Welcome

Welcome to the second issue of the re-imagined Guam monthly Epidemiology Newsletter (EpiNewsletter)!

The primary objective of the Office of Epidemiology and Research (OER) is to conduct public health surveillance to support the prevention and control of disease throughout Guam. Public health surveillance endeavors to provide data essential to informed decision making and public health action. As Bill Foege, Centers for Disease Control and Prevention Epidemiologist who devised the global strategy to eradicate smallpox, said, "The reason for collecting, analyzing, and disseminating information on a disease is to control that disease. Collection and analysis should not be allowed to consume resources if action does not follow."

These monthly newsletters will serve as a tool for recapitulating what has been and what is currently circulating, and shall inform the community of Guam on how best to prepare and protect yourself in times of potential outbreaks. Simplified weekly data reports will also be disseminated to inform a timely response.

It is the vision of the OER to utilize the power of epidemiology to improve the health and wellbeing for our communities in Guam.

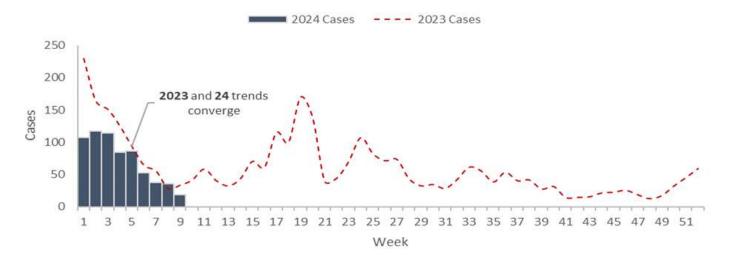
Data used to generate this report have been compiled by one or more of the Surveillance Unit staff: Angelika Argao, Aaron Arizala, Aikani Sablan, and John Taitano. Laboratory data were compiled by Alan Mallari and Anne Marie Santos. Analysis and interpretation are provided by Patrick Sotto, Applied Epidemiology Fellow with the Council of State and Territorial Epidemiologists.

For more information please contact the Office of Epidemiology and Research at dphss.surveillance@dphss.guam.gov.

RESPIRATORY ILLNESS || COVID-19

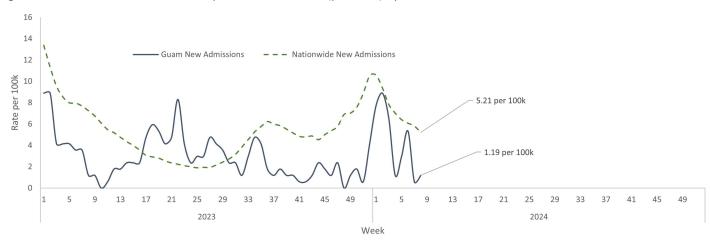
Guam continues to observe a decreasing trend in COVID-19 case reports. For the month of February, a total of 142 cases were reported to public health, down from the 508 cases reported in January. January averaged 100 reported cases per week, whereas February averaged 36 cases. February's case rate appears to be converging with what was seen in 2023 (shown by the bar graph and dashed line, **Figure 1**).

Figure 1. Weekly count of COVID-19 cases reported in Guam, 2023-2024



As noted in January's report, test result data are a limiting metric for assessing the magnitude of COVID-19 in the community. Thus, more appropriate and reliable metric has shifted towards monitoring COVID-19 hospital admission rates. Public Health is fortunate to now include new hospital admissions to augment our understanding of COVID-19 severity in Guam. New hospital admission rates¹ indicate a similar, downward trend (**Figure 2**), as suggested by the case reports.

Figure 2. Nationwide and local new hospital admission rates (per 100k) by week, 2023-2024





¹Weekly COVID-19 new hospital admissions per 100,000 includes number of admitted patients with laboratory-confirmed COVID-19, divided by the 2019 intercensal population estimate, multiplied by 100,000.

RESPIRATORY ILLNESS || COVID-19

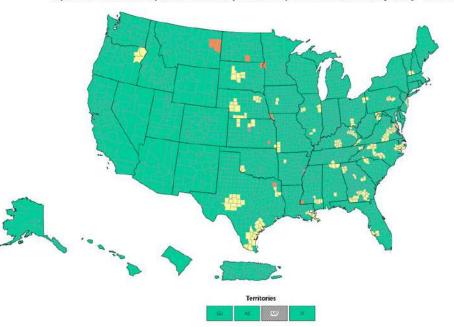
January averaged approximately 5 new hospital admissions per 100k each week, while February averaged 3 per 100k each week, all of which remain below the rates observed at the national level (Figure 2). The improvement in hospitalizations is consistent with what is observed at the national level as well, bringing the majority of the US to a "Low Hospitalization" status, depicted in Green in Figure 3.²

Unsurprisingly, Guam also detected 8 new JN 1 variants in February, bringing the total detected reports to 18. JN 1 remains the largest portion of currently circulating variants and continues to be monitored locally, nationally, and globally.

Figure 3. COVID-19 new hospital admissions rate per 100k, by county



Reported COVID-19 New Hospital Admissions Rate per 100,000 Population in the Past Week, by County - United States



Source: CDC COVID Data Tracker

²COVID-19—associated hospitalization data reported to CDC's National Healthcare Safety Network (NHSN). As of December 15, 2022, COVID-19 hospital data are required to be reported to CDC's NHSN, which monitors national and local trends in healthcare system stress, capacity, and community disease levels for approximately 6,000 hospitals in the United States. Data reported by hospitals to NHSN represent aggregated counts and include metrics capturing information specific to hospital capacity, occupancy, hospitalizations, and admissions. This system change does not impact requirements. For all metrics, if there are no data in the specified locality for a given week, the metric value is displayed as "insufficient data".

For more information, please visit CDC United States COVID-19 Hospitalizations, Deaths, Emergency Department Visits, and test Positivity by Geographic Area



RESPIRATORY ILLNESS | INFLUENZA & ILI

Both influenza cases and influenza-related visits to the Emergency Room (ER) have been decreasing since October 2023, but appear to have tapered off in the past two months (**Figure 4**). January averaged roughly 9 new reported cases and 11 ER visits each week, while February averaged 6 cases and 3 ER visits.

200
150
Sum of Flu_Tot
---- Sum of Flu_ER

50
1 5 9 13 17 21 25 29 33 37 41 45 49 1 5 9 13 17 21 25 29 33 37 41 45 49
2023 MMWR Week 2024

Figure 4. Weekly count of Influenza case reports and ER visits in Guam, 2023-2024

Despite the overall decrease, a notable increase in the proportion of Influenza B is being tracked (**Figure 5**), which is not a cause for concern; rather, a curiosity to continue monitoring. *Clinical laboratories are encouraged to continue submitting influenza samples to the Guam Public Health Laboratory for subtyping*.

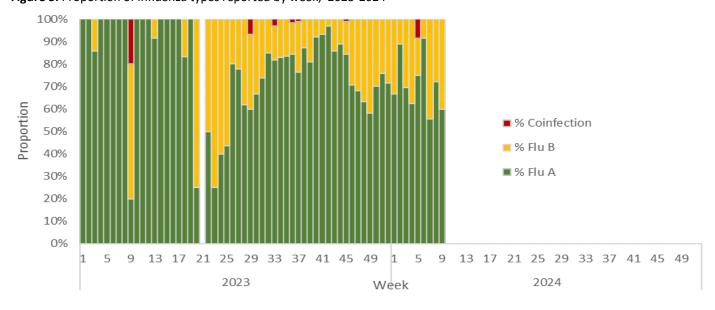


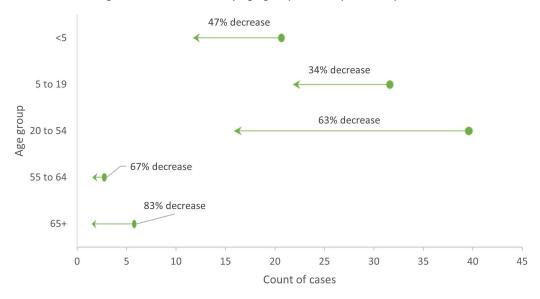
Figure 5. Proportion of influenza types reported by week, 2023-2024



RESPIRATORY ILLNESS | INFLUENZA & ILI

By age group, Guam's working age and elderly population saw favorable relative decreases. Influenza cases aged 20 to 54 were down 63% in February compared to January; those 55 to 64 years old decreased 67%; and those 65 or older decreased by 83%. The arrow chart in **Figure 6** represents the change in absolute case reports by age group from January to February. The percentages provided above each arrow indicate the relative change.

Figure 6. Absolute and relative changes in influenza cases by age group, January-February 2024



Likewise, Influenza-like illness reports continue to drop (**Figure 7**). However, seeing as how majority of the US is seeing High to Very High rates of ILI activity (**Figure 8**), residents are encouraged to remain cautious.

Figure 7. Weekly reports of ILI, 2023-2024



Feb 24, 2024

Very High

New York City

District of Columbia

Moderate

Low

Figure 8. 2023-24 ILI activity level in the US for week ending

Source: CDC ILINet

Minimal

- Insufficient Data



OTHER CONDITIONS OF INTEREST

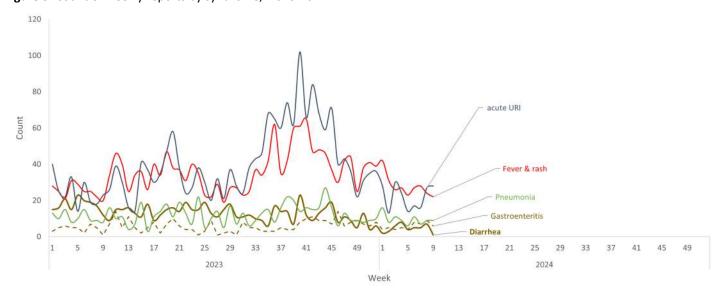
bump in Salmonellosis cases for the month of January —an observation not typically seen in the earlier part of the year. It was a good month in February, which saw relief in salmonellosis reports. Table 1 represents the count of salmonellosis cases reported each week for the past 5 years. Indicated in the light blue row, Weeks 1 to 5 in 2024 saw a higher rate of cases compared to the same weeks for 2020-2023. The subsequent weeks in 2024 show a realignment of what is expected. Public health continues to monitor for salmonellosis reports and investigate as needed.

The previous Epi Newsletter highlighted a Table 1. Count of Salmonellosis reports by week, 2020-2024

	2020	2021	2022	2023	2024
Weeks 1-5	2	1	0	1	5
Week 6	0	0	1	0	0
Week 7	0	1	1	0	0
Week 8	0	1	0	1	1
Week 9	0	1	0	0	0
Total	2	4	2	2	6

SYNDROMIC SURVEILLANCE

Figure 9. Count of weekly reports by syndrome, 2023-2024





APPENDIX || CASE DEFINITIONS

Variable	Syndrome	Definition
ILI	Influenza-like Illness	Fever (temperature of 100.4 F/38 C or greater) and cough and/or sore throat
DIA	Diarrhea	Three (3) or more episodes of loose stools or an occurrence of loos stools that is above normal for the person
AGE	Acute Gastroenteritis	Inflammation of the stomach or intestines, or both, including diarrhea or vomiting
FaR	Fever and Rash	Fever, or measured temperature of $100.4\mathrm{F/38}\mathrm{C}$ or greater, and detection of abnormal areas on the skin that may appear as discolored bumps or flat spots, or blisters or bumps containing fluid or pus that are intact or crusted over
PNEU	Pneumonia	An infection of the lungs, caused by virus, bacteria, or fungi



APPENDIX | CLASS | DISEASES

		Week -]	
Class I Notifiable Diseases	6	7	8	9	YTD	
Acute Flaccid Paralysis or Myelitis	0	0	0	0	0	
Anthrax*	0	0	0	0	0	
Botulism*	0	0	0	0	0	
Chikungunya	0	0	0	0	0	
Cholera	0	0	0	0	0	
Dengue	0	0	0	0	0	
Diptheria	0	0	0	0	0	
Encephalitis (viral)	0	0	0	0	0	
Hemorrhagic Fevers (All Forms)*	0	0	0	0	0	
Measles	0	0	0	0	0	
Meningoccal Disease	0	0	0	0	0	
MERS-Co Virus	0	0	0	0	0	
Novel Influenza Virus	0	0	0	0	0	
Other Arboviral Diseases	0	0	0	0	0	
Pertussis	0	0	0	0	0	
Plague*	0	0	0	0	0	
Poliomyelitis (acute)	0	0	0	0	0	
Rabies	0	0	0	0	0	
Rubella (including congenital)	0	0	0	0	0	
SARS-CoV-2/COVID-19	52	37	35	18	650	
Severe Acute Respiratory Syndrome (SARS) [not inc.COVID-19]	0	0	0	0	0	
Small Pox*	0	0	0	0	0	
Toxic-shock Syndrome	0	0	0	0	0	
Trichinosis	0	0	0	0	0	
Tularemia*	0	0	0	0	0	
Typhoid Fever (Salmonella enterica typhi (S.Typhi) infection)	0	0	0	0	0	
Typhus	0	0	0	0	0	
Yellow Fever	0	0	0	0	0	
Zika	0	0	0	0	0	



APPENDIX | CLASS | DISEASES

	Week		Veek			
Class II Notifiable Diseases	6	7	8	9	YTD	
AIDS	0	0	0	0	0	
Amebiasis	0	0	0	0	0	
Brucellosis	0	0	0	0	0	
Campylobacteriosis	0	0	0	0	2	
Chancroid	0	0	0	0	0	
Chickenpox (varicella)	0	0	0	2	2	
Chlamydia trachomatis	10	17	5	11	104	
Coccidioidomycosis	0	0	0	0	0	
Conjunctivitis, viral or bacterial	0	0	0	0	0	
Cryptosporidiosis	0	0	0	0	0	
Cyclosporiasis	0	0	0	0	0	
Enterococcus sp. VRE, vancomycin resistant	0	0	0	0	0	
Eosinophilic meningoencephalitis	0	0	0	0	0	
Fish poisoning (ciguatera)	0	0	0	0	0	
Fish poisoning (Scrombroid)	0	0	0	0	0	
Food poisoning	0	0	0	0	0	
Giardiasis	0	0	0	0	0	
Gonorrhea	1	6	3	2	36	
Granuloma inguinale	0	0	0	0	0	
Haemophilus influenzae, invasive disease	0	0	0	0	0	
Hansen's disease (leprosy)	0	0	0	0	0	
Hemolytic-uremic syndrome	0	0	0	0	0	
Hepatitis A, acute (IgM Positive)	0	0	0	0	0	
Hepatitis B virus infection, chronic	1	0	0	0	4	
Hepatitis B, acute	0	0	0	0	0	
Hepatitis B, perinatal infection	0	0	0	0	0	
Hepatitis C virus Infection, chronic or resolved	1	1	0	0	3	
Hepatitis C, acute	0	0	0	0	2	
Hepatitis, unspecified	0	0	0	0	0	
Herpes Simplex Type 2	0	0	0	0	3	
HIV	0	0	1	0	1	
Human papillomavirus (HPV)	0	0	0	0	6	
Influenza	13	9	20	10	160	
Kawasaki syndrome	0	0	0	0	0	
Legionellosis	0	0	0	0	0	
Leptospirosis	0	0	0	0	0	
Lyme disease	0	0	0	0	0	
Lymphogranuloma Venereum	0	0	0	0	0	
Malaria	0	0	0	0	0	
Meningitis, aseptic	0	0	0	0	0	
Meningitis, bacterial	0	0	0	0	0	



APPENDIX | CLASS | DISEASES

	Week —				
Class II Notifiable Diseases	6	7	8	9	YTD
Mumps	0	0	0	0	0
Myocarditis	0	0	0	0	0
Paratyphoid fever	0	0	0	0	0
Parvovirus B19 (Fifth disease)	0	0	0	0	0
Rheumatic fever (active) & post-streptococcal glo-					
merulonephritis	0	0	0	0	0
Rickettsial disease	0	0	0	0	0
Salmonellosis (non-typhoidal)	0	0	1	0	7
Scabies	0	0	0	0	0
Scarlet fever	0	0	0	0	0
Shigellosis	0	0	0	0	0
Staphylococcus aureus (MRSA or VRSA)	9	14	7	3	77
Strep. other	15	8	9	1	82
Streptococcal disease (Group A)	0	0	0	0	0
Streptococcal sore throat	22	10	16	19	130
Streptococcus pneumoniae, penicillin resistant (PRSP)	0	0	0	0	0
Syphilis, congenital	0	0	0	0	0
Syphilis, early non-primary, non-secondary	0	1	0	0	1
Syphilis, primary	0	0	0	0	0
Syphilis, secondary	0	0	0	0	0
Syphilis, unknown duration or late	0	0	0	0	2
Tetanus	0	0	0	0	0
Tuberculosis	0	0	0	0	0
Vibriosis (non-cholera Vibrio species infections)	0	0	0	0	0
Shiga toxin-producing Escherichia coli (STEC)					
(0157:H7)	0	0	0	0	0
E. coli other (MDR, ESBL+)	8	5	4	6	42



APPENDIX | Non-reportable Diseases

		Week —			
Non-Reportable Diseases	6	7	8	9	YTD
Achromobacter Xylosoxidans	0	0	0	0	0
Acinetobacter baumanii	0	0	0	0	0
Adenovirus	0	0	0	0	0
Aeromonas hydrophila / punctata	0	0	0	0	0
Burkholderia cepacia	0	0	0	0	0
Candida Auris	0	0	0	0	0
Chryseobacterium	0	0	0	0	0
Citrobacter freundii	0	0	0	0	0
Clostridium difficile	0	0	0	0	0
CP-CRE	0	0	0	0	0
Elizabethkingia	0	0	0	0	0
Flavivirus disease, not otherwise specified	0	0	0	0	0
Gardnerella	0	0	0	0	0
Hand, Foot, and Mouth disease	0	0	0	1	1
Helicobacter pylori (H. pylori)	0	0	0	0	0
Kawasaki Disease	0	0	0	0	0
Klebsiella pneumoniae	0	0	1	0	3
Morganella Morganii	0	0	0	0	0
MTB	0	0	0	0	0
Myroides	0	0	0	0	0
Parotitis	0	0	0	0	0
Proteus mirabilis	0	0	0	0	0
Proteus penneri MDR	1	0	0	0	1
Providencia stuartii	0	0	0	0	0
Pseudomonas aerunginosa	0	0	0	0	0
Respiratory Syncytial Virus (RSV)	0	0	0	0	3
Rhinovirus / Enterovirus	0	0	0	0	0
Rotavirus, Suspect	0	0	0	0	0
Salmonella enterica serotypes Paratyphi A-, B-, C	0	0	0	0	0
Shingles	0	0	0	0	0
Spotted Fever Rickettsiosis	0	0	0	0	0
Streptococcal disease (Group B)	2	1	1	0	7
Toxoplasmosis	0	0	0	0	0
Trichomonas	0	0	0	0	0
Viral Meningitis	0	0	0	0	0
Noroviruses, Norwalk virus (disorder)	0	0	0	0	1

