

# CONGRATULATIONS ON YOUR RETIREMENT

**DR. ANN POBUTSKY**

---

Your unwavering commitment to utilize the tools of epidemiology to support the mission of the Department of Public Health and Social Services has been an inspiration to us all. We sincerely appreciate the support and leadership you have provided as the islands Territorial Epidemiologist. Your vision has shown us the way, and we are lucky to have you and will always follow your path. Have a wonderful retirement!



# Monthly EPI NEWSLETTER

January 2024

## Welcome

Welcome to 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."

Thus, urging the need to re-establish the EpiNewsletter. 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 well-being for our communities in Guam.

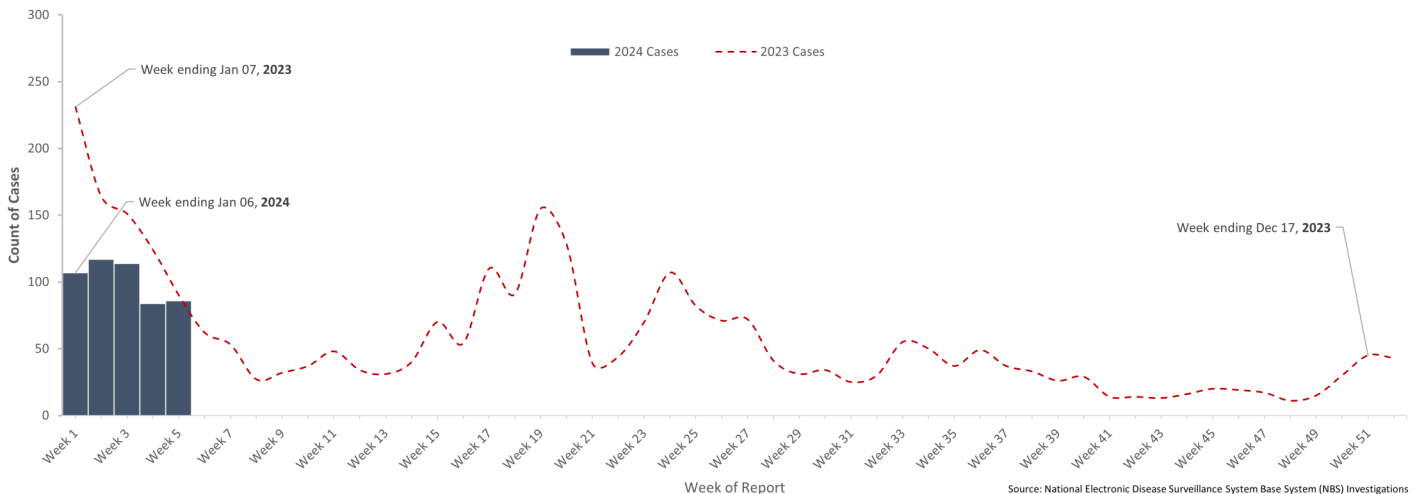
Data used to generate this report have been compiled by one or more of the Surveillance Unit staff: Angelika Argao, Aaron Arizala, Aikani Sablan, and John Taitano. Laboratory data were compiled by Alan Mallari and Anne Marie Santos. Analysis and interpretation are provided by Patrick Sotto, Applied Epidemiology 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](mailto:dphss.surveillance@dphss.guam.gov).

# COVID-19

The earliest part of this year has been marred with commotion surrounding the increase in COVID-19 cases towards the tail end of 2023 (Figure 1). January 2024 saw a total of 339 reported cases, up from 153 observed in December 2023. Despite the relative increase from December 2023 to January 2024, this year saw a marked drop in cases with year-to-year comparisons. January 2024 shows a 49% decrease in COVID-19 cases compared to January 2023: 339 and 670 cases, respectively. Test result data are a limiting metric for assessing the magnitude of COVID-19 in the community given its dependence on at-home-tests to be reported to public health. However, transmission does appear to be waning, which could be attributed to the small variations in newly reported cases.

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

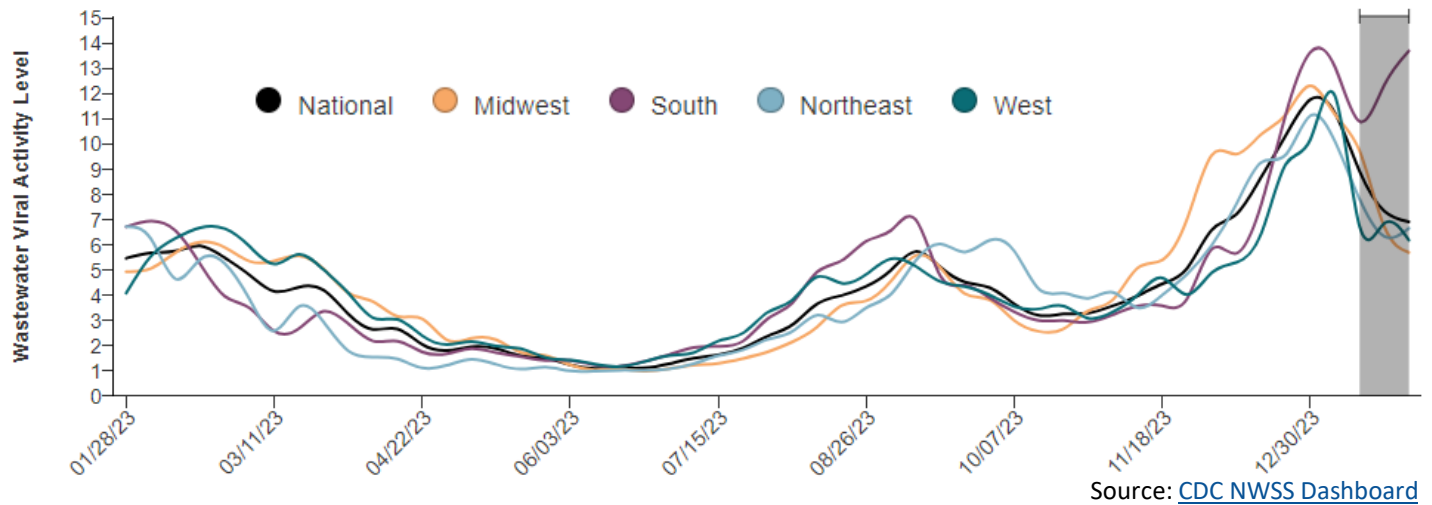


Source: National Electronic Disease Surveillance System Base System (NBS) Investigations

Wastewater data (Figure 2) seen at the national level shows a downward trend, although data from the past two weeks may be incomplete due to delays in reporting (grey shading).

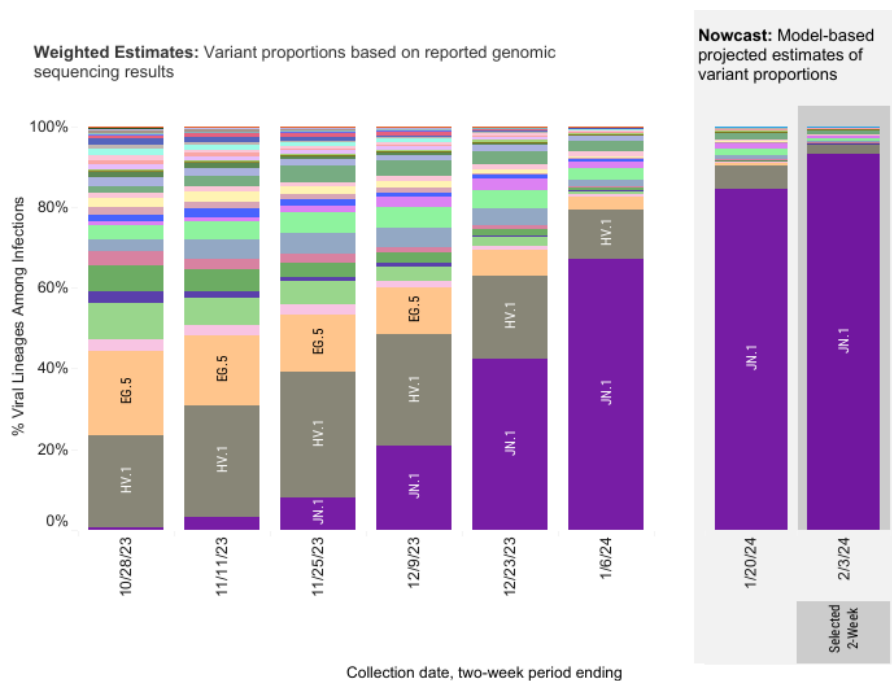
National data also suggests this mini wave is diminishing as hospitalizations have begun to subside since January 01, 2024 (CDC Trends in Hospitalizations). At the height of this recent surge, the country saw 10.5 new hospital admissions per 100k population. As of January 27, 2024, hospital admissions decreased to 6.8 per 100k.

**Figure 2.** Weekly national and regional trends of COVID-19 viral activity in wastewater, 2023-2024



For the month of January 2024, a total of 10 JN.1 COVID-19 genome sequencing results have been reported. Dates of collection ranged from December 18, 2023 to January 18, 2024. Half of those interviewed have identified exposures either in a work-related environment or with a household member. JN.1 is a direct descendant of BA.2.86 and is currently classified as a Variant Being Monitored by the CDC. Throughout the month of January, JN.1 quickly grew and is now estimated to comprise 93.1% of all sequenced samples indicated by the purple bar in **Figure 3**. Despite this sustained growth, JN.1 does not appear to pose additional risks to public health.

**Figure 3.** Weighted and Nowcast estimates for variant proportions based on sequencing results.



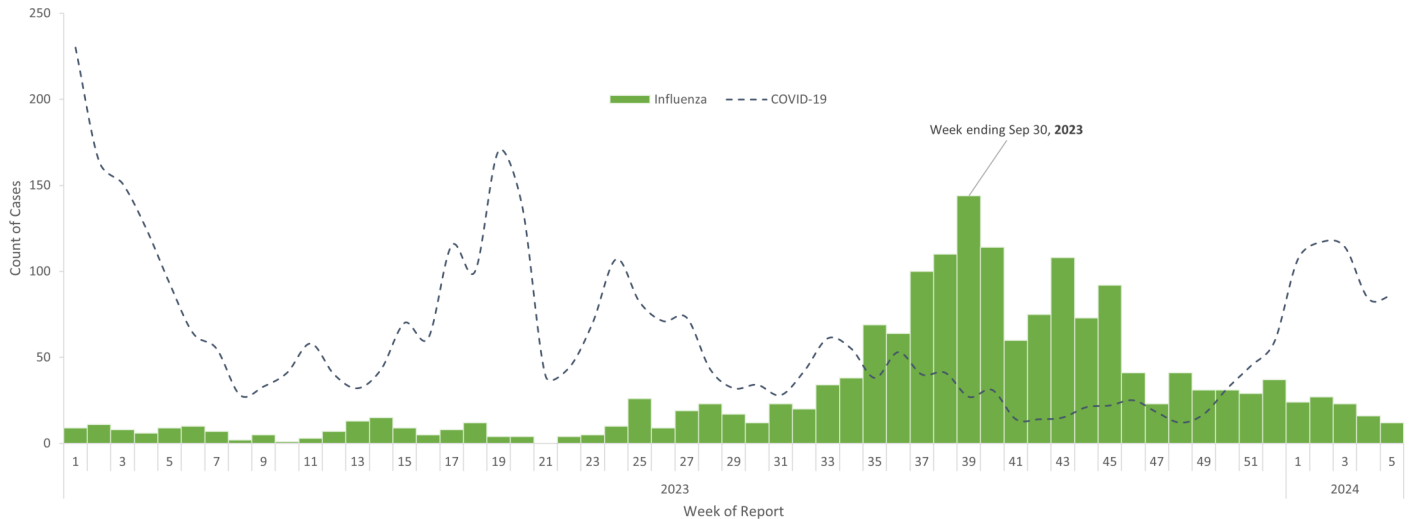
Source: [CDC COVID Data Tracker—Variant Proportions](#)

It should be re-emphasized that Guam is in a better position than it was since the beginning of the COVID-19 pandemic. There are now reduced impacts (e.g., hospitalization and deaths) because of broad population immunity due to vaccination or natural infection and because of the availability of treatments for those who are infected.

# Influenza

Influenza cases have been on the decline since November 2023, with a peak of 144 cases reported in week 39 (Figure 4). Since then, the number of cases has steadily declined and is beginning to taper, averaging at 22 cases per week in January. Interestingly, influenza cases have doubled when compared to January 2023, warranting further investigation. Fortunately, there were minimal influenza patients admitted to the hospital for the month.

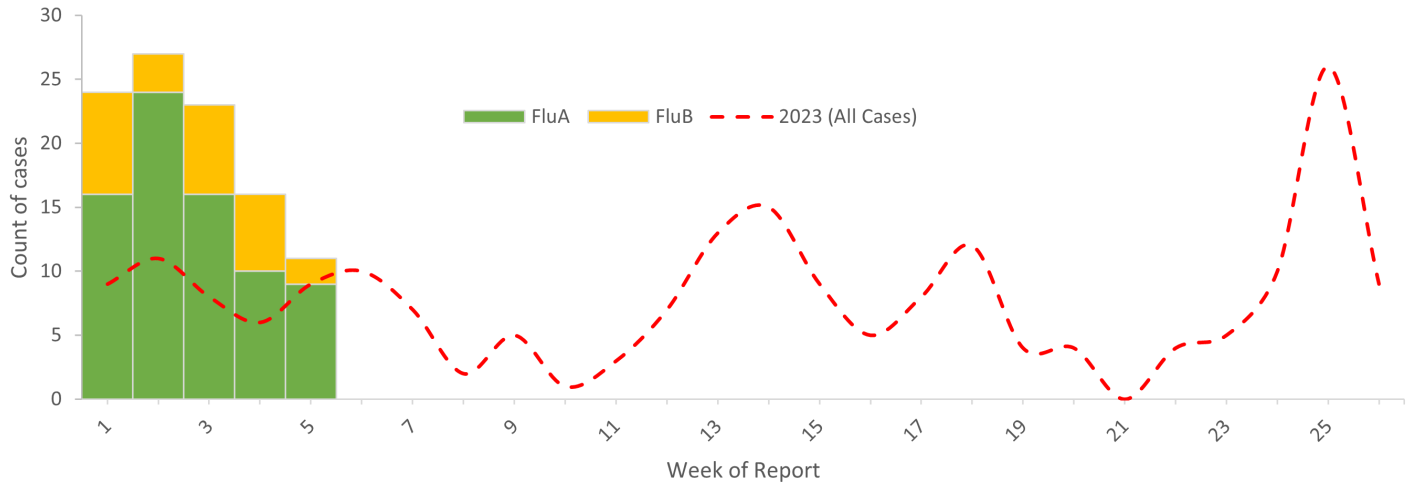
Figure 4. Weekly count of influenza cases reported in Guam, 2023-2024



The past year clearly shows that COVID-19 and influenza transmission displace each other. As respiratory illnesses appear to be sustained throughout the year, it is evident that the underlying cause of respiratory infection appears in distinct phases. As COVID-19 goes up, influenza goes down. As influenza goes up, COVID-19 goes down. The underlying factors are unclear, although it could be argued that influenza is hitting back harder given the world's response to the COVID-19 pandemic, leaving large populations otherwise immune-naïve (susceptible) to influenza infection as a consequential downstream effect.

True to historical data, influenza A remains the most common influenza type at this time of year. However, influenza B appears to be trailing not too far behind (Figure 5). While not a cause for alarm, the increased rates of influenza B infection is a curiosity that should be observed throughout the year.

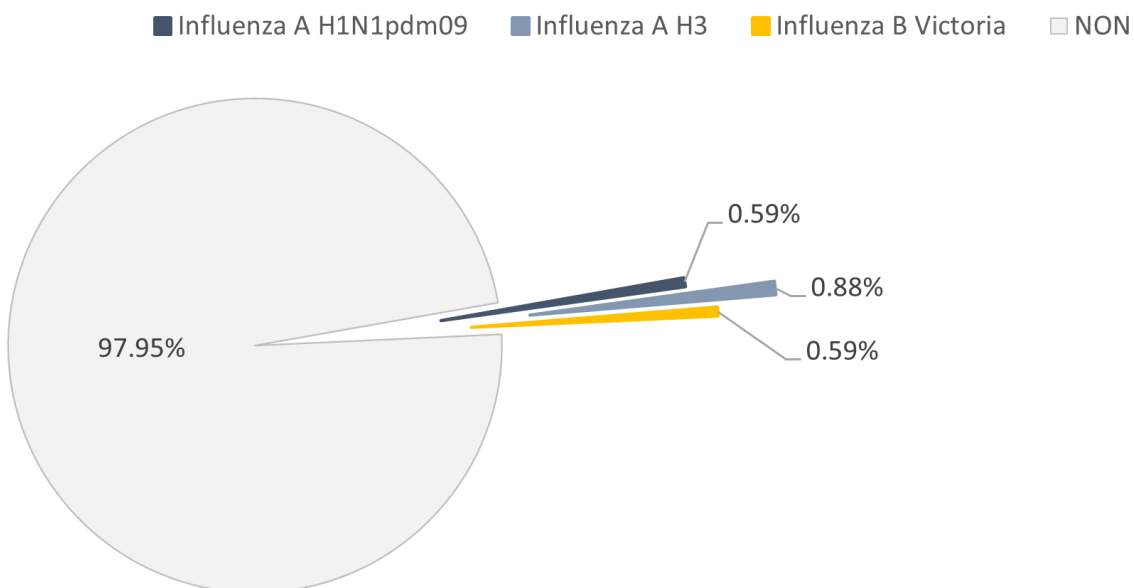
**Figure 5.** Weekly count of influenza cases reported in Guam, by type 2023-2024



True to historical data, influenza A remains the most common influenza type at this time of year. However, influenza B appears to be trailing not too far behind (Figure 5). While not a cause for alarm, the increased rates of influenza B infection is a curiosity that should be observed throughout the year.

Subtyping data shows a balanced distribution of H3 and H1N1 pdm09 (Figure 6). Influenza B continues to remain of the Victoria lineage. For more effective analysis, providers are encouraged to continue submitting influenza samples to the Guam Public Health Laboratory for further subtyping.

**Figure 6.** Proportion of samples submitted for influenza typing and subtyping, Jan 2024



# Antimicrobial Resistance

January 2024 officially commemorates Guam’s participation in the West Region Antimicrobial Resistance Laboratory Network (ARLN). This marks a significant step towards improving Guam’s understanding of the extent of antimicrobial resistance within the island and, potentially, across the region. ARLN is a comprehensive laboratory capacity network which provides gold standard methods and diagnostics needed to combat antimicrobial resistance in healthcare and in the community.

Guam is continuing to build its antimicrobial resistance surveillance system with a focus on carbapenem-resistant organisms, and is actively responding to a carbapenemase-producing carbapenem-resistant *Enterobacterales*. A comprehensive report will be forthcoming.

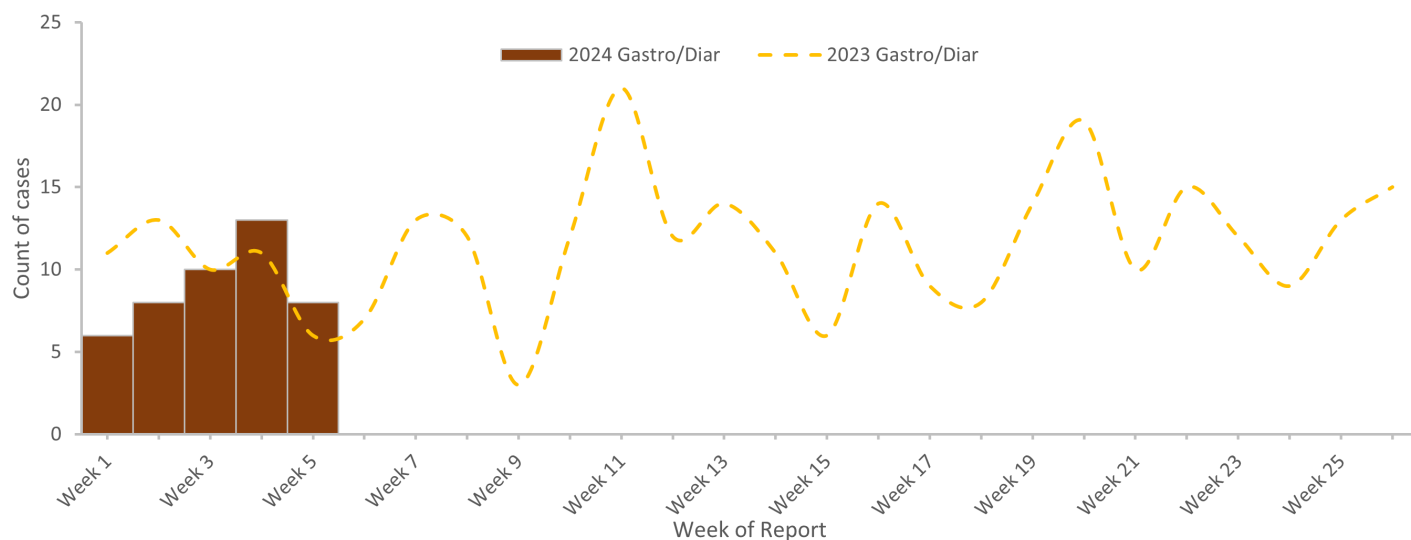
## Other News

For the month of January, there have been 5 laboratory-reported cases of *Salmonella* infections. *Salmonella* is a bacterium that can cause serious and sometimes fatal infections in young children, the elderly, and those with weakened immune symptoms. Most people who get ill from *Salmonella* experience diarrhea, fever, and stomach cramps. Although these reports are outside of what is typically observed in previous years (Table 1), syndromic surveillance for gastrointestinal and diarrheal illnesses (Figure 7) is evidence that this is what is expected.

Table 1. Counts of Salmonellosis reports by week, 2020-2024

	2020	2021	2022	2023	2024
Week 1	0	0	0	0	0
Week 2	0	0	0	0	1
Week 3	1	0	0	1	1
Week 4	0	0	0	0	2
Week 5	1	1	0	0	1
<b>Total</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>5</b>

**Figure 7.** Weekly count of diarrheal/gastroenteritis reports in Guam, 2023-2024



Regardless, the source of infection remains unknown at this time. These appear to be sporadic and with no definitive association with the relatively recent Quaker Oats Company food recall announced and expanded since December 15, 2023.

## Stay Alert for Measles Cases

The CDC has been notified of 23 confirmed cases of measles (Rubeola) reported between December 01, 2023 and January 23, 2024. Seven (7) of these cases were recent international travelers, and most of the cases were among children and adolescents who had not received a measles-containing vaccine (MMR or MMRV). More information on the alert may be found [here](#).

Due to the recent cases, healthcare providers should be on alert for patients who have:

1. Febrile rash illness and symptoms consistent with measles (e.g., cough, coryza, or conjunctivitis), and,
2. Recently traveled abroad, especially to countries with ongoing measles outbreaks. Infected people are contagious from 4 days before the rash starts through 4 days afterwards.

Measles was last detected in Guam in 2014, in 2 child cases with no epidemiologic link to each other. One (1) case had no known travel history; the other had suggestive international travel. The best tool for preventing measles infection is to receive a measles-containing vaccine (i.e., MMR). A two-dose MMR vaccine is 97% effective at preventing and a single dose is 93% effective. MMR vaccine is especially important for those children entering their school-age years, of which recent data for Guam shows 91.5% coverage rate.



# Appendix

<b>Table 1.1 Class I Notifiable Diseases</b>	<b>Week 1</b>	<b>Week 2</b>	<b>Week 3</b>	<b>Week 4</b>	<b>2024 Year to Date</b>
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
Diphtheria	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	107	117	114	84	508
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

Table 2.1 Class II Notifiable Diseases	Week 1	Week 2	Week 3	Week 4	2024 Year to Date
AIDS	0	0	0	0	0
Amebiasis	0	0	0	0	0
Brucellosis	0	0	0	0	0
Campylobacteriosis	1	0	0	0	1
Chancroid	0	0	0	0	0
Chickenpox (varicella)	0	0	0	1	1
Chlamydia trachomatis	3	34	7	16	76
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	3	12	1	5	30
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	0	1	0	0	1
Hepatitis B, acute	0	0	0	0	0
Hepatitis B, perinatal infection	0	0	0	0	0
Hepatitis C virus Infection, chronic or resolved	0	0	0	1	1
Hepatitis C, acute	0	0	0	0	0
Hepatitis, unspecified	0	0	0	0	0
Herpes Simplex Type 2	0	3	0	0	3
HIV	0	0	0	0	0
Human papillomavirus (HPV)	0	6	0	1	7
Influenza	24	27	23	16	102
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

# Appendix

Table 2.1 (continued) Class II Notifiable Diseases	Week 1	Week 2	Week 3	Week 4	2024 Year to Date
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
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 glomerulonephritis	0	0	0	0	0
Rickettsial disease	0	0	0	0	0
Salmonellosis (non-typhoidal)	1	1	1	1	4
Scabies	0	0	0	0	0
Scarlet fever	0	0	0	0	0
Shigellosis	0	0	0	0	0
Staphylococcus aureus (MRSA or VRSA)	11	12	11	5	44
Strep. other	4	4	3	6	22
Streptococcal disease (Group A)	0	0	0	0	0
Streptococcal sore throat	8	19	16	14	73
Streptococcus pneumoniae, penicillin resistant (PRSP)	0	0	0	0	0
Syphilis, congenital	0	0	0	0	0
Syphilis, early non-primary, non-secondary	0	0	0	0	0
Syphilis, primary	0	0	0	0	0
Syphilis, secondary	0	0	0	0	0
Syphilis, unknown duration or late	0	1	0	1	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) (O157:H7,)	0	0	0	0	0
E. coli other ( MDR, ESBL+)	3	4	7	1	18

# Appendix

Table 3.1 Non-Reportable Diseases	Week 1	Week 2	Week 3	Week 4	2024 Year to Date
Achromobacter xylosoxidans	0	0	0	0	0
Acinetobacter baumannii	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	0	0
Helicobacter pylori (H. pylori)	0	0	0	0	0
Kawasaki Disease	0	0	0	0	0
Klebsiella pneumoniae	0	0	1	1	2
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	0	0	0	0	0
Providencia stuartii	0	0	0	0	0
Pseudomonas aeruginosa	0	0	0	0	0
Respiratory Syncytial Virus (RSV)	0	1	1	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)	0	0	1	0	1
Toxoplasmosis	0	0	0	0	0
Trichomonas	0	0	0	0	0
Viral Meningitis	0	0	0	0	0