EPIDEMIOLOGY NEWSLETTER

April 2024

Guam communicable disease update

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Class I and II Reportable Diseases

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Data compiled for this report have been generated by the following Surveillance members: A Argao, A Sablan, A Arizala, J Taitano. Laboratory data were provided by A Mallari and AM Santos. Analysis and interpretation were provided by PP Sotto.



National headlines

US Respiratory virus levels decline as CDC monitors shift in SARS-CoV-2 variant proportions.

Respiratory virus activity continued to decline though estimates of new variant proportions show some notable shifts in SARS-CoV-2, according to the Centers for Disease Control and Prevention (CDC).

CDC A(H5N1) bird flu update.

CDC continues to respond to the public health challenge posed by avian influenza A(H5N1) affecting dairy cows and other animals in the US, including a single human case.

Measles in the United States – March 2024. US CDC published a report on assessing risk of measles in the US and recommended preparedness actions for individuals and public health departments.

The US global health security strategy.

The US launched a new Global Health Security Strategy, reaffirming leadership in global health security. The new Strategy will drive action across multiple sectors to better prevent, detect, respond to and recover from infectious disease threats.



RESPIRATORY ILLNESS || COVID-19

April 2024 revealed increasing COVID-19 case reports, pivoting from the downward trend observed from January to March, but expected when compared to April 2023 (**Figure 1**). Despite this increase, the month of April reported a total of 60 cases, down from the 65 cases reported in March. April averaged 15 reported cases per week, whereas March averaged 16 cases. Public Health will continue to monitor this trend; however, the community is reminded to be cognizant of COVID-19 (and other viral respiratory diseases) as Guam enters its graduation and summer season.



Figure 1. Weekly count of COVID-19 cases in Guam, 2023-24

Guam's COVID-19 new hospital admission rate¹ surpassed the hospital admission rates observed nationwide (**Figure 2**). The increase in new hospital admission rate coincides with the increase in cases reported. Guam averaged a hospital admission rate of 1.19 cases per 100k each week in April compared to 0.59 cases per week in March.²



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.

²Data for the previous week are updated weekly on Fridays (EST) as soon as they are reviewed and verified.

% Change

-0.06%

Despite this relative increase, Guam's hospital admission rate keeps the island in the "Low Hospitalization" status depicted in green in Figure 3.³ Data from the Centers for Disease Control and Prevention (CDC) also indicate that other US jurisdictions are doing well, highlighting that jurisdictions 99.7% of are experiencing hospitalization low rates compared to 98.7% in late March.

Lastly, Guam reported 1 new JN1 variant detected in the month of April, bringing the total JN1 variants detected to 20. Although JN1 remains of interest, the US has recently reported increasing proportions of its descendants - JN1.7 and KP.2.



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



Medium 10.0 - 19.9 12 0.37% 0.09% 10.0 - 19.9 2209 99.63% 0% Time Period: New COVID-19 hospital admissions per 100.000 population (7-day total) are calculated using data from the MM/RW week (Sun-Sat) ending April 27, 2024. Reported COVID-19 New Hospital Admissions Rate per 100,000 Population in the Past Week, by County - United States

GU

Territories

Total

Percent



High

≥ 20.0

RESPIRATORY ILLNESS || Influenza & ILI

The cause for the sudden increase in mid-March remains unknown; however, influenza case reports have been declining since then **(Figure 4)**. April reported a total of 61 cases, down from the 86 cases detected in March. Guam saw an average of 15 cases per week in April, compared to 22 cases per week in March. **Figure 5** also highlights a shift in influenza type. While the majority of influenza cases for 2024 were influenza A, the proportion of influenza B has been rising in recent weeks.



Figure 4. Weekly count of influenza and ILI cases in Guam, 2023-24



Figure 5. Proportion of influenza type reported by week, 2023-24



RESPIRATORY ILLNESS || Influenza & ILI

Much progress has been made since March. Those younger than 5 years of age saw a 60% decrease in case reports from March (11 cases) to April (4 cases). While Guam's school-age population experienced the greatest number of influenza cases among all age groups, the total number of cases reduced by 55%. The working age community saw no differences (0%) between March and April. Individuals from 55 to 64 years of age observed a 20% increase, and those ages 65yrs or older saw a 55% decrease.



Figure 7. Weekly report of ILI and pneumonia in Guam, 2023-24





For more information, please contact the Office of Epidemiology and Research at <u>dphss.surveillance@dphss.guam.gov</u>.

NOTABLE CONDITIONS || Salmonella

DPHSS continues to monitor the rise in Salmonella infections. No Salmonellosis infection has been associated with the contaminated food products mentioned in earlier reports, nor do these recent Salmonellosis cases have any identified epi-links. Majority of the cases were male (57%). The median age for all 14 cases reported in 2024 is 32.5years. **Table 1** highlights the current issue, with 10 total cases being identified in the first quarter of 2024, compared to the low reports observed in the first quarter of previous years.

Week	2020	2021	2022	2023	2024
1-13	2	5	2	3	11
14	0	0	0	2	0
15	0	1	0	0	2
16	1	1	0	2	0
17	0	1	0	1	1
Total	3	8	2	8	14

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

NOTABLE CONDITIONS || E. coli

On April 26, 2024, the Guam Waterworks Authority issued a boil water notice for residents in Agaña Heights, Sinajaña, and Maina after having detected presence of *Escherichia coli* (*e. coli*) in a well. *E. coli* is a group of bacteria found in the environment, foods, and intestines of people and animals. Although most strains are harmless, some may cause intestinal illnesses such as diarrhea and are commonly associated with ingestion of contaminated food. Other strains may cause urinary tract infections, respiratory illness, or pneumonia. There were no confirmed reports or unusual trends that would suggest an *E. coli* infection associated with the affected areas. Reports of diarrhea were low for most of April and have remained low for most of 2024 (**Figure 8**). Other reports of E. coli were extraintestinal (strains associated with UTI's, respiratory illnesses, or pneumonia), which were either detected outside of the window of infection or were residents not associated with affected area.

SYNDROMIC SURVEILLANCE

120 100 80 Count 60 Fever and rash 40 Acute URI 20 Gastroenteritis Diarrhea Ο 29 41 5 q 13 17 21 25 33 37 41 45 49 5 9 13 17 21 25 29 33 37 49 1 45 1 2023 2024 Week

Figure 8. Weekly report of syndromic cases in Guam, 2023-24



APPENDIX || Case definitions

Syndromic surveillance case definitions

Variable	Definition
Influenza-like Illness	Fever (temperature of 100.4 F/38 C or greater) and cough and/or sore throat
(ILI)	
Diarrhea (DIA)	Three (3) or more episodes of loose stools or an occurrence of loose stools that is above normal
	for the person
Gastroenteritis (AGE)	Inflammation of the stomach or intestines, or both, including diarrhea or vomiting
Fever and Rash (FaR)	Fever, or measured temperature of 100.4 F/38 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
Acute upper	Self-limited irritation and swelling of the upper airways with associated cough and no signs of
respiratory infection	pneumonia, in a patient with no other condition that would account for their symptoms, or with
(AURI)	no history of chronic obstructive pulmonary disease, emphysema, or chronic bronchitis.
Pneumonia	An infection of the lungs, caused by virus, bacteria, or fungi

MMWR Weeks

An epidemiologic week, more aptly referred to as the MMWR week, is a standardized method of counting weeks to allow for comparison of data year after year. Each MMWR week begins on a Sunday and ends on a Saturday.

Week	Date Range						
1	12/31/23 - 01/06/24	6	02/04-02/10	11	03/10-03/16	16	04/14-04/20
2	01/07-01/13	7	02/11-02/17	12	03/17 - 03/23	17	04/21-04/27
3	01/14-01/20	8	02/18-02/24	13	03/24 - 03/30	18	04/28-05/04
4	01/21-01/27	9	02/25 - 03/02	14	03/31-04/06	19	05/05 - 05/11
5	01/28-02/03	10	03/03 - 03/09	15	04/07 - 04/13	20	05/12 - 05/18



APPENDIX || Class I Conditions

APPENDIX Class I Condition	IS					
		Week				
Disease	14	15	16	17	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	5	15	10	30	820	
Severe Acute Respiratory Syndrome (SARS)	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	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 II Conditions

	Week				
Disease	14	15	16	17	YTD
AIDS	0	0	0	0	0
Amebiasis	0	0	0	0	0
Brucellosis	0	0	0	0	0
Campylobacteriosis	0	0	0	0	5
Chancroid	0	0	0	0	0
Chickenpox (varicella)	0	0	0	0	2
Chlamydia trachomatis	6	13	17	9	189
Coccidioidomycosis	0	0	0	0	0
Conjunctivitis, viral or bacterial	0	3	4	0	9
Cryptosporidiosis	0	0	0	0	0
Cyclosporiasis	0	0	0	0	0
E. coli other (MDR, ESBL+)	6	11	7	5	85
Enterococcus sp. VRE, vancomycin resistant	2	1	1	0	20
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	2	7	3	69
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	1	3	1	11
Hepatitis B, acute	0	0	0	0	1
Hepatitis B, perinatal infection	0	1	0	0	2
Hepatitis C virus Infection, chronic or resolved	1	1	0	0	7
Hepatitis C, acute	0	1	0	0	3
Hepatitis, unspecified	0	0	0	0	0
Herpes Simplex Type 2	0	0	0	0	0
HIV	0	0	0	0	1
Human papillomavirus (HPV)	0	0	0	0	6
Influenza	18	18	16	9	308
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 || Class II Conditions

		Wee	ek		
Disease	14	15	16	17	YTD
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)	0	0	0	0	0
Rickettsial disease	0	0	0	0	0
Salmonellosis (non-typhoidal)	0	2	0	1	14
Scabies	0	0	0	0	0
Scarlet fever	0	0	0	0	0
Shiga toxin-producing Escherichia coli (STEC) (0157:H7)	0	0	0	0	0
Shigellosis	0	0	0	0	0
Staphylococcus aureus (MRSA or VRSA)	10	16	5	7	151
Strep. other	5	6	11	10	124
Streptococcal disease (Group A)	0	0	0	0	0
Streptococcal sore throat	16	14	22	25	308
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	3
Syphilis, unknown duration or late	0	0	0	0	2
Tetanus	0	0	0	0	0
Tuberculosis	0	2	0	1	17
Vibriosis (non-cholera Vibrio species infections)	0	0	0	0	0

