



Public Health Preparedness and Situational Awareness Report: #2024:1 Report covering MMWR Week #1: December 31, 2023 – January 6, 2024

Report Date: January 12, 2024

The weekly Public Health Preparedness and Situational Awareness (PHPSA) Report provides a snapshot of disease throughout Maryland. This report looks for different types of illnesses or disease clusters which may warn of a larger public health issue, including the potential for a bioterrorism event.

NOTE: The PHPSA report has been updated to calculate baselines from January 1, 2020 (unless otherwise indicated) and now uses 2020 Census data. Therefore, the mean and median rates may be different than previous reports.

Data is gathered from Maryland's Emergency Departments using the Electronic Surveillance System for the Early Notification of Community-based Epidemics (ESSENCE). Additional data is compiled from the Centers for Disease Control and Prevention's (CDC's) Health Alert Network, the Maryland Department of Health Prevention and Health Promotion Administration, the Maryland Institute for Emergency Medical Services Systems (MIEMSS), the World Health Organization, the National Electronic Disease Surveillance System, and the Program for Monitoring Emerging Diseases (ProMED).

CURRENT HOMELAND SECURITY THREAT LEVELS

National:	No Active Alerts
Maryland:	Normal (MDEM 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 2020 census.

Electronic Surveillance System for the Early Notification of Community-Based Epidemics (ESSENCE).
Baltimore, MD: Maryland Department of Health; 2023.

Weekly Outbreak Summary Report

2024-01 (December 31, 2023 – January 6, 2024)

Overview:

There were 78 total outbreaks reported to MDH during MMWR Week 01.

By Type & Region:

- 3 Gastroenteritis outbreaks
 - 1 outbreak of GASTROENTERITIS in a Daycare (1 NCR)
 - 2 outbreaks of GASTROENTERITIS in Nursing Homes (2 BMA)

- 75 Respiratory Illness outbreaks
 - 1 outbreak of INFLUENZA-LIKE-ILLNESS in a Daycare (Eastern)
 - 2 outbreaks of INFLUENZA-LIKE-ILLNESS in Nursing Homes (BMA, Western)
 - 1 outbreak of COVID-19 in an Adult Medical Daycare (BMA)
 - 20 outbreaks of COVID-19 in Assisted Living Facilities (8 BMA, 2 Eastern, 4 NCR, 3 Southern, 3 Western)
 - 4 outbreaks of COVID-19 in Correctional Facilities (3 BMA, Eastern)
 - 3 outbreaks of COVID-19 in Daycares (Eastern, NCR, Southern)
 - 1 outbreak of COVID-19 in a Drug Treatment Center (Southern)
 - 8 outbreaks of COVID-19 in Group Homes (6 BMA, 2 NCR)
 - 8 outbreaks of COVID-19 in Hospitals (6 BMA, Eastern, Western)
 - 20 outbreaks of COVID-19 in Nursing Homes (6 BMA, Eastern, 7 NCR, 2 Southern, 4 Western)
 - 2 outbreaks of COVID-19 at Other Types of facilities (2 Eastern)
 - 1 outbreak of COVID-19 at a Shelter (NCR)
 - 1 outbreak of INFLUENZA at a Hospital (Eastern)
 - 3 outbreaks of INFLUENZA at Nursing Homes (BMA, NCR, Western)

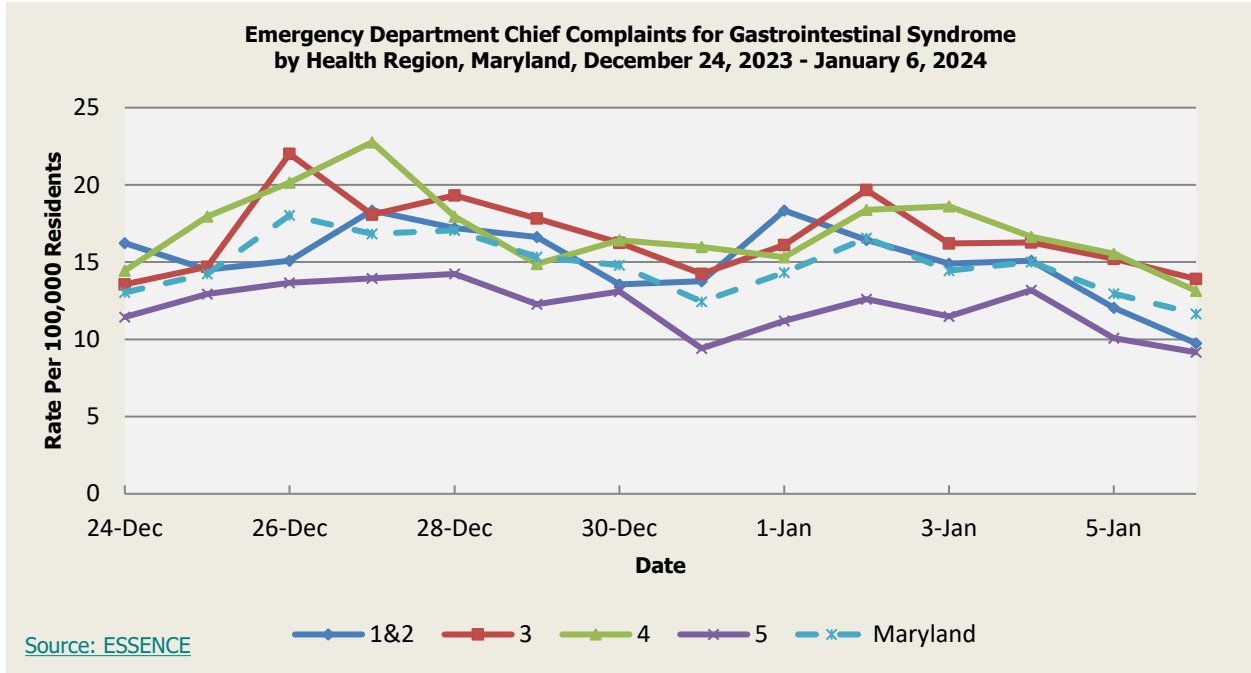
BMA – Baltimore Metropolitan Area

NCR – National Capital Region

Gastrointestinal Syndrome

Gastrointestinal Syndrome Baseline Data January 1, 2020 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	12.63	13.44	16.41	9.68	12.13
Median Rate*	12.61	13.60	16.42	9.95	12.34

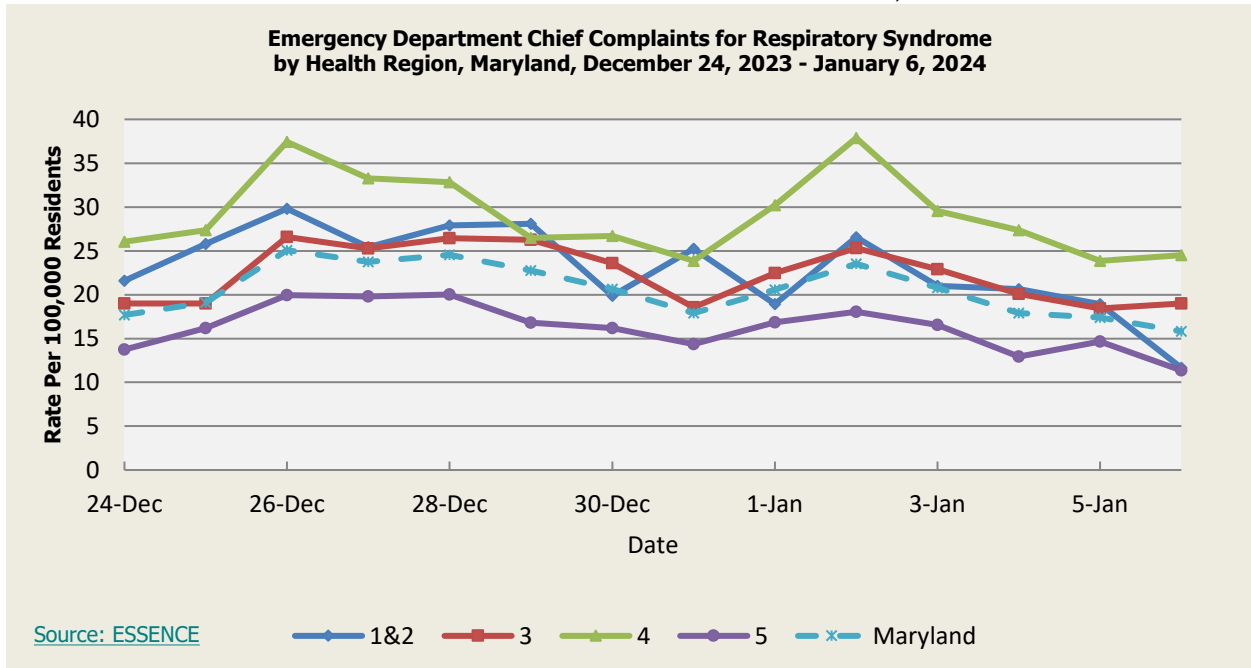
* Per 100,000 Residents



Respiratory Syndrome

Respiratory Syndrome Baseline Data January 1, 2020 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	13.04	14.90	17.07	9.98	12.99
Median Rate*	12.61	13.85	16.20	9.37	12.14

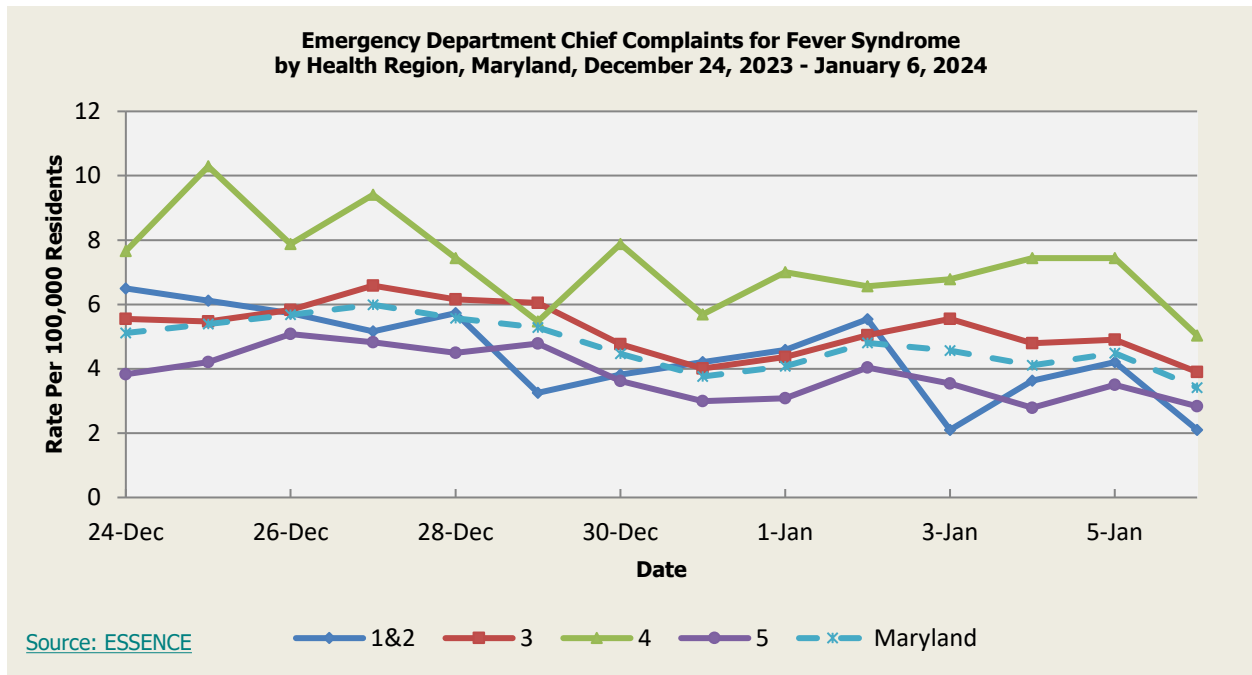
* Per 100,000 Residents



Fever Syndrome

Fever Syndrome Baseline Data January 1, 2020 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.10	3.86	4.31	2.71	3.38
Median Rate*	2.87	3.69	4.16	2.58	3.25

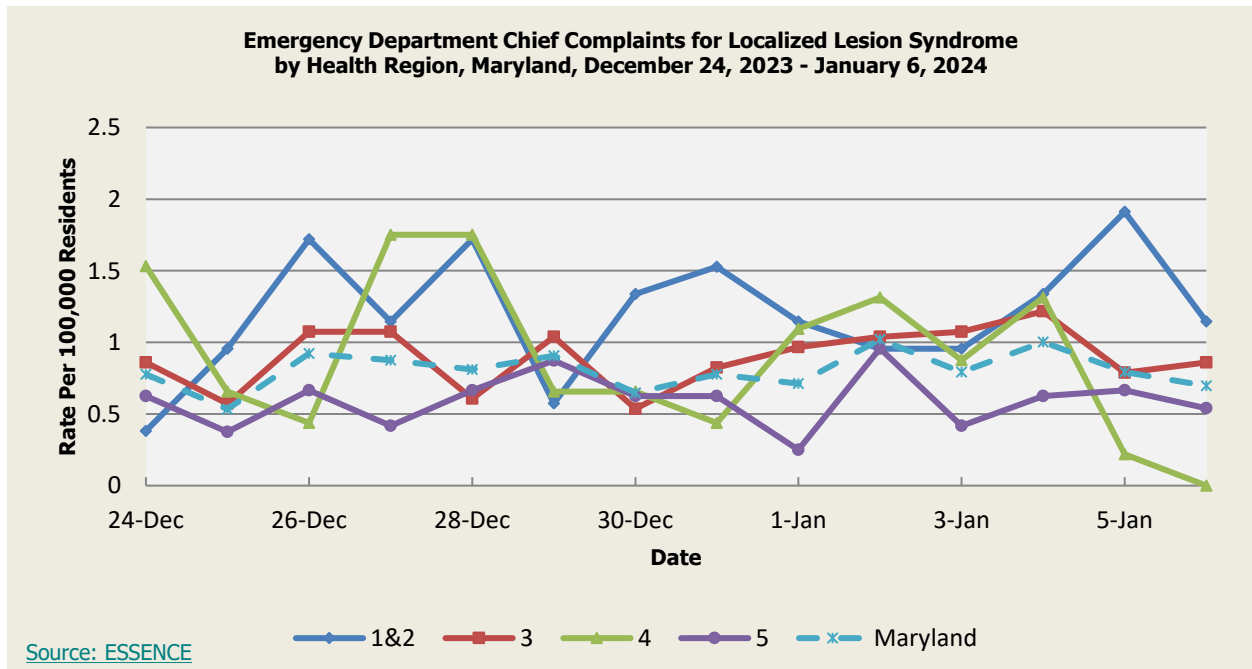
*Per 100,000 Residents



Localized Lesion Syndrome

Localized Lesion Syndrome Baseline Data January 1, 2020 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	1.11	0.93	1.32	0.59	0.84
Median Rate*	1.15	0.93	1.31	0.58	0.83

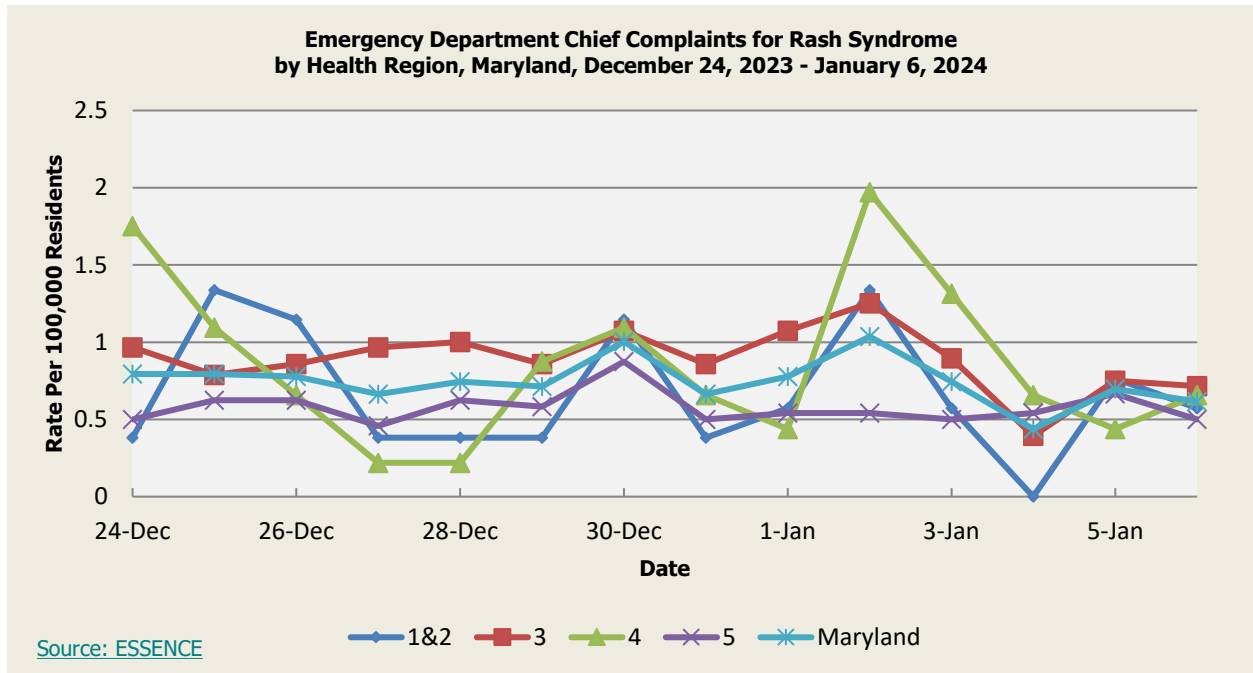
* Per 100,000 Residents



Rash Syndrome

Rash Syndrome Baseline Data January 1, 2020 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.69	0.93	1.04	0.57	0.78
Median Rate*	0.57	0.89	1.09	0.54	0.76

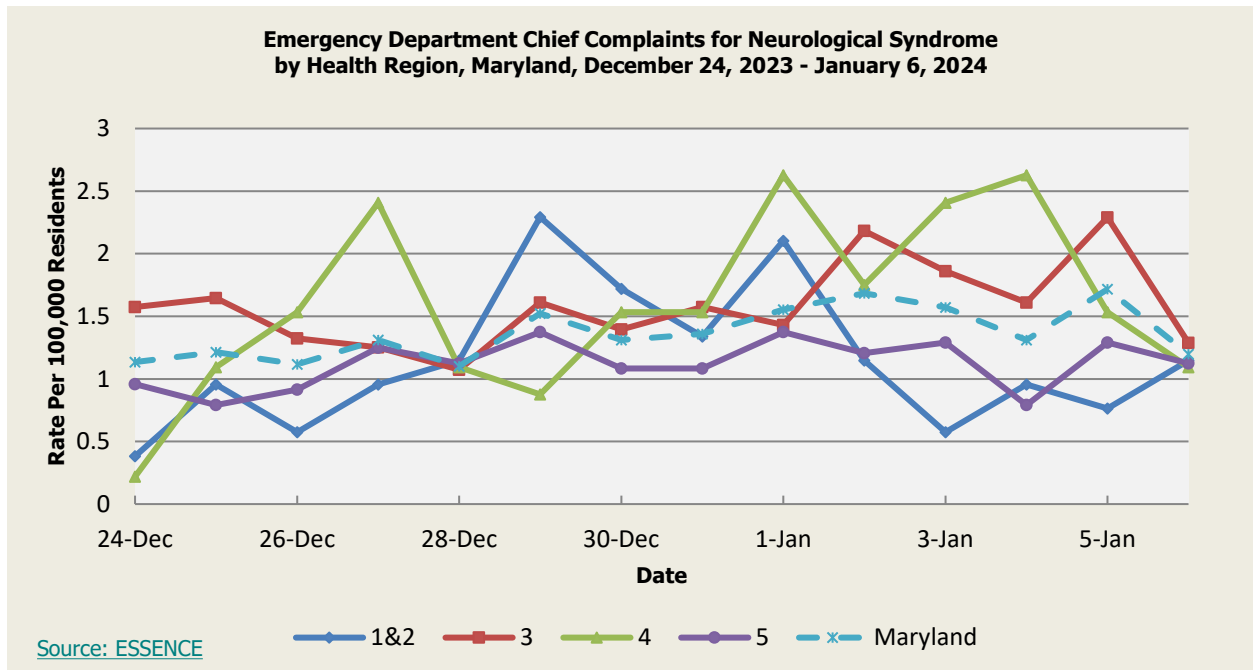
* Per 100,000 Residents



Neurological Syndrome

Neurological Syndrome Baseline Data January 1, 2020 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	1.11	1.51	1.51	1.01	1.28
Median Rate*	1.15	1.50	1.53	1.00	1.28

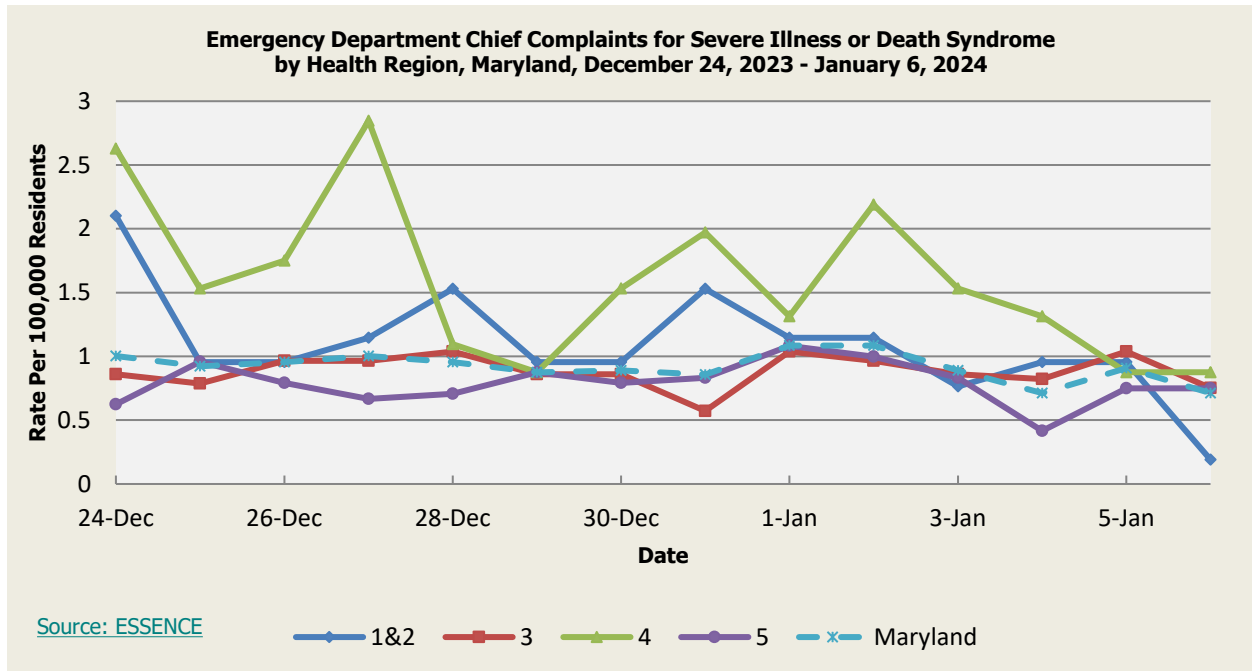
* Per 100,000 Residents



Severe Illness or Death Syndrome

Severe Illness or Death Syndrome Baseline Data January 1, 2020 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.80	0.76	1.06	0.66	0.75
Median Rate*	0.76	0.75	1.09	0.67	0.74

* Per 100,000 Residents

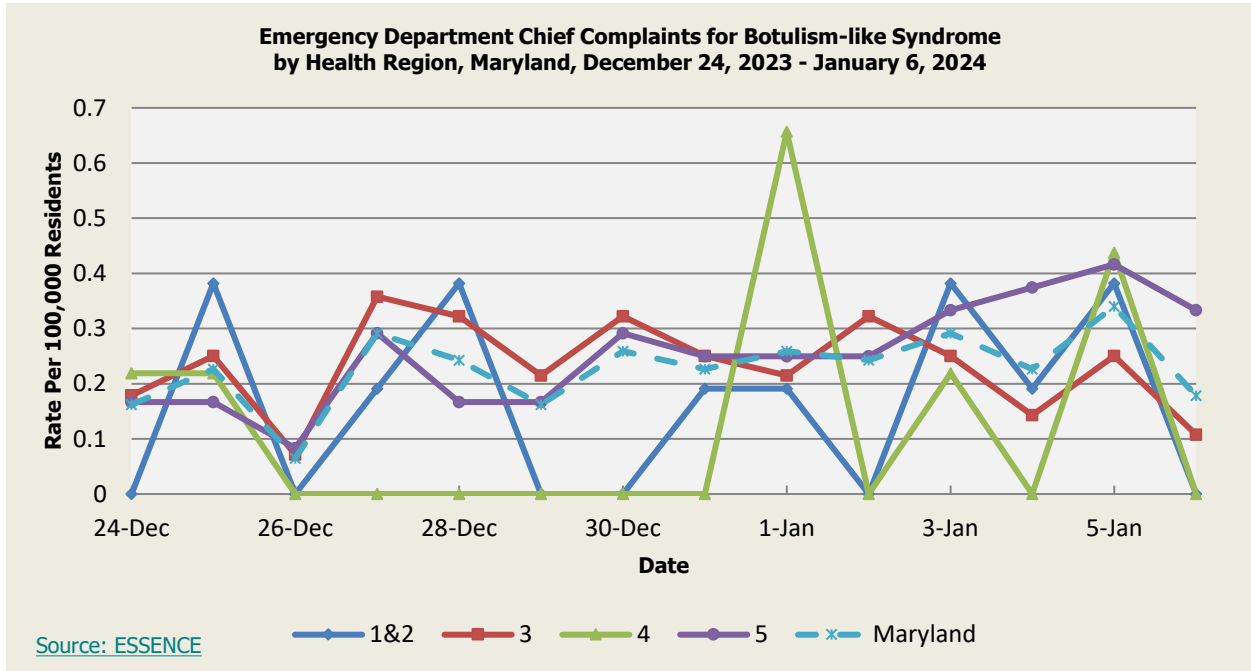


SYNDROMES RELATED TO CATEGORY A AGENTS

Botulism-like Syndrome

Botulism-like Syndrome Baseline Data January 1, 2020 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.15	0.23	0.14	0.20	0.21
Median Rate*	0.19	0.21	0.00	0.17	0.19

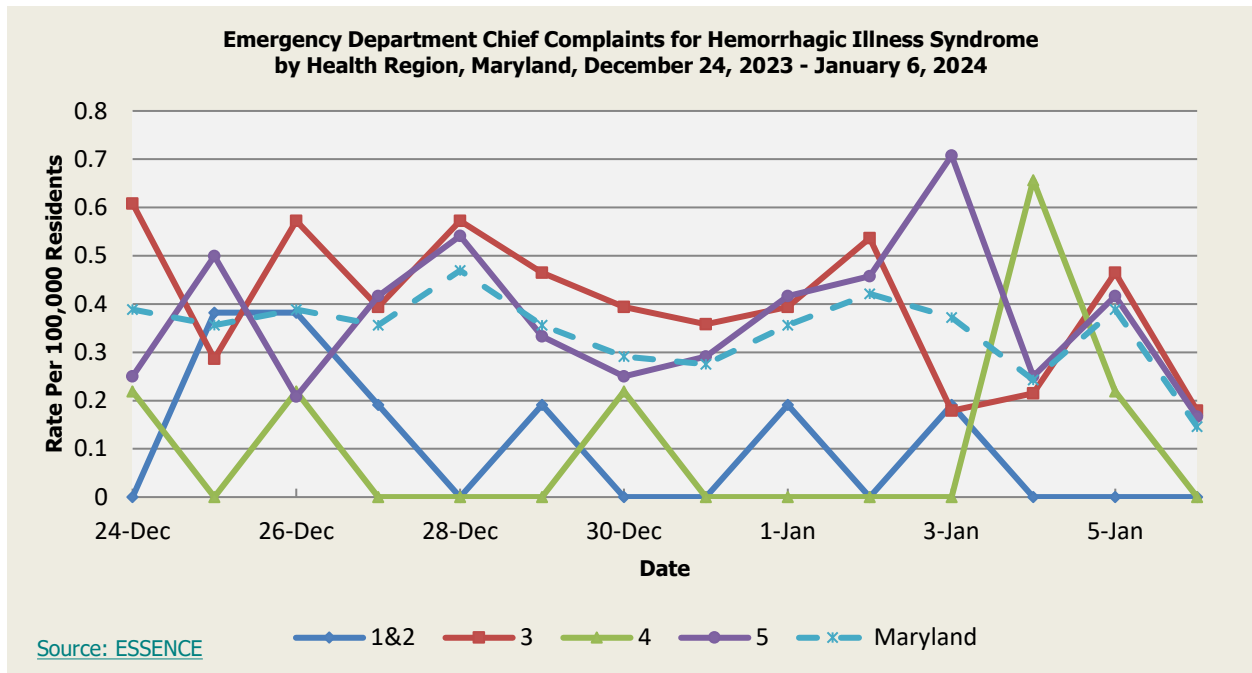
* Per 100,000 Residents



Hemorrhagic Illness Syndrome

Hemorrhagic Illness Syndrome Baseline Data January 1, 2020 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.09	0.25	0.08	0.25	0.22
Median Rate*	0.00	0.21	0.00	0.21	0.19

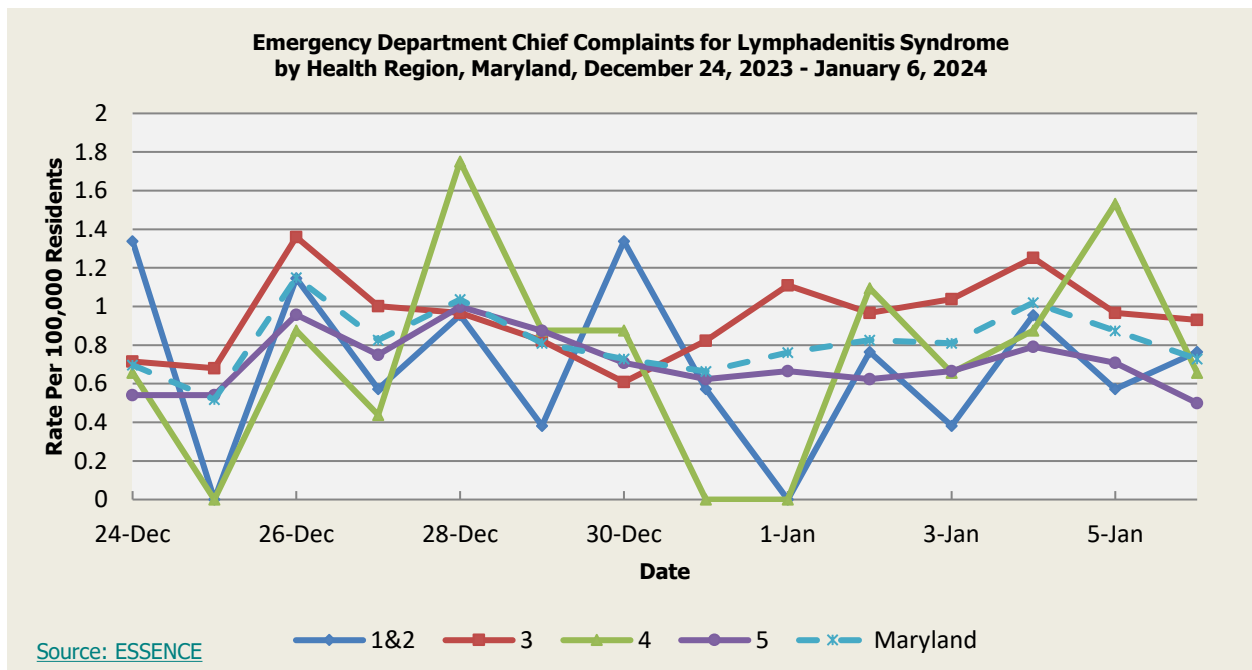
* Per 100,000 Residents



Lymphadenitis Syndrome

Lymphadenitis Syndrome Baseline Data January 1, 2020 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.65	0.78	0.54	0.58	0.67
Median Rate*	0.57	0.79	0.44	0.58	0.68

* Per 100,000 Residents



SYNDROMIC INFLUENZA SURVEILLANCE

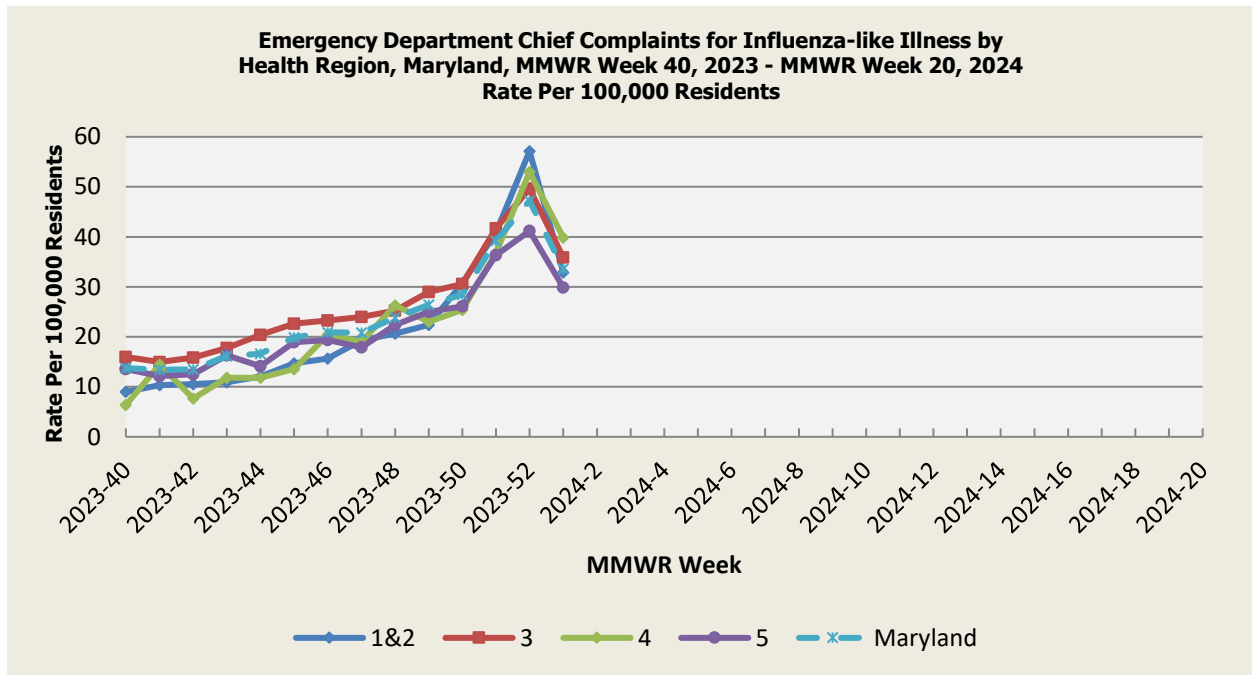
Seasonal Influenza Activity for 2024 Week 1 was: **HIGH**

Seasonal Influenza reporting occurs from MMWR Week 40 through MMWR Week 20 (October 2023 through May 2024).

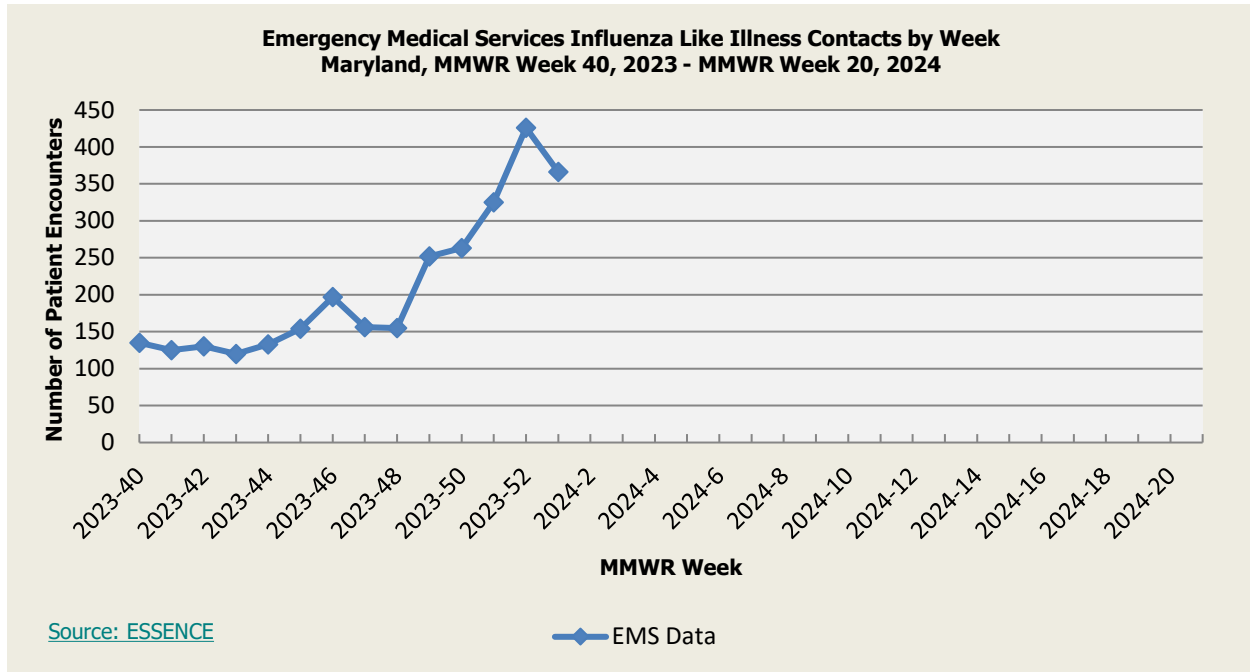
Influenza-like Illness

Influenza-like Illness Baseline Data Week 40 2019 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	11.38	17.51	15.43	13.78	15.38
Median Rate*	8.41	12.77	11.60	10.36	11.51

* Per 100,000 Residents



Influenza-like Illness from Emergency Medical Services (EMS) by Week

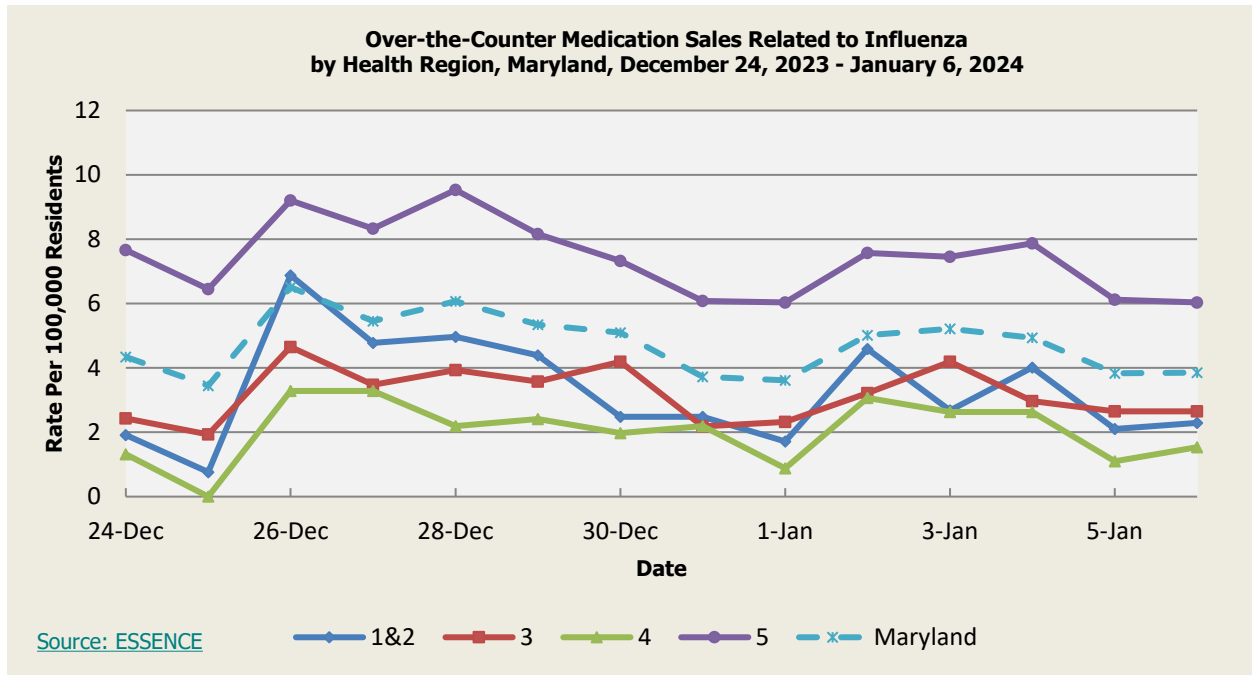


Disclaimer on EMS flu related data: These data are based on EMS Pre-hospital care reports where the EMS provider has selected “flu like illness” as a primary or secondary impression of a patient’s illness. This impression is solely based on the signs and symptoms seen by the provider, not on any diagnostic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

Over-the-Counter Influenza-Related Medication Sales

OTC Medication Sales Baseline Data January 1, 2020 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	1.55	1.53	1.19	3.99	2.46
Median Rate*	1.34	1.25	1.09	3.54	2.15

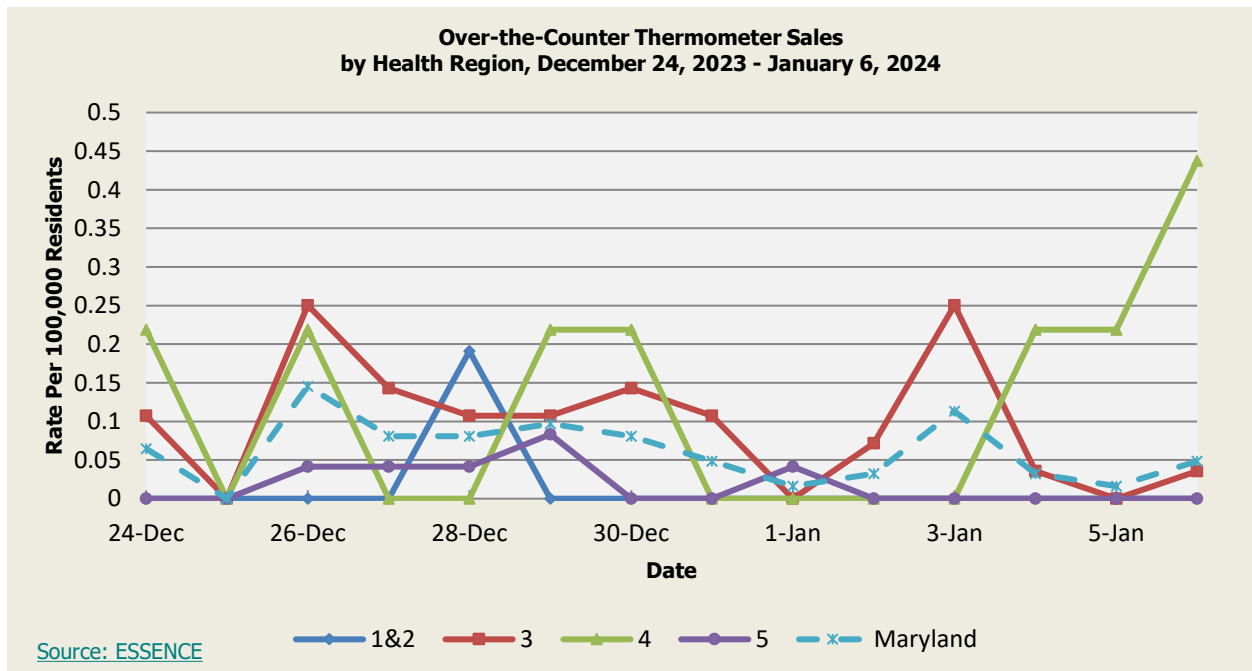
* Per 100,000 Residents



Over-the-Counter Thermometer Sales

Thermometer Sales Baseline Data January 1, 2020 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.44	0.41	0.69	0.40	0.43
Median Rate*	0.19	0.29	0.44	0.25	0.31

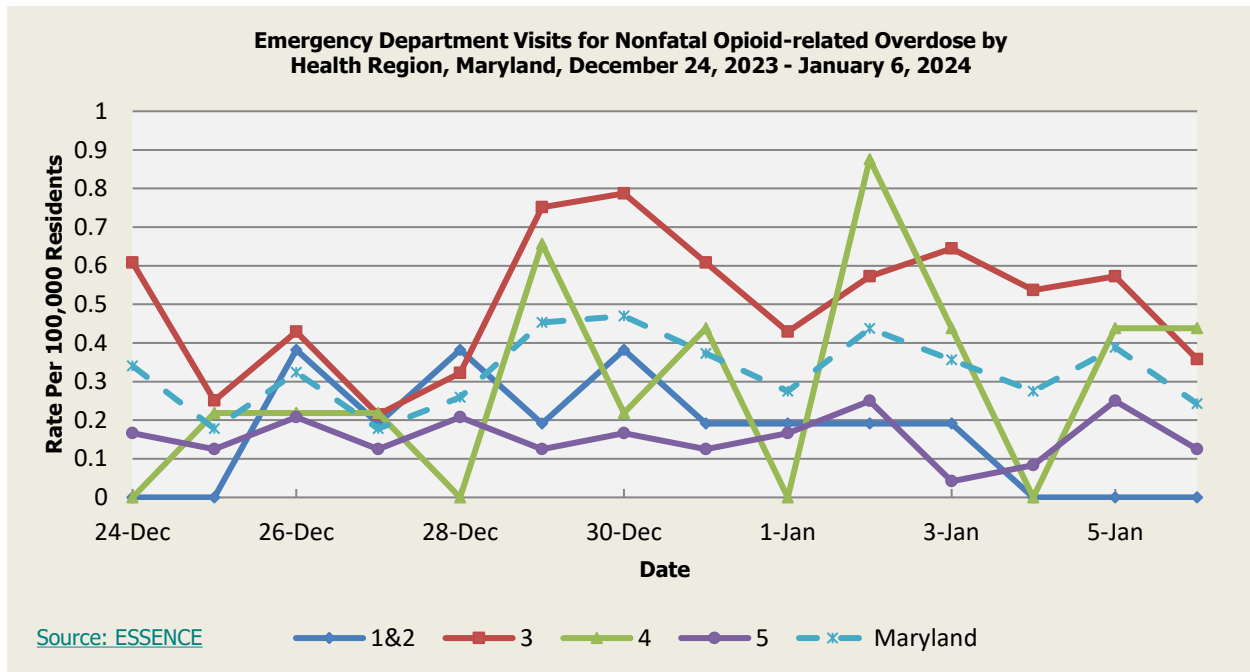
* Per 100,000 Residents



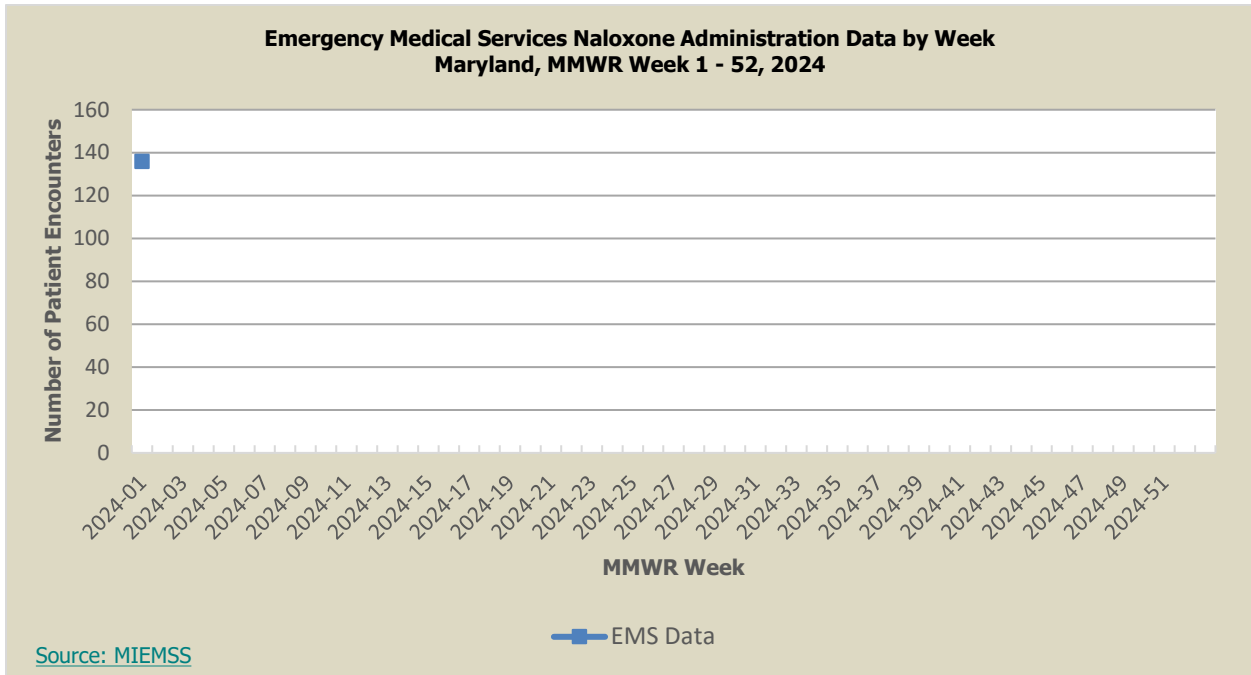
SYNDROMIC OVERDOSE SURVEILLANCE

The purpose of this section is to characterize nonfatal overdose trends among Maryland residents captured by ESSENCE data, including emergency department (ED) chief complaint and discharge diagnosis as well as emergency medical services (EMS) patient care reports. Maryland uses ESSENCE data to track trends in nonfatal drug overdoses as a critical strategy for surveillance and tailoring prevention resources to populations most affected in the state.

Nonfatal Opioid-related Overdose

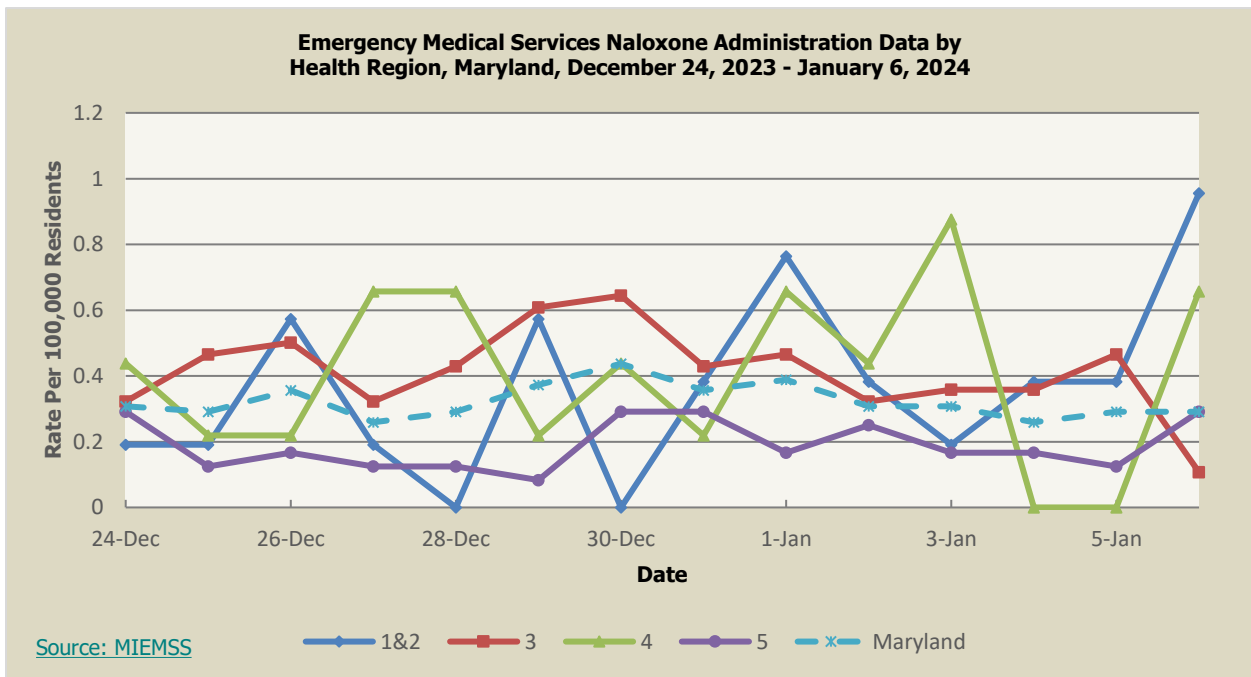


Naloxone Administration Data by Week



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.

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.

RESOURCES:

World Health Organization (WHO):

- [Disease Outbreak News \(DONs\)](#)
- [Emergency Situation Reports](#)
- [Weekly Epidemiological Record \(WER\)](#)
- [Avian Influenza Situation Reports](#)

ProMED Reports:

- [Latest Posts and Hot Topics](#)

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 (mdh.essence@maryland.gov). 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

