



July 15, 2016

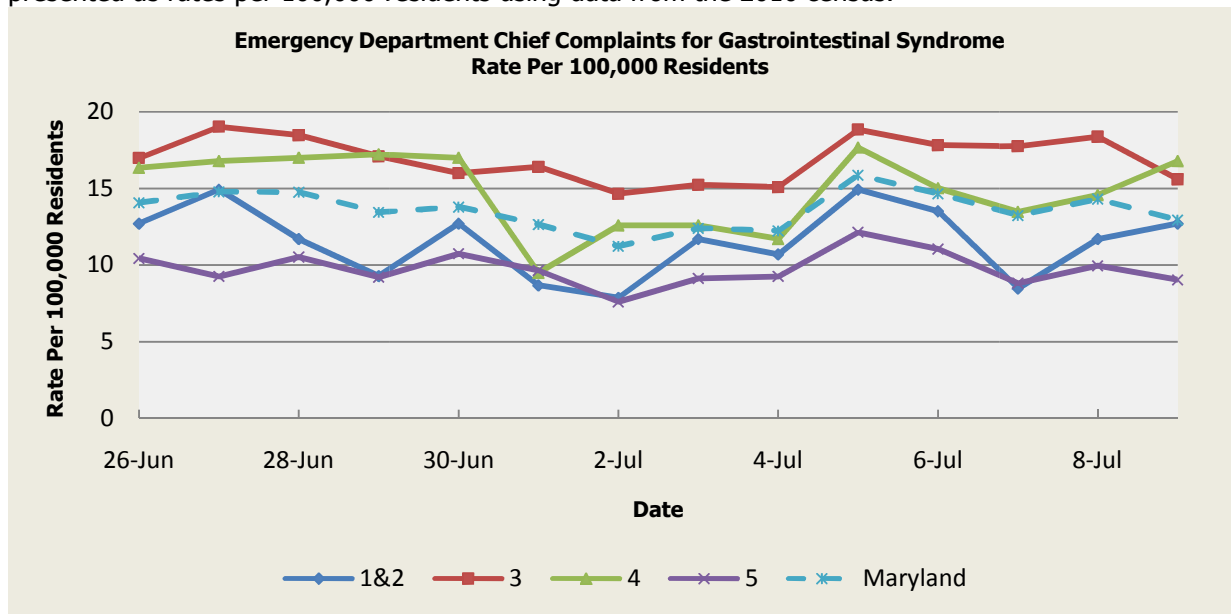
**Public Health Preparedness and Situational Awareness Report: #2016:27
Reporting for the week ending 7/9/16 (MMWR Week #27)**

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):

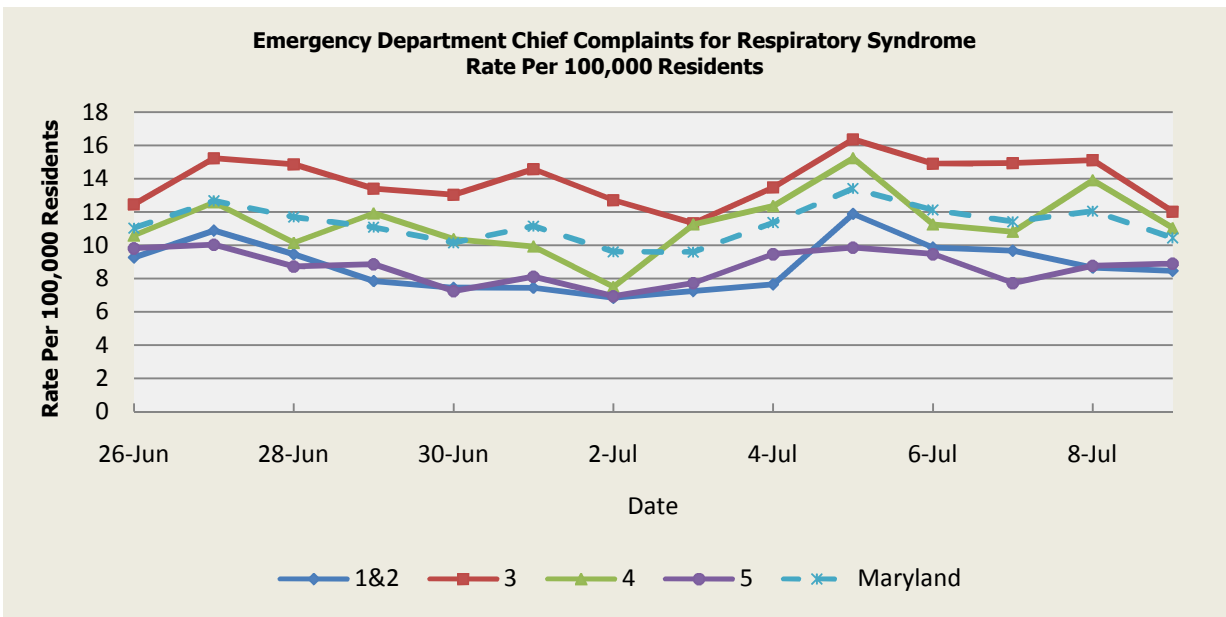
Graphical representation is provided for all syndromes (excluding the "Other" category; see Appendix 1) by Health and Medical Regions (See Appendix 2). Emergency department chief complaint data is presented as rates per 100,000 residents using data from the 2010 census.



There was one (1) gastrointestinal illness outbreak reported this week: 1 outbreak of gastroenteritis in a Hospital (Region 3). There was one (1) foodborne outbreak reported this week: 1 outbreak of ciguatera associated with a Grocery Store (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

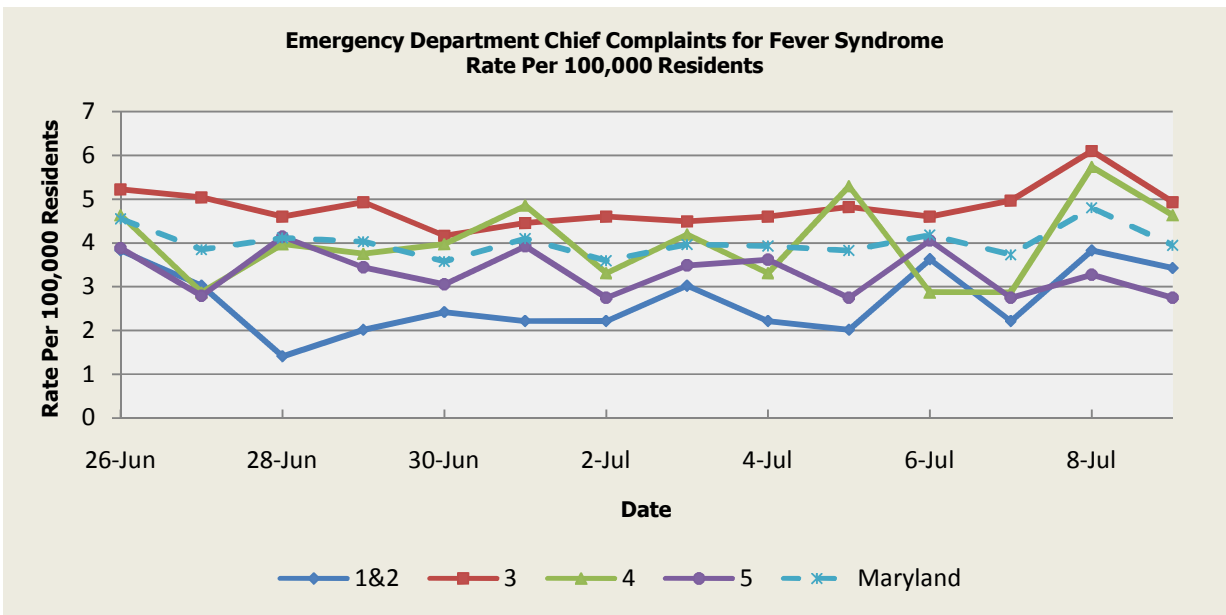
* Per 100,000 Residents



There was one (1) respiratory illness outbreak reported this week: one outbreak of ILI/pneumonia in a Nursing Home (Region 5).

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

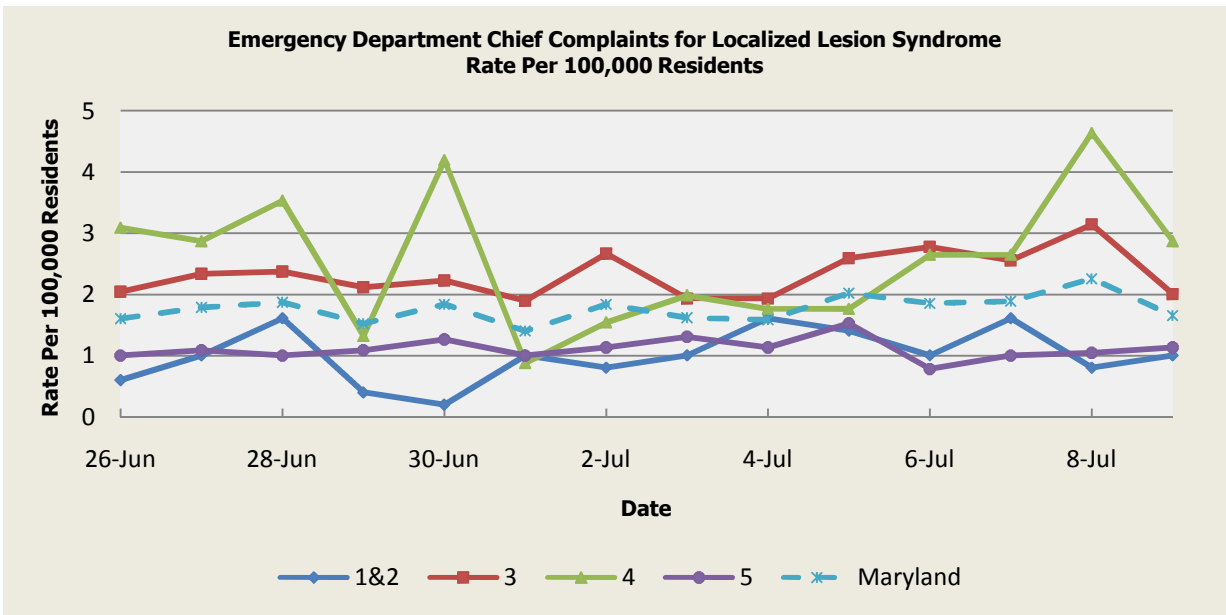
* Per 100,000 Residents



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

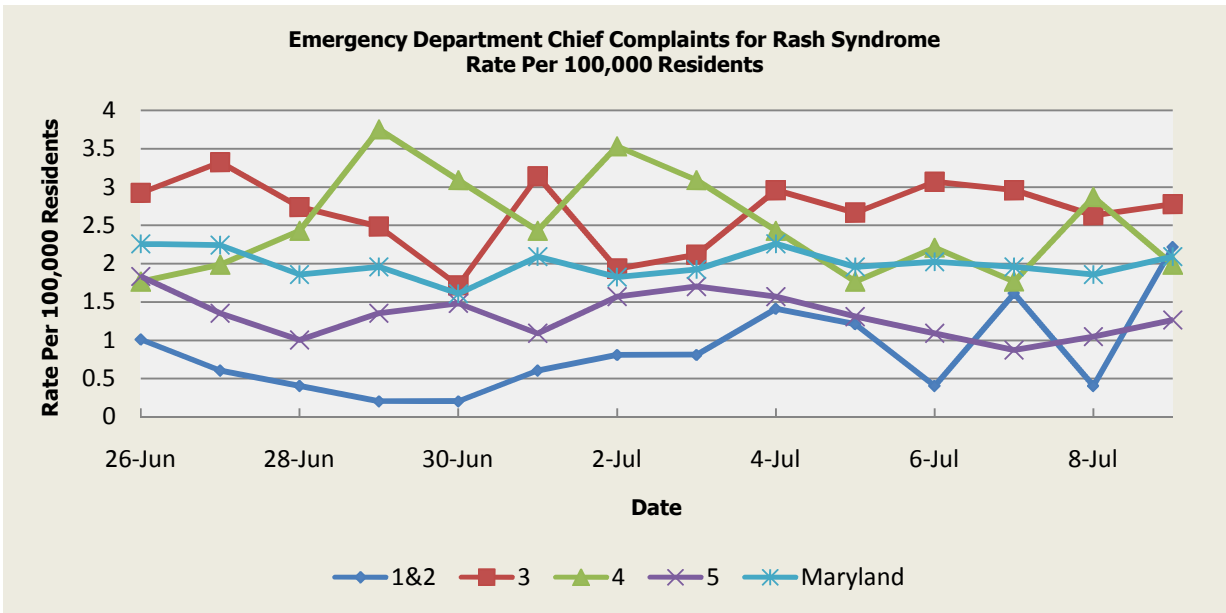
Per 100,000 Residents



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

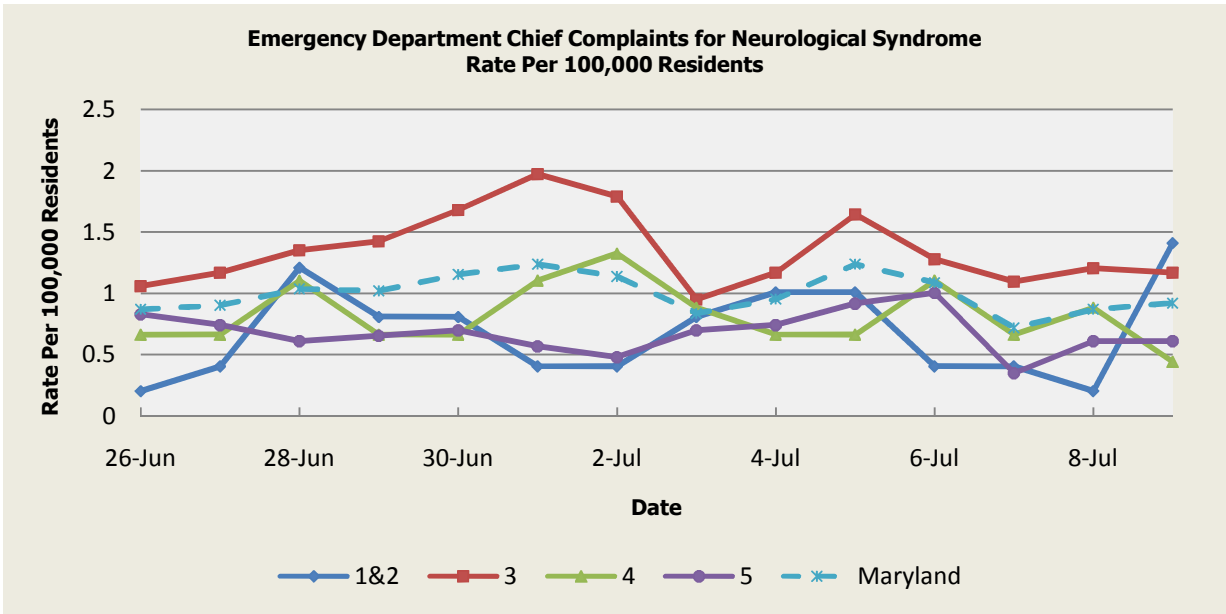
* Per 100,000 Residents



There were three (3) rash illness outbreaks reported this week: 3 outbreaks of Hand, Foot and Mouth Disease associated with Daycare Centers (2 Region 4; 1 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

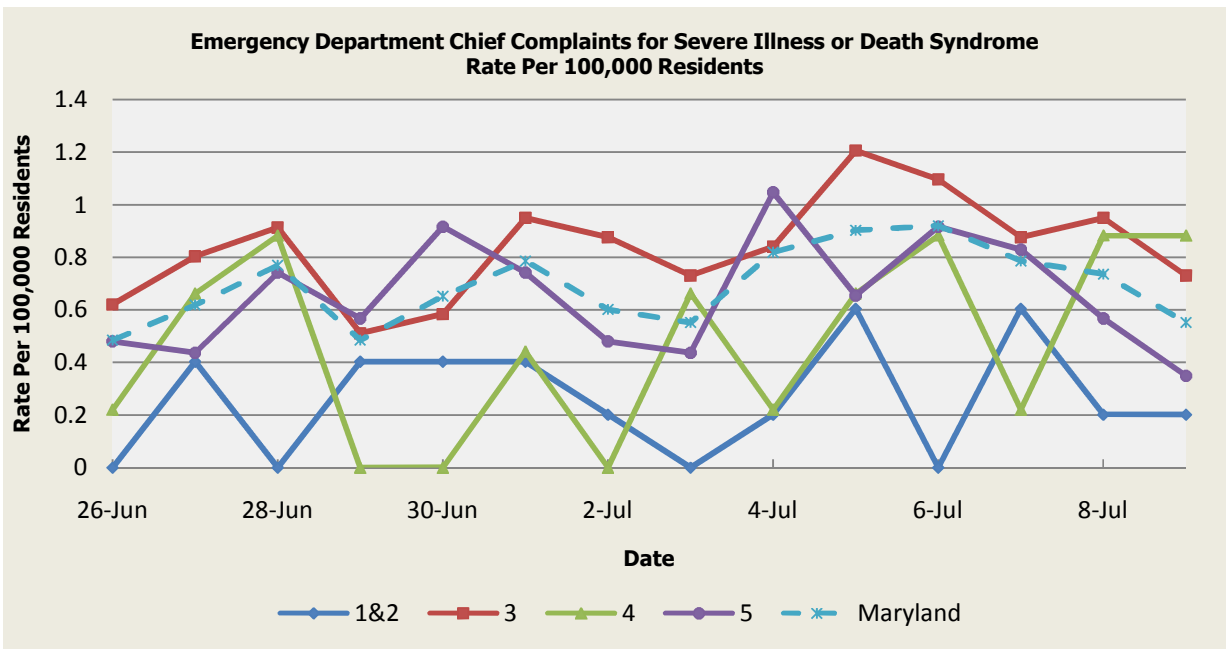
* Per 100,000 Residents



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

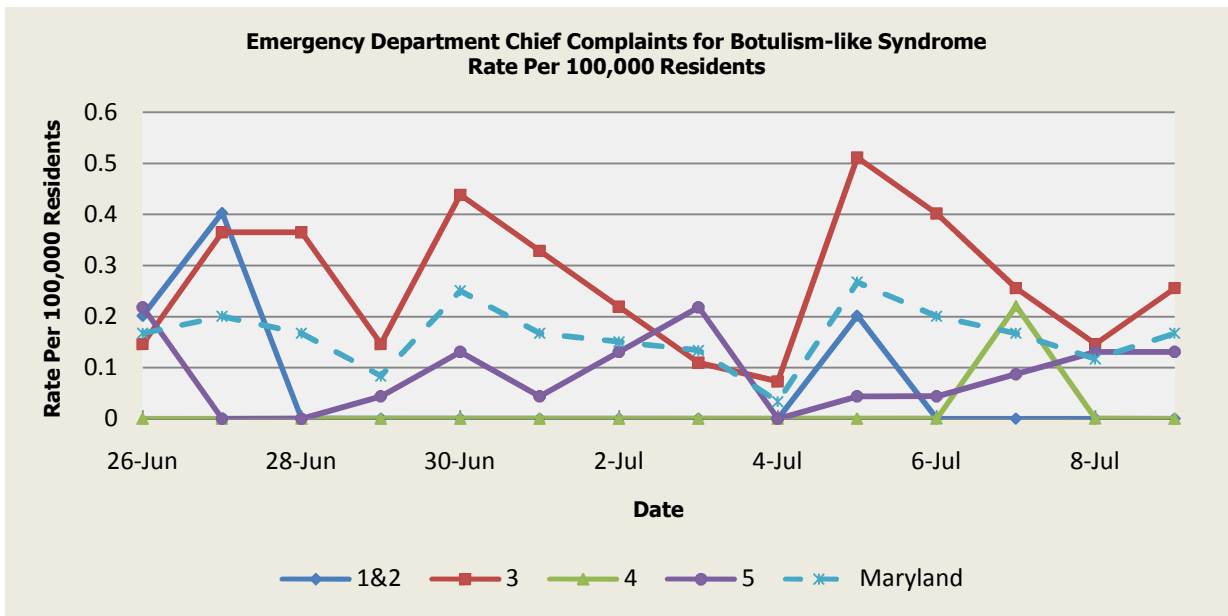


There were no severe illness or death outbreaks reported this week.

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

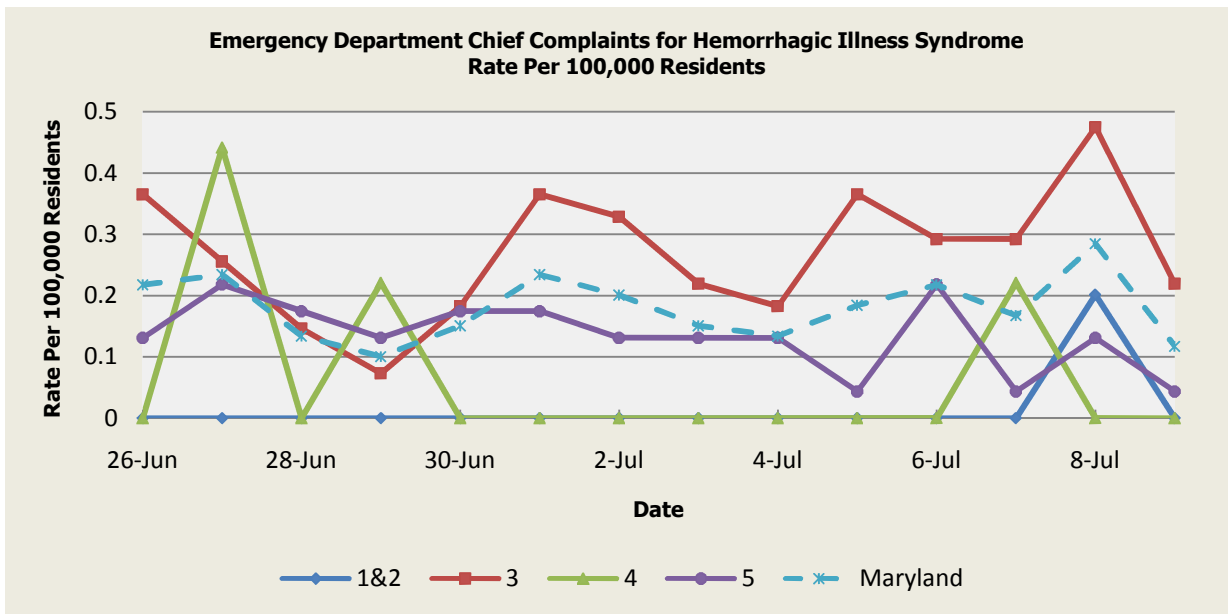
SYNDROMES RELATED TO CATEGORY A AGENTS



There was an appreciable increase above baseline in the rate of ED visits for Botulism-like Syndrome on 6/26 (Region 5), 6/27 (Region 3), 6/28 (Region 3), 6/30 (Regions 3,5), 7/1 (Region 3), 7/2 (Regions 3,5), 7/3 (Region 5), 7/5 (Regions 1&2,3), 7/6 (Region 3), 7/7 (Regions 3,5), 7/8 Region 5), and 7/9 (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

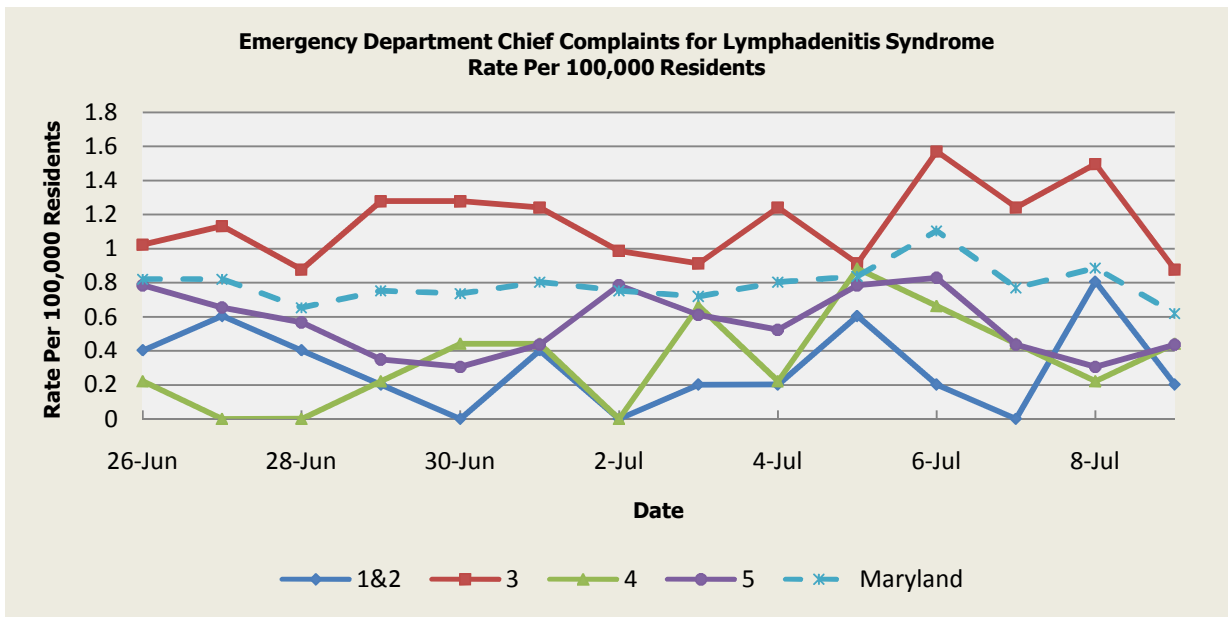
* Per 100,000 Residents



There was an appreciable increase above baseline in the rate of ED visits for Hemorrhagic Illness Syndrome on 6/26 (Region 3), 6/27 (Regions 3,4,5), 6/28 (Region 5), 6/29 (Region 4), 6/30 (Region 5), 7/1 (Regions 3,5) 7/2 (Region 3), 7/3 (Region 3), 7/5 (Region 3), 7/6 (Regions 3,5), 7/7 (Regions 3,4), 7/8 (Regions 1&2,3) and 7/9 (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 6/26 (Regions 3,5), 6/27 (Regions 3,5), 6/29 (Region 3), 6/30 (Region 3), 7/1 (Region 3), 7/2 (Regions 3,5), 7/3 (Region 5), 7/4 (Region 3), 7/5 (Regions 4,5), 7/6 (Regions 3,5), 7/7 (Region 3), 7/8 (Regions 1&2,3). 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

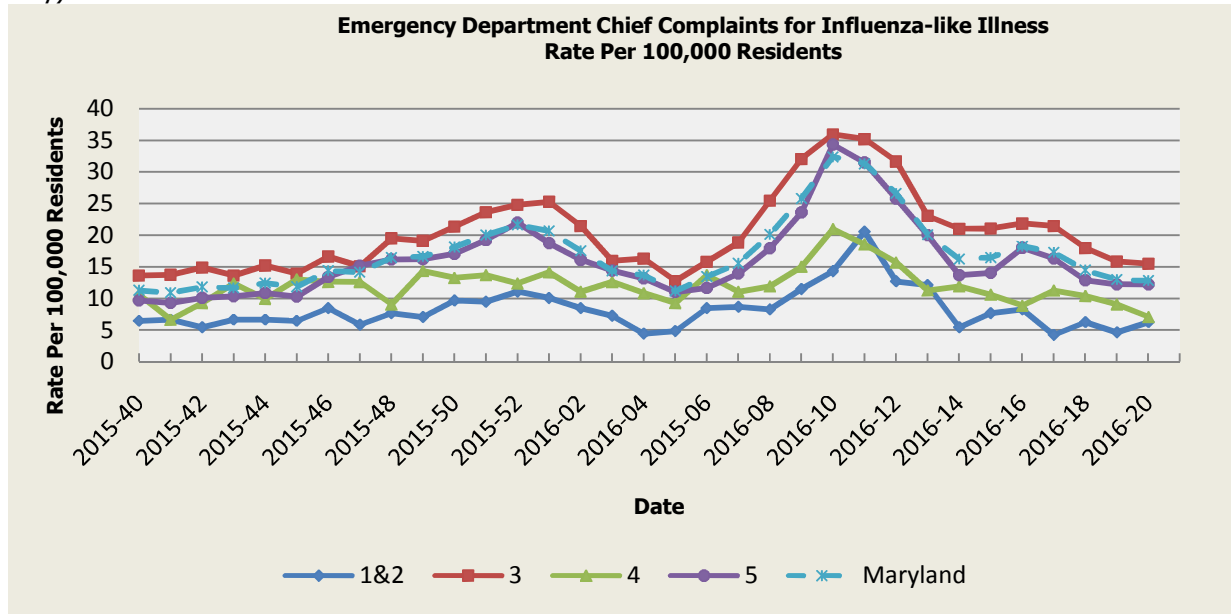
Condition	Counts of Reported Cases†					
	July			Cumulative (Year to Date)**		
	2016	Mean*	Median*	2016	Mean*	Median*
Vaccine-Preventable Diseases	2016	Mean*	Median*	2016	Mean*	Median*
Aseptic meningitis	2	13.4	13	150	193.8	200
Meningococcal disease	0	0	0	2	4.4	4
Measles	0	0	0	3	2.6	2
Mumps	0	0.4	0	8	30.6	9
Rubella	0	0	0	1	1.8	2
Pertussis	4	6.6	7	97	133.4	154
Foodborne Diseases	2016	Mean*	Median*	2016	Mean*	Median*
Salmonellosis	10	36	37	288	399	418
Shigellosis	3	3.4	4	58	92.2	107
Campylobacteriosis	7	31.8	33	339	337.6	343
Shiga toxin-producing Escherichia coli (STEC)	1	4.6	4	61	60.6	51
Listeriosis	0	1.2	1	6	6.4	7
Arboviral Diseases	2016	Mean*	Median*	2016	Mean*	Median*
West Nile Fever	0	0.2	0	0	1	1
Lyme Disease	30	98.4	93	655	790.8	872
Emerging Infectious Diseases	2016	Mean*	Median*	2016	Mean*	Median*
Chikungunya	0	2	0	3	6.8	0
Dengue Fever	2	0.4	0	19	6.8	7
Zika Virus***	1	0	0	35	0.2	0
Other	2016	Mean*	Median*	2016	Mean*	Median*
Legionellosis	5	5.4	3	64	71.6	75

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

***As of July 13, 2016, the total Maryland Confirmed Zika Virus Infections is 35.

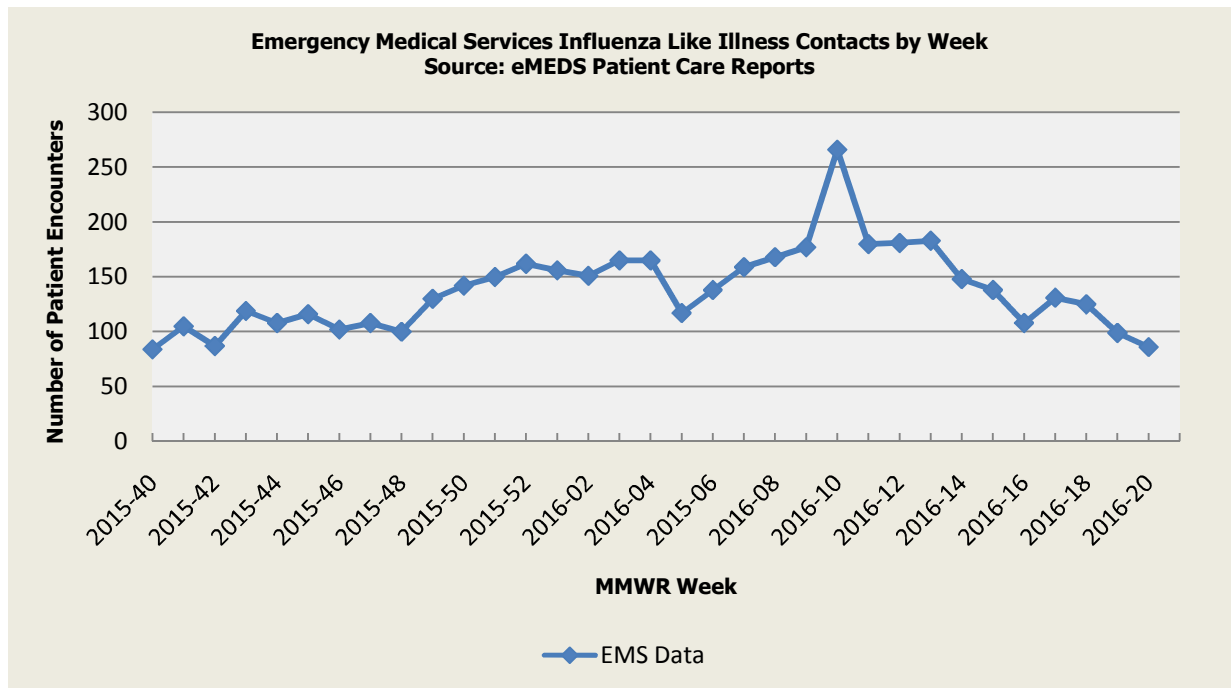
SYNDROMIC INFLUENZA SURVEILLANCE

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

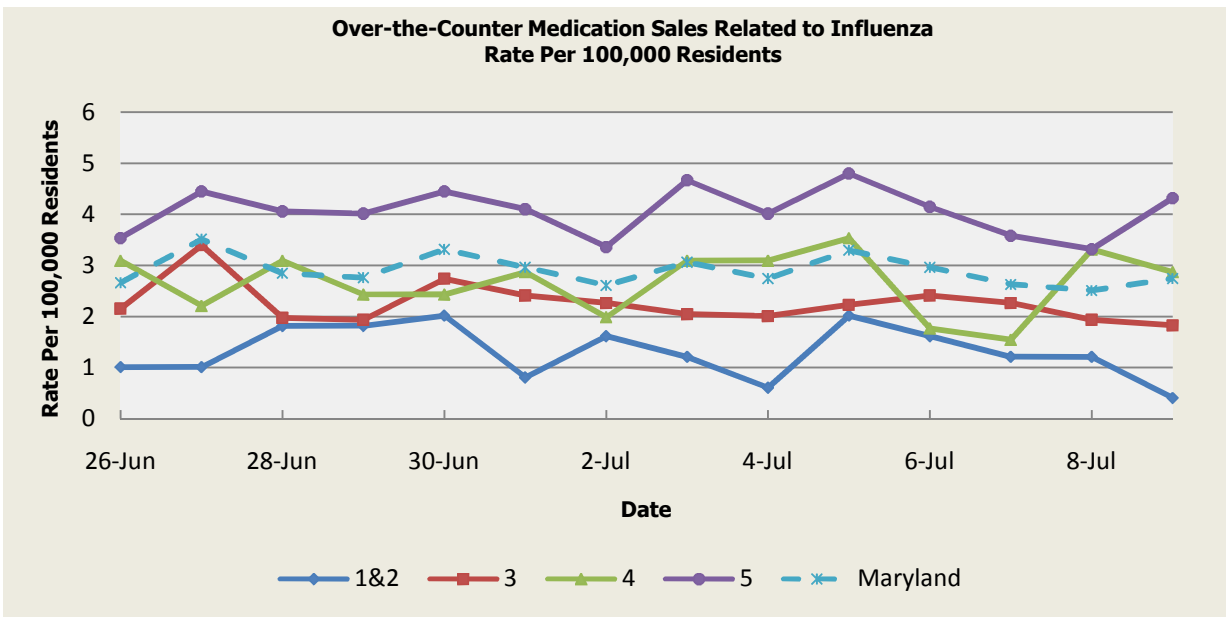


Influenza-like Illness Baseline Data Week 1 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	9.26	11.58	10.78	10.43	10.88
Median Rate*	7.66	8.99	9.05	8.03	8.72

* Per 100,000 Residents



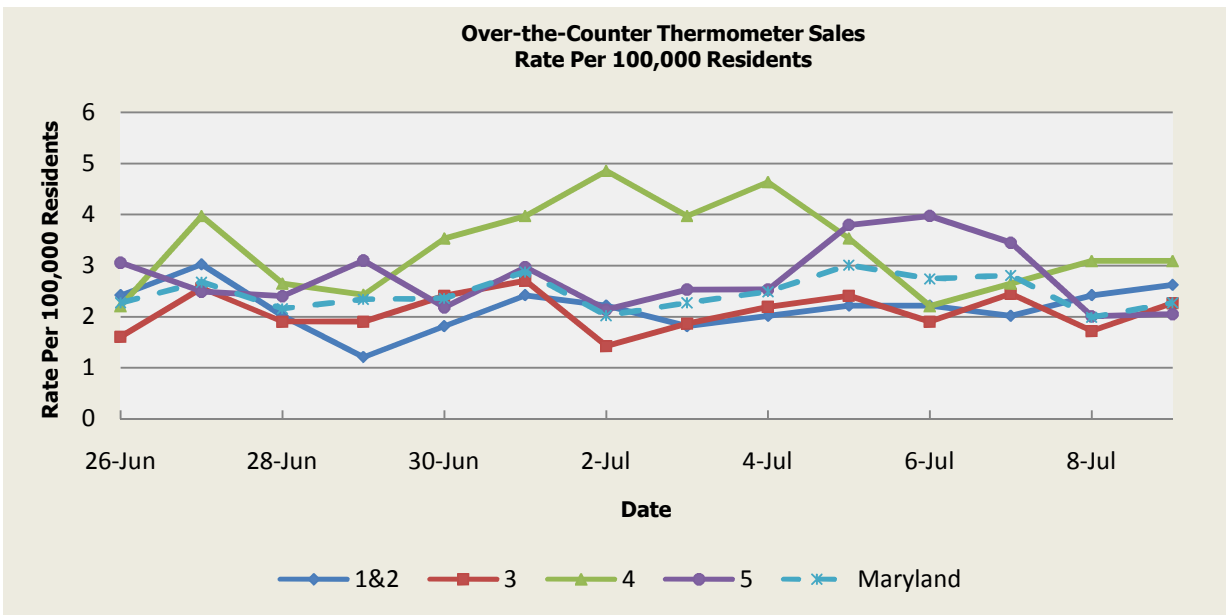
Disclaimer on eMEDS flu related data: This data is based on EMS Pre-hospital care reports where the EMS provider has selected "flu like illness" as a primary or secondary impression of a patient's illness. This impression is solely based on the signs and symptoms seen by the provider, not on any diagnostic 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.



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



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:

H7N9 (CHINA): 14 Jul 2016, On 15 Jun 2016, the National Health and Family Planning Commission (NHFPC) of China notified WHO of 5 additional laboratory confirmed cases of human infection with avian influenza A(H7N9) virus, including 1 death. Read More: <http://www.promedmail.org/post/4343947>

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:

H5N2 (CANADA): 11 Jul 2016, The federal government has imposed a quarantine zone around a St. Catharines, Ont., farm where a strain of bird flu was discovered. The Canadian Food Inspection Agency (CFIA) said in a news release it has established an "Avian Influenza Control Zone" to control the movement of animals, products and equipment in the area to minimize the spread of the disease. Read More: <http://www.promedmail.org/post/4342839>

H5N1 (CENTRAL AND WEST AFRICA): 13 Jul 2016, Countries across West and Central Africa are on alert as the highly pathogenic avian influenza virus H5N1 continues to spread across the region, with Cameroon becoming the latest African country to detect the disease. The strain can infect and cause death in humans and kills poultry at a high rate. The latest H5N1 outbreaks were recently confirmed on chicken farms in Cameroon putting poultry production in the country and its neighbours at high risk. This is the 1st time the disease has been found in Central Africa since 2006. Read More: <http://www.promedmail.org/post/4343176>

NATIONAL DISEASE REPORTS

TULAREMIA (NEW MEXICO): 12 Jul 2016, The City of Albuquerque Environmental Health Department, the New Mexico Department of Health, and the Bernalillo County Health Protection Section announced today [12 Jul 2016] that 2 cases of human tularemia have been confirmed from Bernalillo County, with one of the individuals likely being exposed in the bosque [In the predominantly arid or semi-arid southwestern United States, the bosque is an oasis-like ribbon of green vegetation, often canopied, that only exists near rivers, streams, or other water courses. It derives its name from the

Spanish word for woodlands. - Mod.LL]. These are the 1st 2 laboratory confirmed human cases in New Mexico in 2016. Read More: <http://www.promedmail.org/post/4342491>

VIBRIO VULNIFICUS (FLORIDA): 8 Jul 2016, A Citrus County resident has died from a *Vibrio vulnificus* saltwater bacterial infection, according to the Florida Department of Health. The state keeps track of the number of persons who are diagnosed with *V. vulnificus* infections and those who die as a result of the infection. The state does not release the names of those who are diagnosed with *V. vulnificus* because of health privacy laws. So far in 2016, 4 people in Florida have died from *V. vulnificus*. Those who died were from Citrus, Broward, Palm Beach and Santa Rosa counties. Read More: <http://www.promedmail.org/post/4335205>

INTERNATIONAL DISEASE REPORTS

VIBRIO PARAHAEMOLYTICUS (CANADA): 7 Jul 2016, British Columbia has recorded its 1st case in 2016 of someone being sickened by eating raw oysters contaminated with vibrio bacteria. The BC Centre for Disease Control (BCCDC) said the illness was reported on 30 Jun 2016 in the Vancouver area. Read More: <http://www.promedmail.org/post/4333739>

TRICHINELLOSIS (RUSSIA): 10 Jul 2016, The number of people infected with the parasitic disease, trichinosis, has grown to 20 in the Irkutsk region of Siberia, Russia, according to a Sib.fm report (computer translated). The public health investigation reveals that the hunters contracted the infection in May after preparing smoked bear meat which was later consumed. Shortly after consuming the not fully cooked meat, they complained of feeling sick and went to the hospital. Read More: <http://www.promedmail.org/post/4337865>

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

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

