



MARYLAND Department of Health

Public Health Preparedness and Situational Awareness Report: #2019:16

Reporting for the week ending 04/20/19 (MMWR Week #16)

April 25, 2019

CURRENT HOMELAND SECURITY THREAT LEVELS

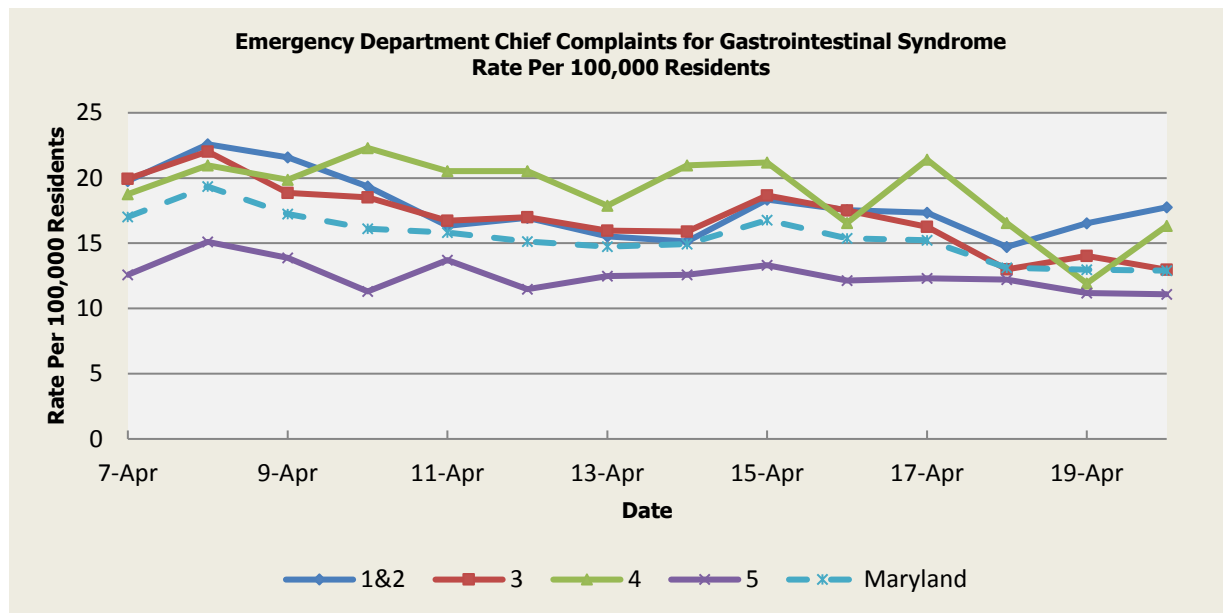
National:	No Active Alerts
Maryland:	Normal (MEMA status)

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. Electronic Surveillance System for the Early Notification of Community-Based Epidemics (ESSENCE). Baltimore, MD: Maryland Department of Health; 2019.

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Gastrointestinal Syndrome



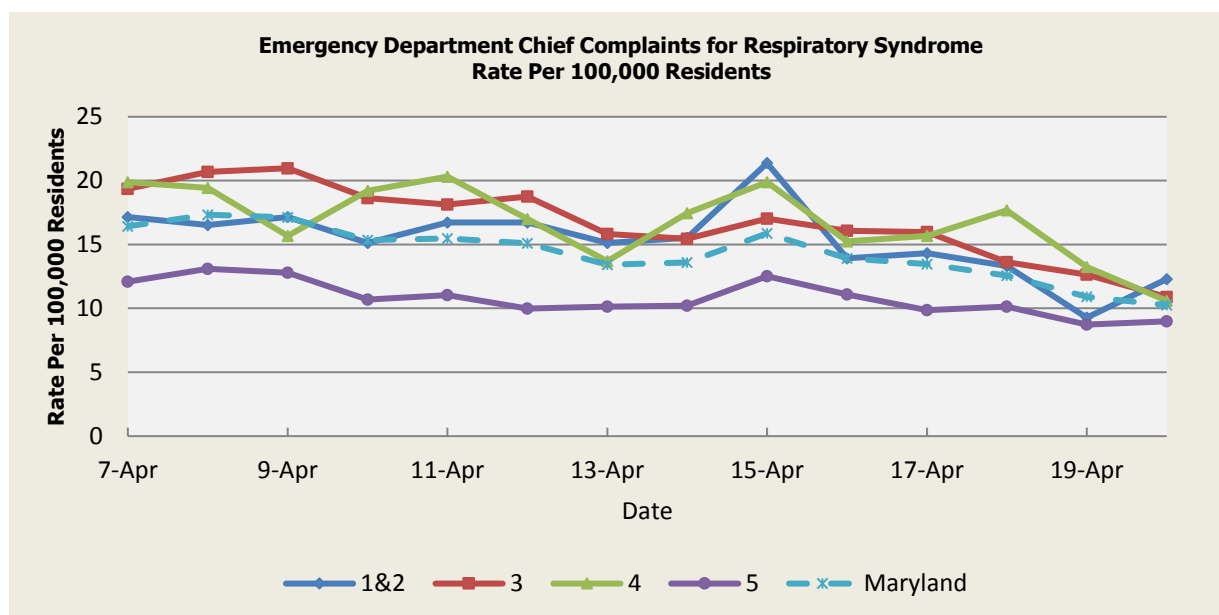
There were seven (7) Gastrointestinal Syndrome outbreaks reported this week: three (3) outbreaks of Gastroenteritis in Assisted Living Facilities (Regions 3,5); one (1) outbreak of Gastroenteritis in a Hospital (Region 3); one (1) outbreak of Gastroenteritis associated with a School (Regions 1&2); one (1) outbreak of Gastroenteritis associated with a Daycare Center (Region 5); one (1) outbreak of Gastroenteritis/Foodborne associated with a Restaurant (Region 3).

Gastrointestinal Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	13.22	15.10	15.87	10.22	13.14
Median Rate*	13.11	14.87	15.46	10.13	12.98

* Per 100,000 Residents

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Respiratory Syndrome



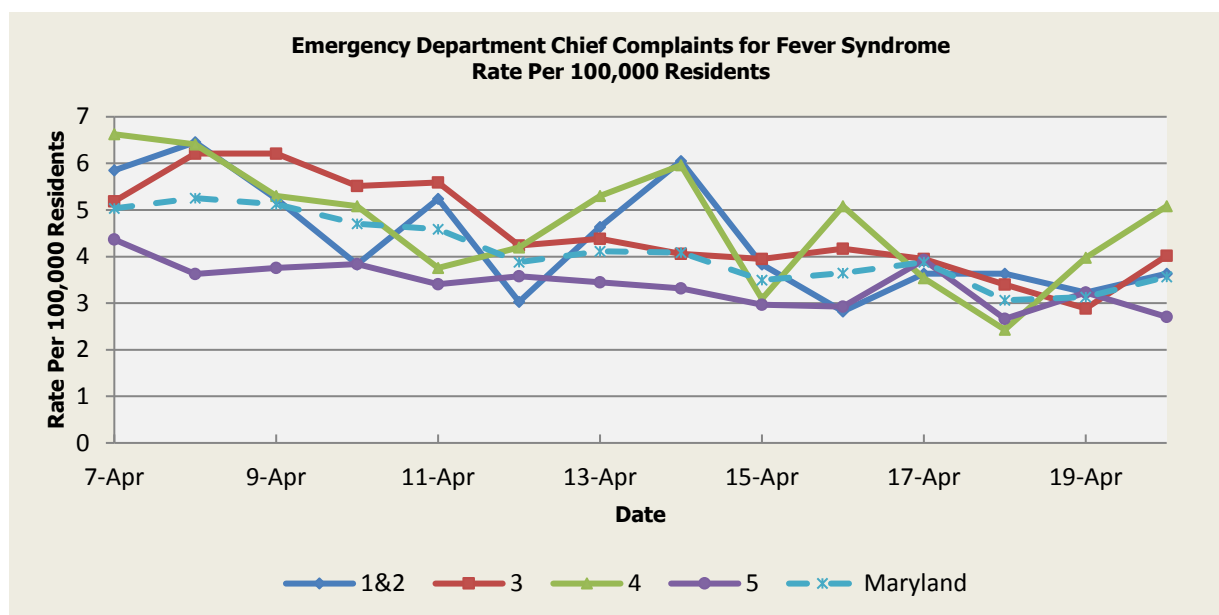
There were two (2) Respiratory Syndrome outbreaks reported this week: one (1) outbreak of Influenza associated with a School (Region 3); one (1) outbreak of Pneumonia in a Nursing Home (Region 5).

Respiratory Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	12.65	14.74	15.07	9.98	12.77
Median Rate*	12.10	14.18	14.35	9.60	12.26

* Per 100,000 Residents

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Fever Syndrome



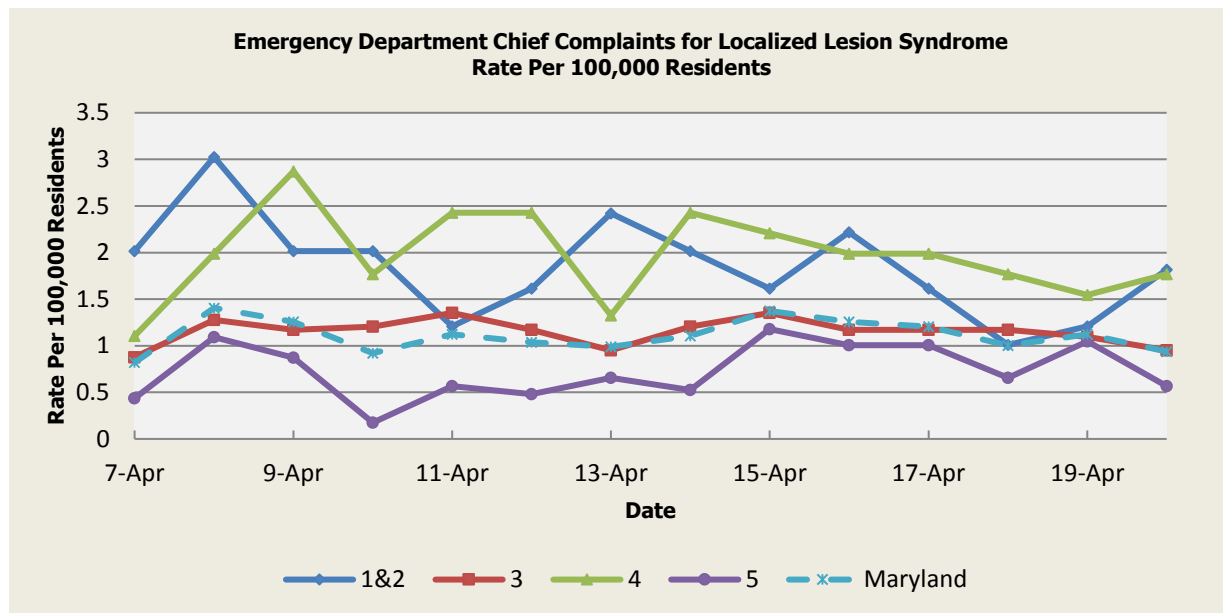
There were no Fever Syndrome outbreaks reported this week.

Fever Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.07	3.90	4.09	3.04	3.51
Median Rate*	3.02	3.76	3.97	2.92	3.38

**Per 100,000 Residents*

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Localized Lesion Syndrome



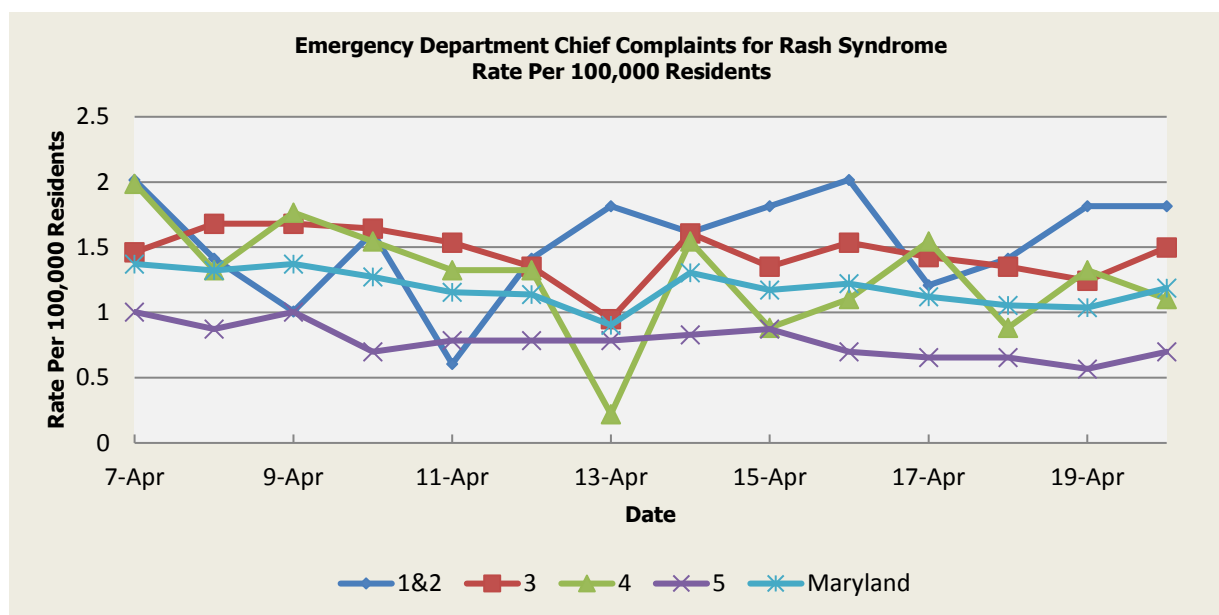
There were no Localized Lesion Syndrome outbreaks reported this week.

Localized Lesion Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	1.10	1.80	2.03	0.91	1.42
Median Rate*	1.01	1.75	1.99	0.87	1.36

* Per 100,000 Residents

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Rash Syndrome



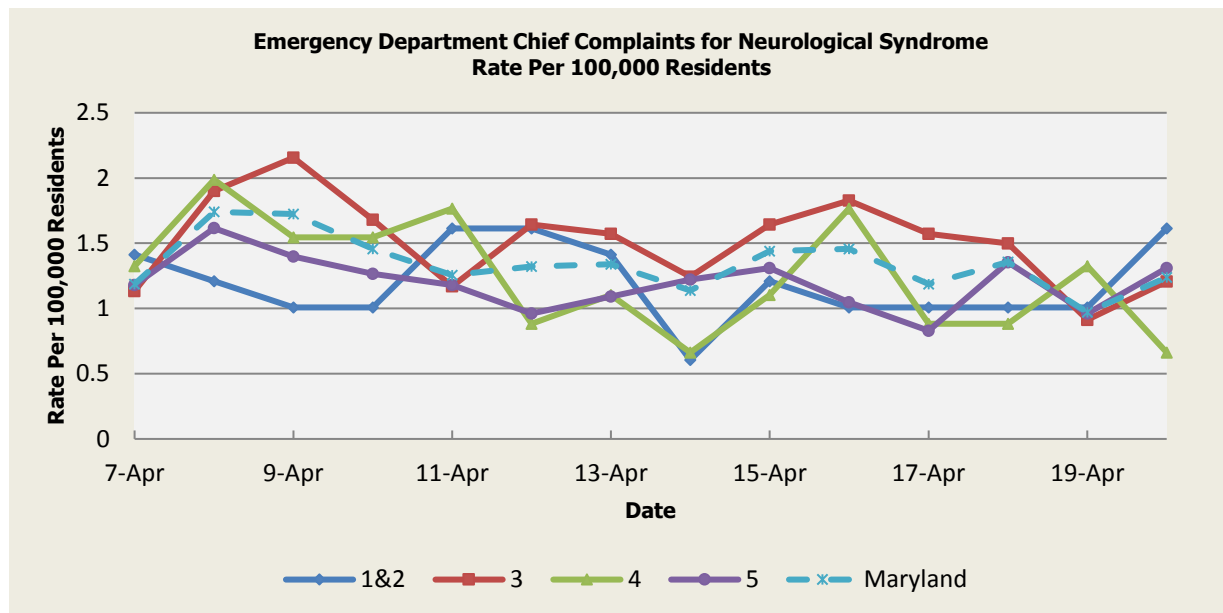
There were two (2) Rash Syndrome outbreaks reported this week: one (1) outbreak of MEASLES in a Community (Region 3); one (1) outbreak of Chickenpox associated with a Daycare Center (Regions 1&2).

Rash Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	1.22	1.68	1.76	0.98	1.38
Median Rate*	1.21	1.61	1.77	0.92	1.32

* Per 100,000 Residents

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Neurological Syndrome



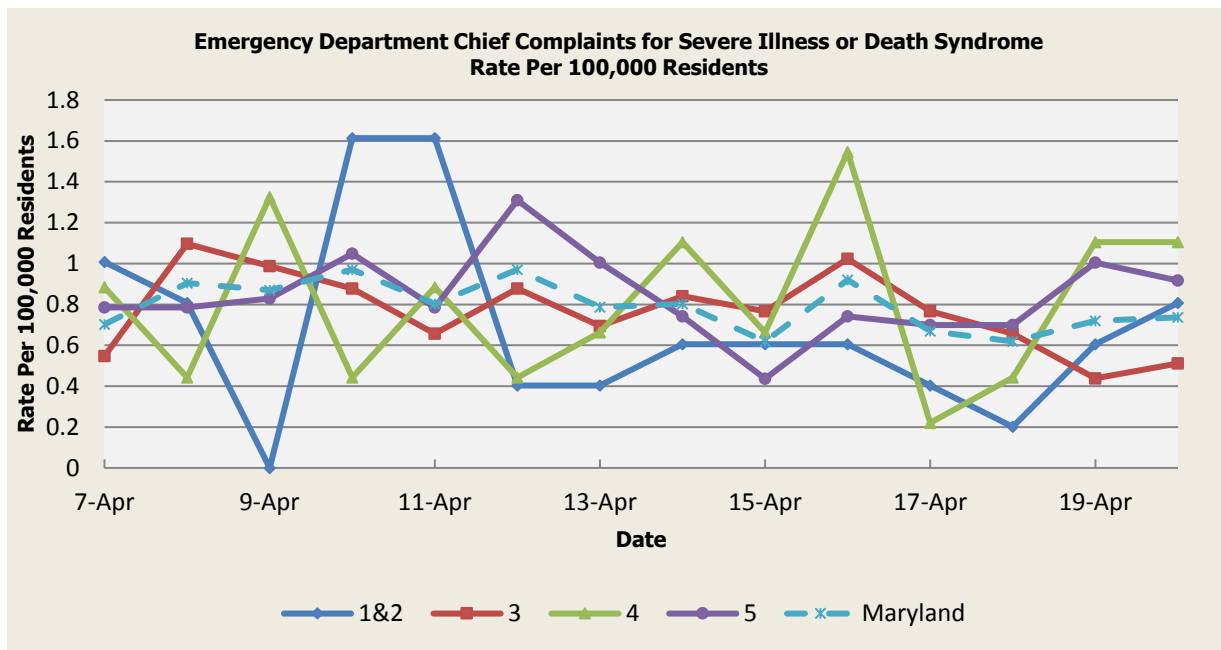
There were no Neurological Syndrome outbreaks reported this week.

Neurological Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.76	0.93	0.84	0.59	0.78
Median Rate*	0.60	0.80	0.66	0.52	0.69

* Per 100,000 Residents

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Severe Illness or Death Syndrome



There were no Severe Illness or Death Syndrome outbreaks reported this week.

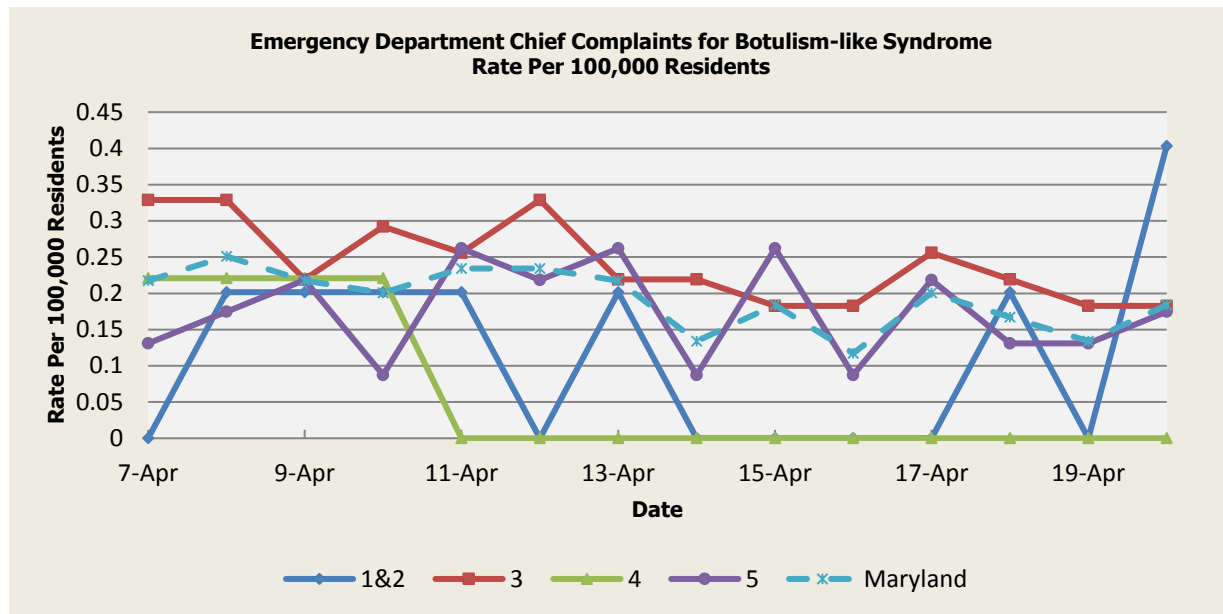
Severe Illness or Death Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.66	0.90	0.83	0.51	0.72
Median Rate*	0.60	0.88	0.66	0.48	0.69

* Per 100,000 Residents

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SYNDROMES RELATED TO CATEGORY A AGENTS

Botulism-like Syndrome



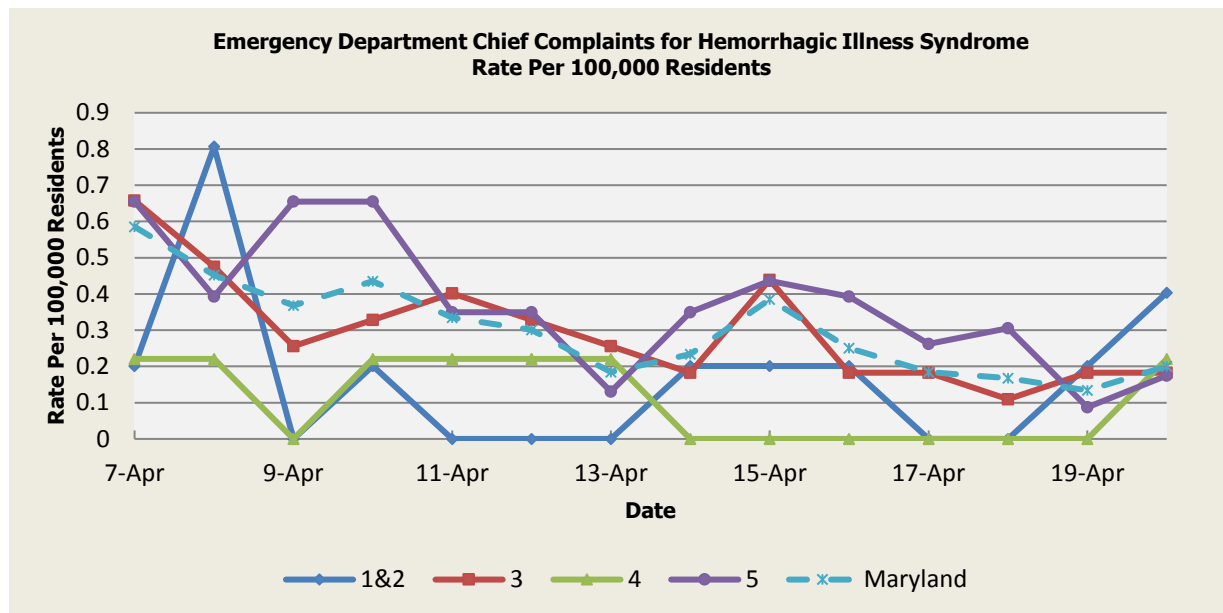
There was an appreciable increase above baseline in the rate of ED visits for Botulism-like Syndrome on 4/7 (Regions 3,4), 4/8 (Regions 1&2,3,4,5), 4/9 (Regions 1&2,4,5), 4/10 (Regions 1&2,3,4), 4/11 (Regions 1&2,3,5), 4/12 (Regions 3,5), 4/13 (Regions 1&2,5), 4/15 (Region 5), 4/17 (Regions 3,5), 4/18 (Regions 1&2), 4/20 (Regions 1&2,5). 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*	0.07	0.12	0.06	0.07	0.09
Median Rate*	0.00	0.07	0.00	0.04	0.07

* Per 100,000 Residents

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Hemorrhagic Illness Syndrome



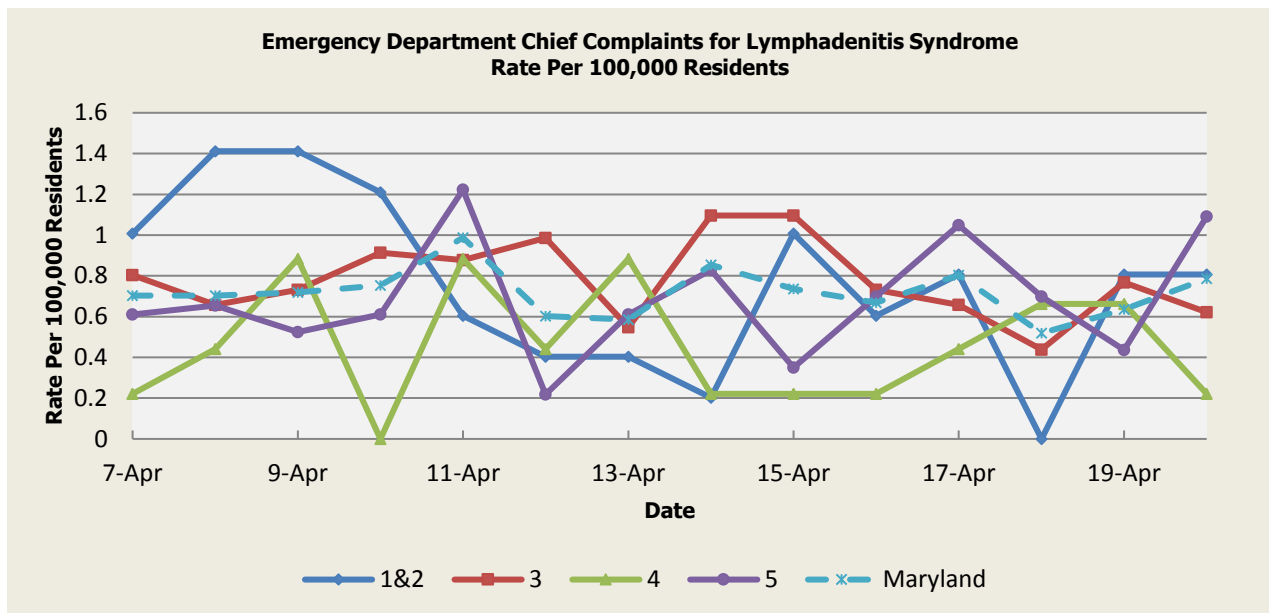
There was an appreciable increase above baseline in the rate of ED visits for Hemorrhagic Illness Syndrome on 4/7 (Regions 1&2,3,4,5), 4/8 (Regions 1&2,3,4,5), 4/9 (Region 5), 4/10 (Regions 1&2,3,4,5), 4/11 (Regions 3,4,5), 4/12 (Regions 3,4,5), 4/13 (Region 4), 4/14 (Regions 1&2,5), 4/15 (Regions 1&2,3,5), 4/16 (Regions 1&2,5), 4/17 (Region 5), 4/18 (Region 5), 4/19 (Regions 1&2,5), 4/20 (Regions 1&2,4). 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*	0.04	0.15	0.04	0.12	0.12
Median Rate*	0.00	0.07	0.00	0.09	0.07

* Per 100,000 Residents

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Lymphadenitis Syndrome



There was an appreciable increase above baseline in the rate of ED visits for Lymphadenitis Syndrome on 4/7 (Regions 1&2), 4/8 (Regions 1&2), 4/9 (Regions 1&2,4), 4/10 (Regions 1&2), 4/11 (Region 5), 4/13 (Region 4), 4/14 (Region 5), 4/15 (Regions 1&2), 4/17 (Regions 1&2,5), 4/19 (Regions 1&2), 4/20 (Regions 1&2,5). 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*	0.36	0.58	0.40	0.37	0.47
Median Rate*	0.20	0.47	0.44	0.31	0.40

* Per 100,000 Residents

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MARYLAND REPORTABLE DISEASE SURVEILLANCE

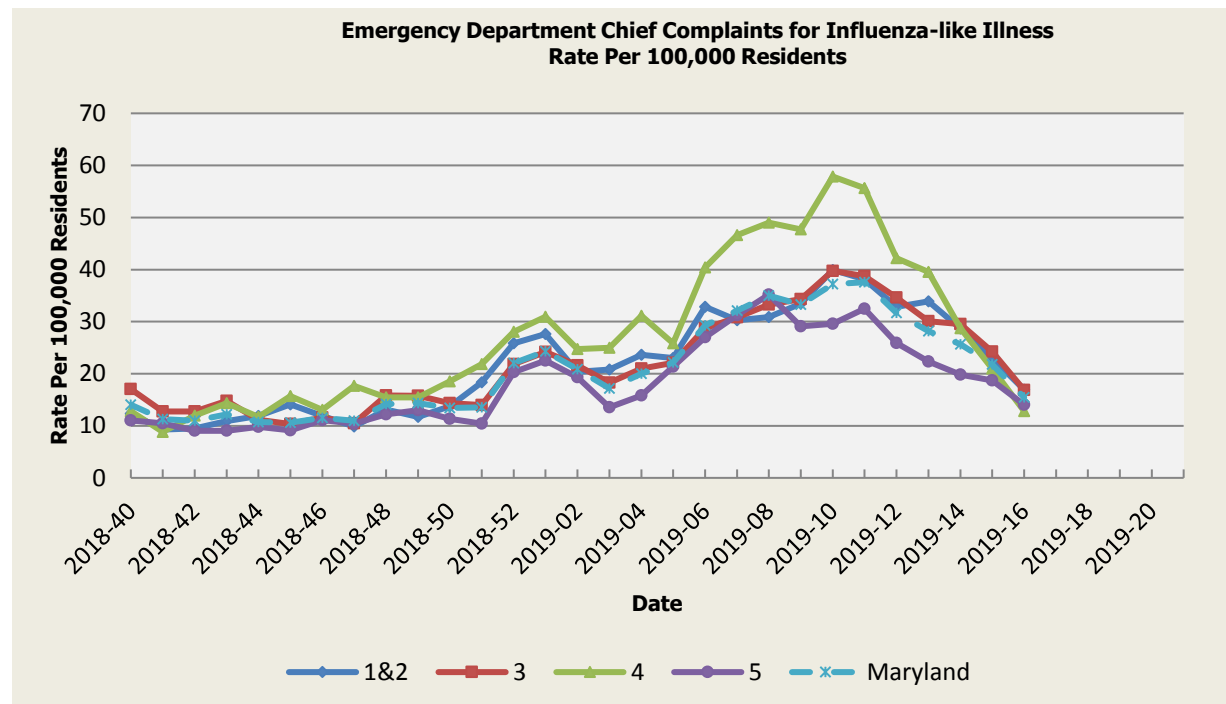
Reportable disease data from the National Electronic Disease Surveillance System (NEDSS) that feeds into ESSENCE is currently being validated. We will include these data in future reports once the validation process is complete.

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SYNDROMIC INFLUENZA SURVEILLANCE

Seasonal Influenza reporting occurs from MMWR Week 40 through MMWR Week 20 (October 2018 through May 2019). Seasonal Influenza activity for Week 16 was: Minimal Intensity and Regional geographic activity.

Influenza-like Illness

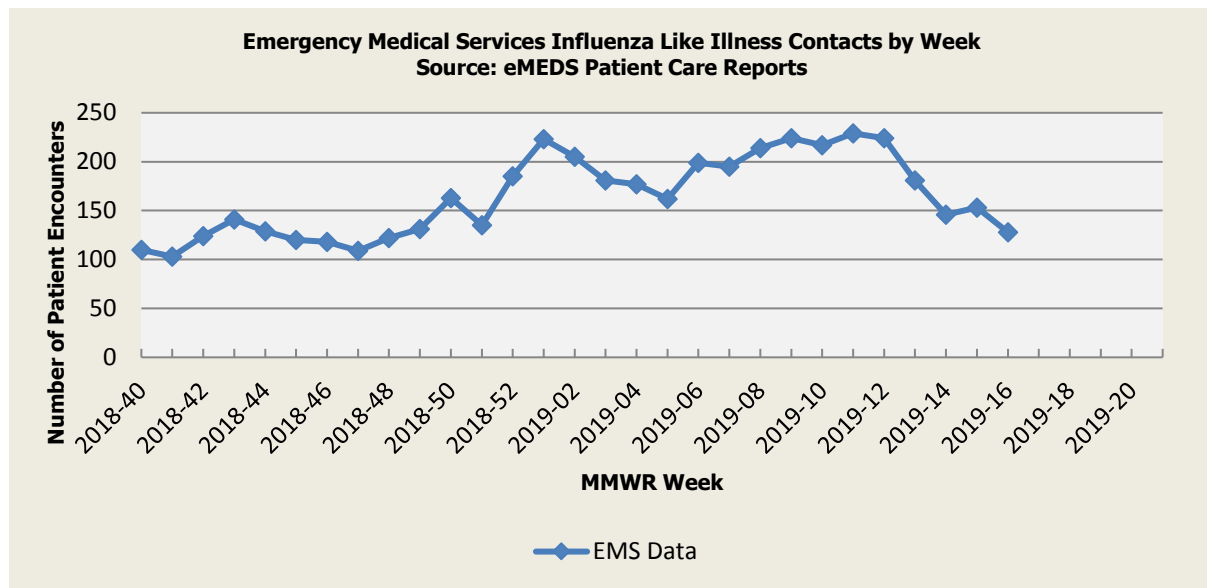


Influenza-like Illness Baseline Data Week 1 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	10.26	13.39	12.95	11.33	12.31
Median Rate*	7.66	10.30	9.27	8.73	9.35

* Per 100,000 Residents

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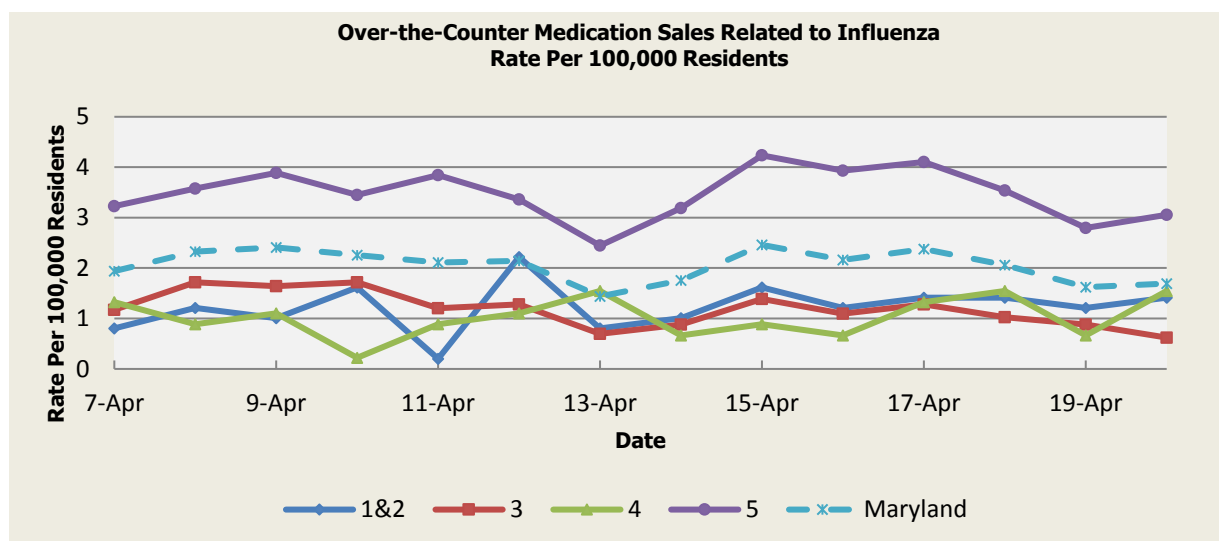
Influenza-like Illness Contacts by Week



Disclaimer on eMEDS flu related data: These data are 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. These data are reported for trending purposes only.

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Over-the-Counter Influenza-Related Medication Sales



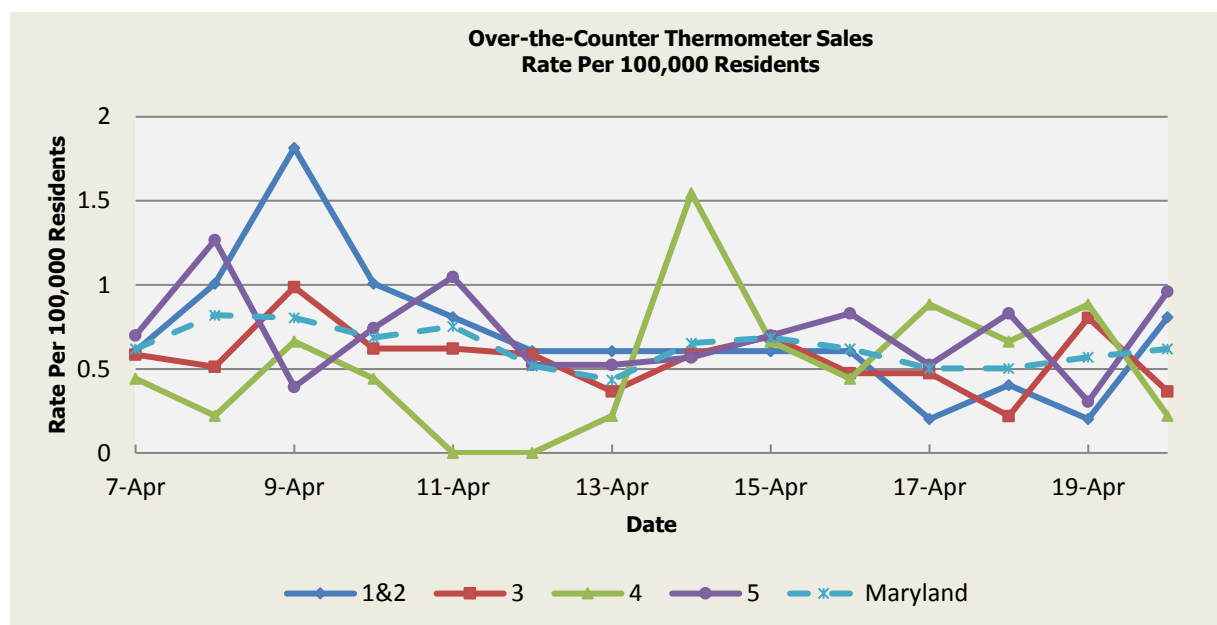
There was not an appreciable increase above baseline in the rate of OTC thermometer sales during this reporting period.

OTC Medication Sales Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.58	4.62	2.73	8.05	5.70
Median Rate*	2.82	3.80	2.43	7.33	4.99

* Per 100,000 Residents

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Over-the-Counter Thermometer Sales



There was not an appreciable increase above baseline in the rate of OTC thermometer sales during this reporting period.

Thermometer Sales Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.06	2.92	2.31	3.88	3.25
Median Rate*	2.82	2.78	2.21	3.75	3.13

* Per 100,000 Residents

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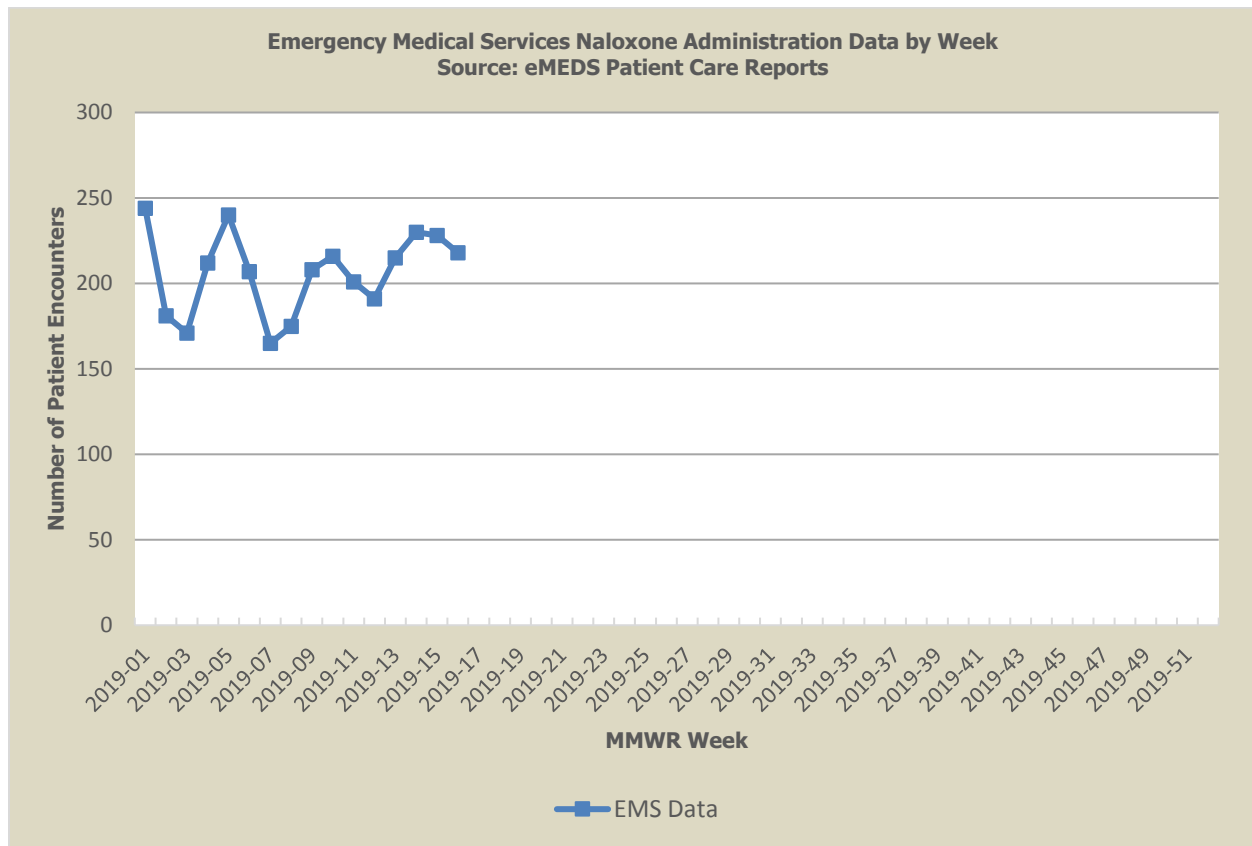
SYNDROMIC OVERDOSE SURVEILLANCE

The purpose of this section is to characterize non-fatal ED visit trends for acute unintentional overdose by Heroin, Opioid or Unspecified substance among Maryland residents captured by ESSENCE data, including chief complaint and discharge diagnosis. ED visits that are identified as unintentional overdose by Heroin, Opioid or Unspecified substance include those with medical and non-medical use of a prescription Opioid or where the substance is not specified, given evidence that most fatal overdoses are Opioid-related.

In preparation for the release of new ESSENCE queries for identifying heroin, opioid and all drug overdoses, please note that we have removed the data chart showing unintentional overdose rates by heroin, opioid, or unspecified substances. These new data, when available, will be presented below.

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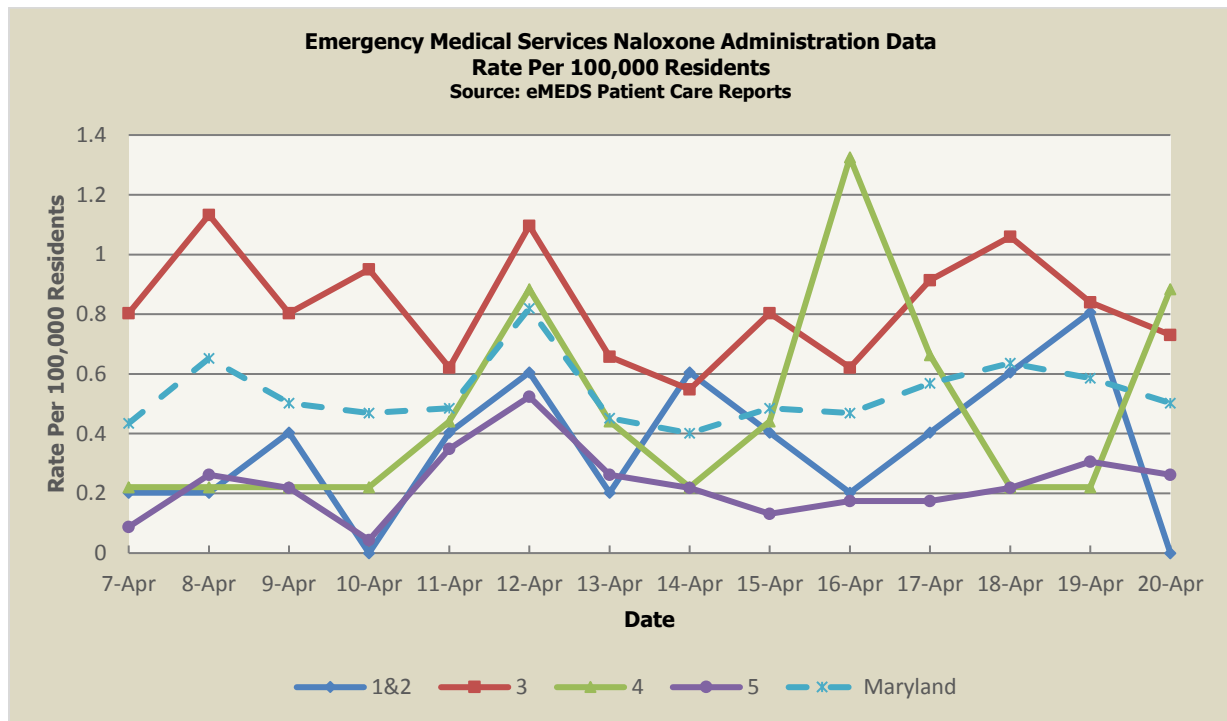
Naloxone Administration Data by Week



Disclaimer on eMEDS naloxone administration related data: These data are based on EMS Pre-hospital care reports where the EMS provider has documented that they administered naloxone. The administration of naloxone is based on the patient's signs and symptoms and not on any diagnostic tests. These data are reported for trending purposes only.

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Naloxone Administration Data



Disclaimer on eMEDS Naloxone administration related data: These data are based on EMS Pre-hospital care reports where the EMS provider has documented that they administered naloxone. The administration of naloxone is based on the patient's signs and symptoms and not on any diagnostic tests. These data are reported for trending purposes only.

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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. Presently, 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 April 24, 2019, the WHO-confirmed global total (2003-2019) of human cases of H5N1 avian influenza virus infection stands at 860, of which 454 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 53%.

AVIAN INFLUENZA

There were no relevant avian influenza reports this week.

HUMAN AVIAN INFLUENZA

There were no relevant human avian influenza reports this week.

NATIONAL DISEASE REPORTS

LEGIONELLOSIS (CALIFORNIA), 21 Apr 2019, CDC, Officials from the California Department of Rehabilitation and Corrections are investigating the presence of deadly Legionnaires' disease bacteria at a Central Valley prison. Last month [March 2019], one inmate at the California Health Care Facility in Stockton (CHCF) died of the disease -- considered a severe form of pneumonia -- and a 2nd inmate tested positive for the bacteria but is now in stable condition. Read More: <http://www.promedmail.org/post/6433946>

ACUTE FLACCID MYELITIS (MINNESOTA), 21 Apr 2019, A virus appears to be the cause behind a rash of polio-like illnesses that struck Minnesota last fall [2018], causing paralyzing symptoms in several children, including one girl who lost all motor function and remains hospitalized. Researchers from Minnesota and the US Centers for Disease Control and

Prevention (CDC) reported Thursday [18 Apr 2019] that they found enterovirus-D68 (EV-D68) in the spinal fluid of one of 6 children with acute flaccid myelitis (AFM). Read More: <http://www.promedmail.org/post/6432362>

HEPATITIS A (MULTISTATE), 20 Apr 2019, The Alabama Department of Public Health (ADPH) says there is currently a hepatitis A outbreak in several northeast Alabama counties. It says since 1 Sep 2018, there have been 26 confirmed cases of hepatitis A in Jackson county, and 19 confirmed cases in DeKalb county. There have been a total of 51 cases throughout the state in that same time frame. As of 16 Apr 2019, the ADPH says there are 22 active cases in Jackson county and 12 cases in DeKalb county. Unlike similar, recent cases in Tennessee and Georgia, the ADPH has not pinpointed an exact location, such as a restaurant, for the source of the outbreak. Read More: <http://www.promedmail.org/post/6429687>

LISTERIOSIS (MULTISTATE), 19 Apr 2019, Deli-sliced meats and cheeses are to blame for a multistate outbreak of *Listeria* infections involving 8 people, one of whom has died. The Centers for Disease Control and Prevention late [Wed 17 Apr 2019] announced a state and federal investigation into the *Listeria* outbreak is underway. Both the US Department of Agriculture's Food Safety and Inspection Service (FSIS) and the US Food and Drug Administration (FDA) have joined the effort. Read More: <http://www.promedmail.org/post/6430200>

INTERNATIONAL DISEASE REPORTS

BOTULISM (SCOTLAND), 24 Apr 2019, Scotland health officials have received at least 4 notifications of wound botulism cases (3 confirmed and one probable) since February 2019. The source of the infection is believed to be heroin contaminated with *Clostridium botulinum* spores. The 1st case, in NHS Fife, presented in early February 2019 and has been confirmed microbiologically. Two further cases presented in mid-late March 2019 in NHS Lanarkshire and NHS Greater Glasgow and Clyde (GGC), respectively, and have also been confirmed microbiologically. In the past few days, a further probable case from NHS Lanarkshire presented. All cases presented with clinical features consistent with wound botulism, and all involve people who inject drugs (PWID). There have been no deaths among the identified cases. Read More: <http://www.promedmail.org/post/6436749>

ANTHRAX (KENYA), 24 Apr 2019, Two people have died in Meru from suspected anthrax outbreak that has left 9 other fighting for their lives. A statement issued by the Meru County government on [Wed 24 Apr 2019] said the [remaining] 9 are receiving treatment at the Muthara Level IV Hospital. The [11] patients were admitted with swellings that turned into wounds. Doctors said patients with the swellings on their necks also had difficulty breathing. "Two patients died due to the infection and samples have been sent to Kenya Medical Research Institute (Kemri) in Nairobi for confirmatory tests," said Meru County's Director of Communication Purity Nkirote. Read More: <http://www.promedmail.org/post/6438111>

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.health.maryland.gov/> or follow us on Facebook at www.facebook.com/MarylandOPR.

More data and information on influenza can be found on the MDH website:
<http://phpa.health.maryland.gov/influenza/fluwatch/Pages/Home.aspx>

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

Prepared By:

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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

