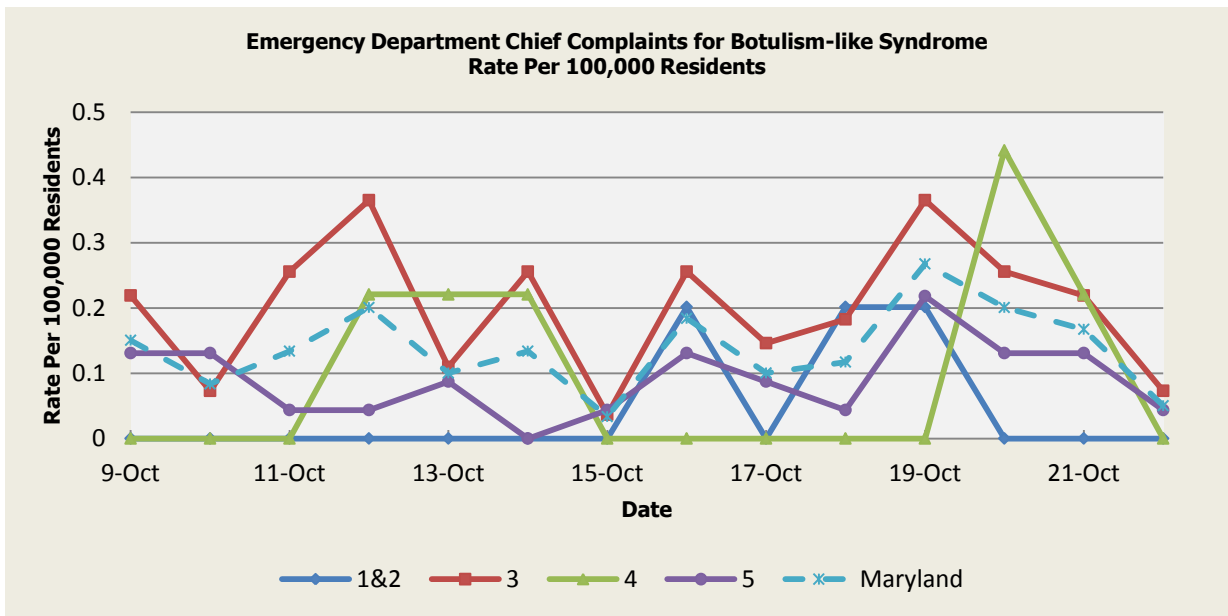


There were no severe illness or death outbreaks reported this week.

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

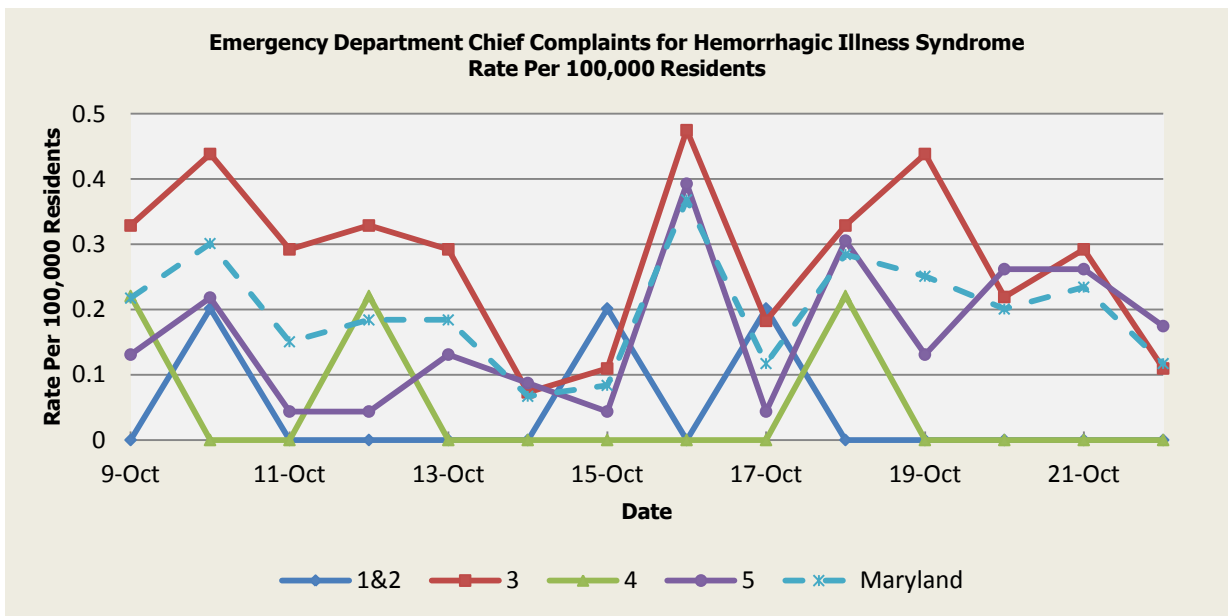
SYNDROMES RELATED TO CATEGORY A AGENTS



There was an appreciable increase above baseline in the rate of ED visits for Botulism-like Syndrome on 10/09 (Regions 3,5), 10/10 (Regions 5), 10/11 (Regions 3), 10/12 (Regions 3,4), 10/13 (Region 4), 10/14 (Regions 3,4), 10/16 (Region 1&2,3,5), 10/18 (Regions 1&2,3), 10/19 (Region 1&2,3,5), 10/20 (Region 3,4,5), and 10/21 (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	0.08	0.04	0.05	0.06
Median Rate*	0.00	0.04	0.00	0.04	0.05

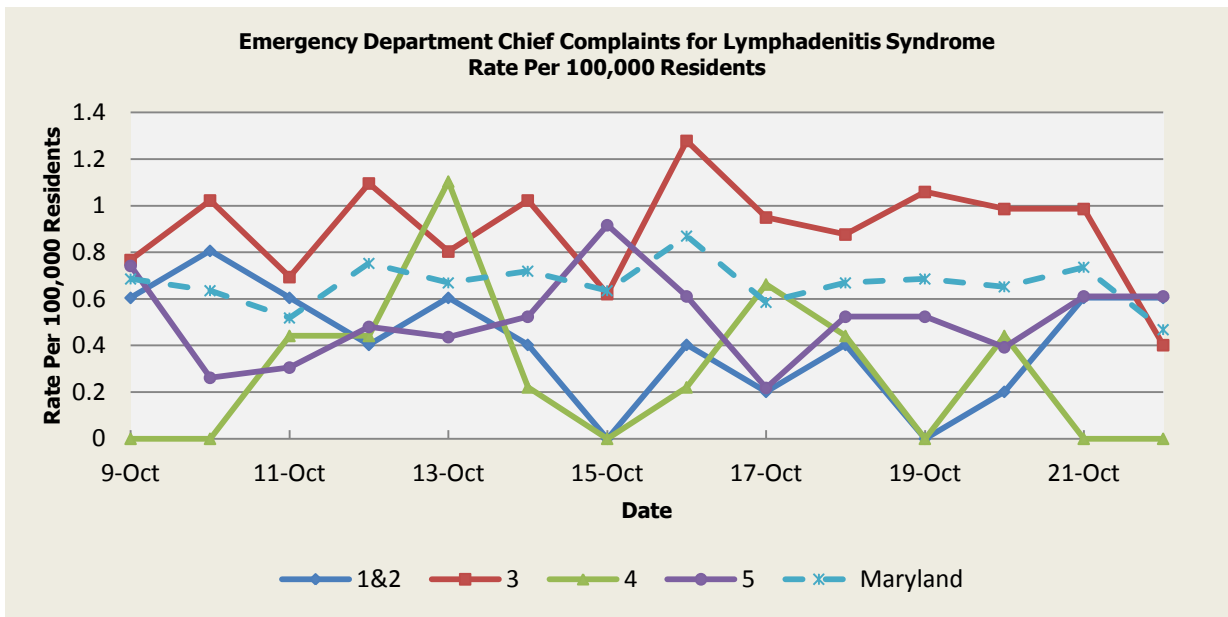
* Per 100,000 Residents



There was an appreciable increase above baseline in the rate of ED visits for Hemorrhagic Illness Syndrome on 10/09 (Regions 3,4), 10/10 (Region 1&2, 3, 5), 10/11 (Regions 3), 10/12 (Region 3,4), 10/13 (Regions 3), 10/15 (Region 1&2), 10/16 (Regions 3,5), 10/17 (Regions 3), 10/19 (Region 3), 10/20 (Regions 3), 10/21 (Region 3,5) and 10/22 (Regions 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	0.11	0.03	0.08	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 10/09 (Region 5), 10/10 (Regions 1&2,3), 10/12 (Region 3), 10/13 (Region 4), 10/15 (Region 5), 10/16 (Regions 3,5), 10/17 (Region 3), 10/19 (Region 3), 10/20 (Region 3), 10/21 (Region 3,5) and 10/22 (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	0.50	0.34	0.51	0.38
Median Rate*	0.20	0.37	0.22	0.26	0.32

* Per 100,000 Residents

MARYLAND REPORTABLE DISEASE SURVEILLANCE

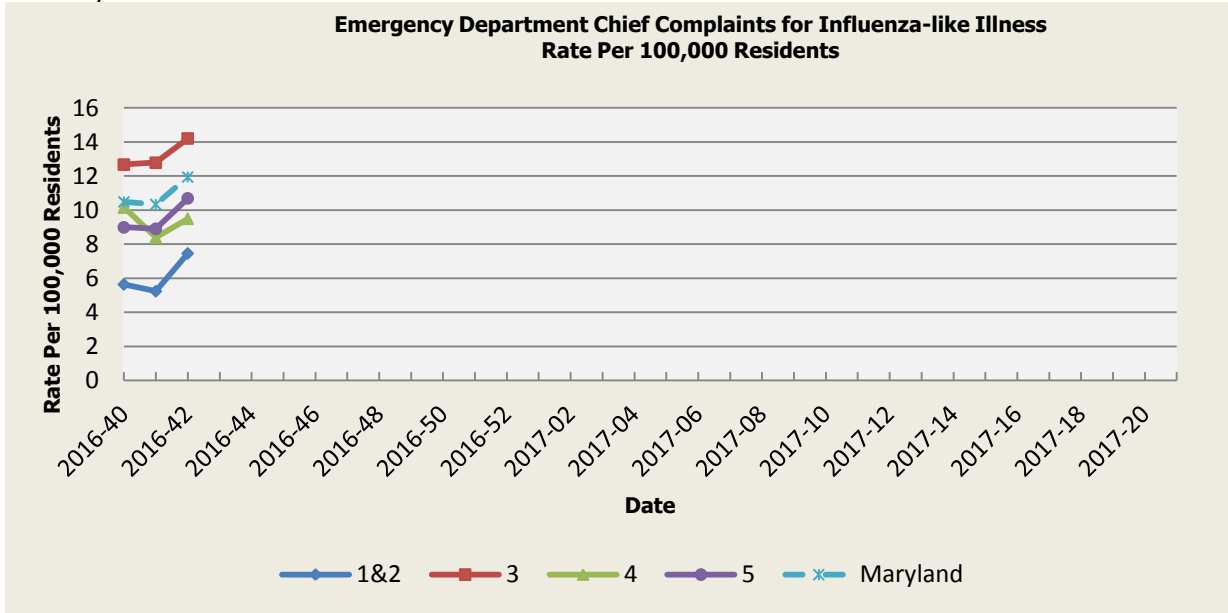
Condition	Counts of Reported Cases‡					
	October			Cumulative (Year to Date)**		
	2016	Mean*	Median*	2016	Mean*	Median*
Vaccine-Preventable Diseases						
Aseptic meningitis	15	36.2	36	288	383.2	387
Meningococcal disease	0	0.4	0	3	6.4	5
Measles	0	0.2	0	4	4.2	3
Mumps	0	0.6	0	16	36.6	12
Rubella	0	0	0	1	2.4	2
Pertussis	25	19.6	19	190	244.2	298
Foodborne Diseases						
Salmonellosis	22	56.4	58	677	795.6	812
Shigellosis	4	10.6	10	112	154	188
Campylobacteriosis	31	42	42	595	587.8	584
Shiga toxin-producing Escherichia coli (STEC)	12	7.2	7	147	104.6	96
Listeriosis	1	1.4	1	18	14	15
Arboviral Diseases						
West Nile Fever	0	0.4	0	2	11.8	10
Lyme Disease	50	74.4	74	1561	1316.8	1409
Emerging Infectious Diseases						
Chikungunya	0	2.8	0	5	14.6	0
Dengue Fever	1	1.6	1	37	14.4	15
Zika Virus***	3	0	0	115	0.2	0
Other						
Legionellosis	14	16.2	14	130	144.8	144

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

*** As of October 28, 2016, the total Maryland Confirmed Zika Virus Infections is 105.

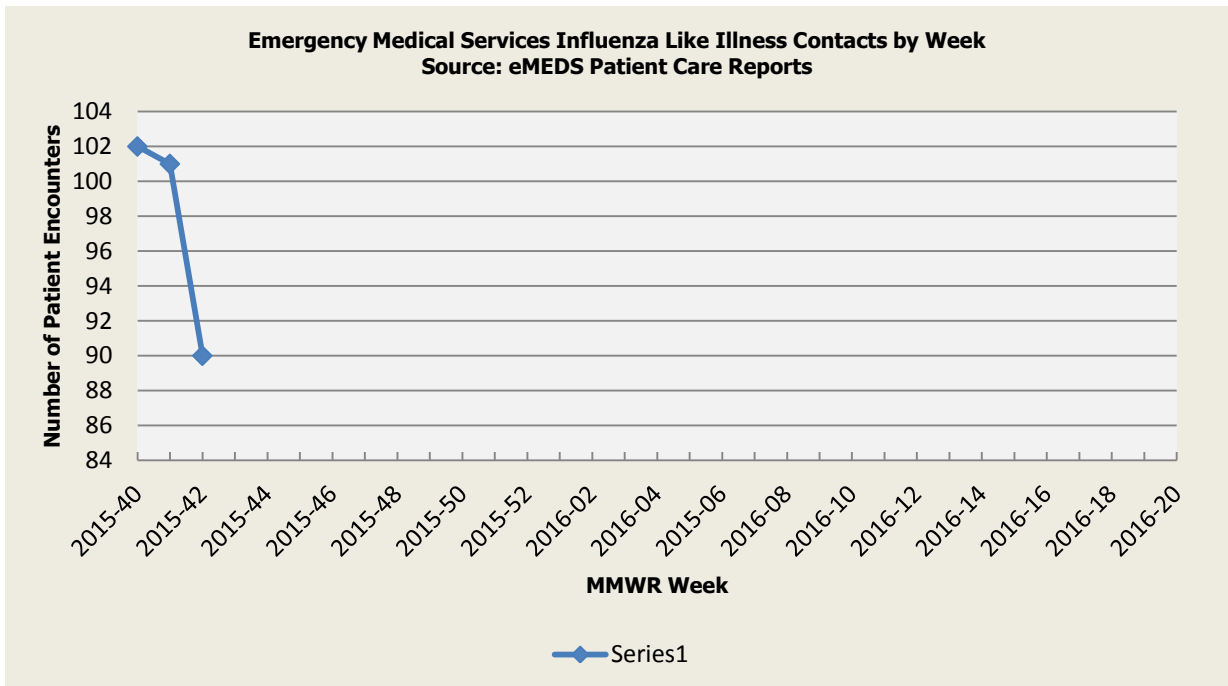
SYNDROMIC INFLUENZA SURVEILLANCE

Seasonal Influenza reporting occurs from MMWR Week 41 through MMWR Week 20 (October through May). Seasonal Influenza activity for Week 41 was: Minimal Geographic Spread with Sporadic Intensity.

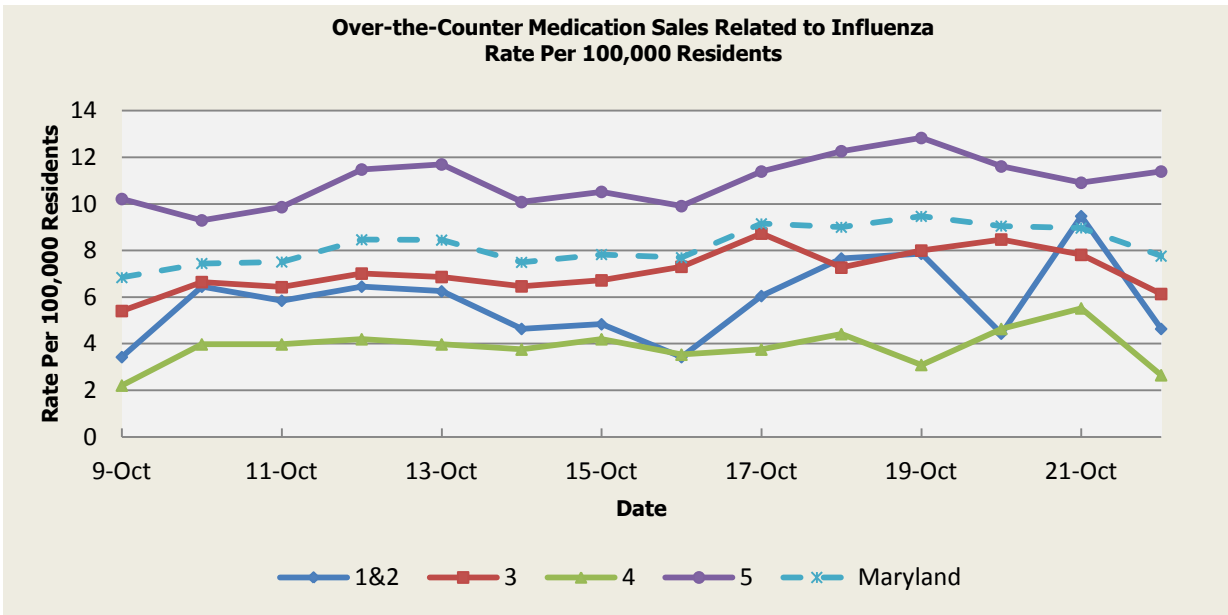


Influenza-like Illness Baseline Data Week 1 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	9.26	11.58	10.78	10.43	10.88
Median Rate*	7.66	8.99	9.05	8.03	8.72

* Per 100,000 Residents



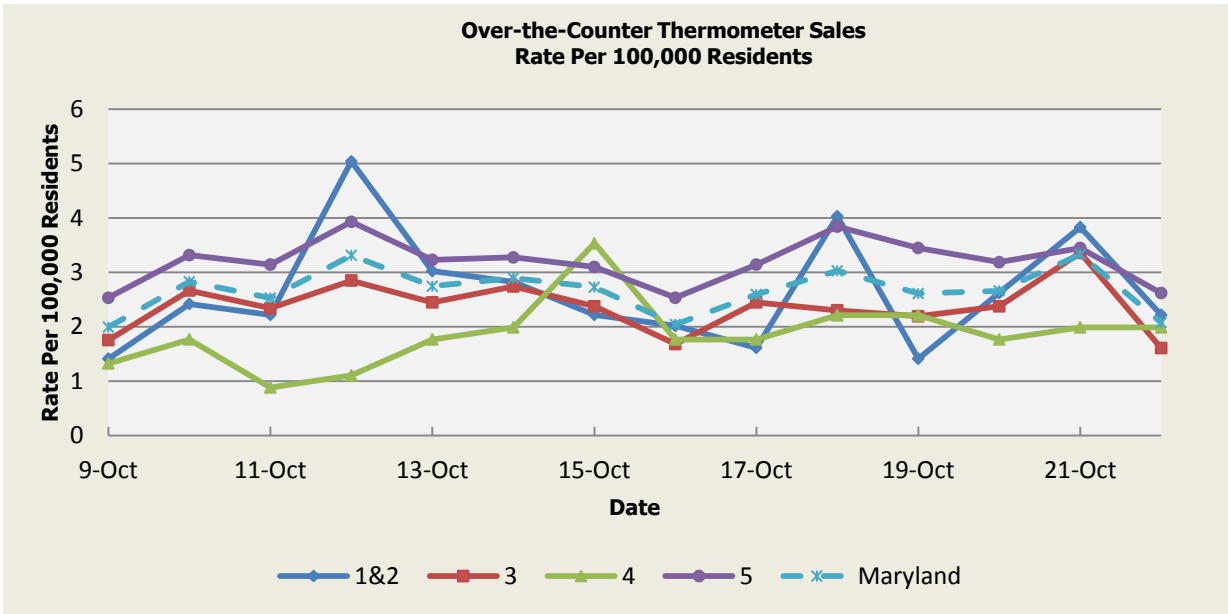
Disclaimer on eMEDS flu related data: This data is based on EMS Pre-hospital care reports where the EMS provider has selected "flu like illness" as a primary or secondary impression of a patient's illness. This impression is solely based on the signs and symptoms seen by the provider, not on any diagnostic 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 an appreciable increase above baseline in the rate of OTC medication sales on 10/18 (Region 1&2), 10/19 (Regions 1&2), and 10/21 (Region 1&2,4). These increases are not known to be associated with any outbreaks.

OTC Sales Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.86	4.69	2.60	8.21	5.79
Median Rate*	2.82	3.98	2.21	7.60	5.19

* 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 October 3, 2016, the WHO-confirmed global total (2003-2016) of human cases of H5N1 avian influenza virus infection stands at 856, of which 452 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 53%.

Avian Influenza:

H5N8 (INDIA): 24 Oct 2016, The zoo in the Indian capital Delhi has been temporarily closed after confirming at least ten (10) birds were found dead in the city over the past 48 hours of avian influenza (H5N8). Globally, 856 cases of bird flu were reported in humans between 2003 and 2016. Out of these, 452 died, reflecting the high mortality rate of the disease. Initial symptoms of bird flu in humans include high fever, sore throat, abdominal pain, chest pain and diarrhea. Read More: <http://www.promedmail.org/post/4581750>

NATIONAL DISEASE REPORTS

NEW WORLD SCREWORM (FLORIDA, GEORGIA): 25 Oct 2016, According to the Florida Department of Agriculture, screwworms have spread to Big Torch, Middle Torch, Little Torch, Cudjoe, Ramrod and Summerland keys. Recently New World Screwworm was found in wild deer and pets in the Florida Keys. Screwworm was eradicated from the USA in the 1960's; therefore, this finding is significant. In an effort to protect the health of our Georgia Animal Industry and to safely maintain animal movement, Effective Immediately: all livestock and pets entering Georgia from Florida should be carefully examined for signs of Screwworm and treated appropriately, if necessary, prior to entry. Read More: <http://www.promedmail.org/post/4584559>

POISONING, BELLADONNA (USA): 23 Oct 2016, On Thursday 20 Oct 2016, The FDA reported investigating more than 400 reports of adverse events associated with homeopathic teething products in the last 6 years, in which they are aware of reports of 10 deaths during that period that reference homeopathic teething products. At this time, the FDA recommends that parents do not give their children homeopathic teething tablets and gels. Symptoms of problems associated with these products include difficulty breathing, lethargy, excessive sleepiness, muscle weakness, skin flushing, constipation, and agitation after using the product. Your child should be taken to a doctor if any of these symptoms develop. Read more: <http://www.promedmail.org/post/4578600>

TULAREMIA (TEXAS): 20 Oct 2016, The Wichita Falls Health Department is investigating how a man got a potentially deadly bacterial disease. A man in Wichita Falls was recently diagnosed with tularemia - also known as Rabbit Fever. Health officials say it's a rare bacterial infection for this area that comes from tick and deer fly bites, skin contact with infected animals like rabbits and rats, and ingesting contaminated water. Read more: <http://www.promedmail.org/post/4572972>

INTERNATIONAL DISEASE REPORTS

FOODBORNE ILLNESS (MADAGASCAR): 26 Oct 2016, The Gendarmerie Nationale reported fatal food poisoning resulting in a total of 22 people admitted to hospital and five (5) deaths, including three (3) infants aged 4, 7, and 15 months respectively were the first to die after the intoxication. A sea turtle weighing nearly 25 kilos, caught by a fisherman on [Mon 17 Oct 2016] is the origin of this massive poisoning. Having brought (the turtle) home, the fisherman sold the remaining meat in the market. Read more: <http://www.promedmail.org/post/4586498>

AMEBIC MENINGOENCEPHALITIS (CHINA): 22 Oct 2016, On Wed 19 Oct, The Department of Infectious Diseases at Shenzhen's No. 3 People's Hospital in China reported that a man died from primary amoebic meningoencephalitis (PAM) caused by *N. fowleri* in early September. *Naegleria fowleri* is a relatively rare, pathogenic amoeba found in warm or hot freshwater like lakes, rivers and hot springs. It is also possible to get it from dirty unchlorinated or under-chlorinated swimming pools. The amoeba does not live in salt water or in swimming pools and hot tubs that are properly cleaned, maintained and treated with chlorine. This is the 1st report of meningoencephalitis due to *Naegleria fowleri* from mainland China. Read More: <http://www.promedmail.org/post/4577395>

MEASLES (SOMALIA, AUSTRALIA, USA): 22 Oct 2016, On Fri 14 Oct 2016, a measles outbreak is continuing to spread in remote parts of Jubbaland; 20 children, most of them under the age of 5, have been admitted for treatment at Kismayo General Hospital in Lower Jubba region. Health authorities have issued a Northern Territory-wide measles alert in Australia after an infected woman visited Darwin for 5 days last week. Washtenaw County Public Health has confirmed a case of measles in an adult with a recent history of international travel. The individual is receiving medical treatment after being seen at the University of Michigan East Ann Arbor Health and Geriatrics Center on Thu 13 Oct [2016]. Read more: <http://www.promedmail.org/post/4578186>

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

