Infection Control and Public Health Weekly Meeting

Thursday, March 6 | 12:30 – 1:00 pm

Influenza Hospitalizations and Respiratory Season

- Hospital capacity peaked in February but remains elevated (figure 1)
- Influenza B cases tend to occur later in the season

Hospital "At Capacity" for Southwest Ohio Hospitals

At Capacity SWOH	2024	2025
January	1,027	626
February	263	1,046

Average total number of hours At Capacity for the previous 12 months is 297

Measles Outbreak in West Texas – CDC Epi-Aid

- Texas has confirmed 159 measles cases—the majority in Gaines County (Lubbock).
- Unvaccinated 6-year-old death reported (2/26) is the first U.S. death since 2015.
- At least 22 people have been hospitalized.
- MMR vaccination rate among kindergartners in Texas' Gaines County was 82% last year.
- Most of the cases are in children ages 5 to 17 that are unvaccinated or have unknown vaccination status.
- 80 individuals were unvaccinated, 74 had unknown vaccination status, and only five had received at least one dose of the MMR vaccine.

Measles Eradication: A Goal Within Reach, Slipping Away

- One person with measles can infect 12-18 others including someone who enters a room two hours later. Measles transmission occurs four days before rash onset.
- Before a vaccine was introduced in <u>1963</u>, there were 4 million measles cases with 48,000 hospitalizations and 500 deaths in the US every year.
- A total of 285 measles cases were reported nationwide in 2024 and so far in 2025 there have been 222 measles cases reported (as of March 6) and 17% hospitalized.

Measles Without Vaccine

- Up to 40 percent of patients have complications from measles infection.
- Before widespread vaccination, measles caused 5 to 10 percent of profound hearing-loss.
- Worldwide, measles used to be a leading cause of blindness among children.
- The most common complication from measles is pneumonia, which accounts for most measlesrelated deaths. Less frequently, measles can lead to blindness, croup, mouth ulcers, ear infections or severe diarrhea.
- From 1987 to 2000, the most commonly reported complications associated with measles infection were pneumonia (6%), otitis media (7%), and diarrhea (8%).
- For every 1,000 reported measles cases in the United States, approximately one case of encephalitis (seizure, hearing loss, intellectual disabilities) and two to three deaths resulted.

Measles Testing Available in Epic

- 1. Measles Antibodies (IgG, IgM)
- 2. Measles (Rubeola) IgG
- 3. Measles (Rubeola) IgM

Serologic Testing for Measles in Low Prevalence Setting

- Detection of specific IgM antibodies in a serum sample collected within the first few days of rash onset can provide presumptive evidence of a current or recent measles virus infection (false negatives and positives occur).
- Reference labs and ARUP defer specimens to the state labs and CDC for direct detection via PCR.
- Viral transport media with Dacron swab (oropharyngeal, nasopharyngeal)
- May require sample transport to ODH lab by public health

Adult Measles Contacts

- Need for post-exposure prophylaxis with Immunoglobulin. CCHMC clinic template based on response to prior outbreaks.
- Those vaccinated between 1957 and 1968 should receive a booster of the MMR vaccine. Two forms of the measles vaccine were used during this time period (killed and live-attenuated).
- Evidence of immunity, such as a positive serology (IgG), and whether you are a healthcare worker
- Measles antibody titer can be negative and still have vaccine protection through T-cell immunity
- Healthcare personnel should still get vaccinated if no evidence of immunity.
- For travel, MMR is recommended for 6 months and up
- See "Ask the Experts section on MMR at immunize.org <u>https://www.immunize.org/ask-experts/topic/mmr/</u>

https://www.cdc.gov/measles/data-research/index.html

Upcoming Seminars

CME Sexual Health Update: Syphilis

Wednesday, Mar 12: Webinar, 12:00 – 1:00 pm Register at <u>Syphilis Summit March 2025</u> Jacob McLean, DO, Assistant Professor, Columbia University Medical Center

Tuberculosis Summit – Multidrug resistant Tuberculosis

Wednesday, Mar 26; Zoom format, 5:00 – 6:30 pm Register at <u>TB Summit March 2025</u>

Case Study in Tuberculosis Contact Tracing: Tenets and Tribulations Alex Woroncow, MPH, CIC; Senior Epidemiologist, Hamilton County Public Health Update on the Treatment of Drug-Susceptible & Drug-Resistant Tuberculosis Dr. Moises Huaman; Tuberculosis Medical Director, Hamilton County Public Health



Confirmed Influenza-associated Hospitalizations Southwest Ohio Region

Region 8 Syphilis Cases by Year

