Measles Outbreak Update
April 5, 2024

Summary and Action Items

- A total of 55 shelter-linked measles cases and 2 non-shelter-linked cases have been identified.
- CDPH has identified breakthrough cases, which may have altered clinical presentation.
- Over 6000 vaccine doses have been administered in shelters, likely stemming a wider outbreak.
- Providers should make sure all patients are up to date on MMR, including adult patients.
- Please note updated IDPH laboratory hours this weekend.

Background:
Since March 2024, 57 measles cases have been identified among Chicago residents and non-Chicago residents associated with the Chicago-based measles outbreak (Figure 1). Of these, 55 cases are linked to a Pilsen shelter housing new arrivals either through primary or secondary exposures (3 cases are in people not residing in Chicago) and 2 are in Chicago residents not epidemiologically linked to the shelter system. Among cases, 33 (58%) have been in children 0–4 years, 7 (12%) in children 5–17 years, and 17 (30%) in adults 18+ years. Nearly all transmission events have occurred within the shelter; 1 transmission event has been identified at a healthcare facility, and no transmission events have been identified at schools, daycares, or other community settings.

Figure 1. Confirmed Measles Cases by Rash Onset Date* and Transmission Setting

Breakthrough infections:
A majority (71%) of cases have been among unvaccinated people. However, 16 have been among people with at least 1 dose of measles-containing vaccine received at least 21 days prior to first known measles exposure. Among measles cases in the U.S. from 2001-2023, 12% were previously vaccinated with 1 or more MMR dose. These cases might present with milder disease and non-classical symptoms including atypical rash or absence of cough, coryza, or conjunctivitis.
Vaccine response:
In the three days following identification of the first shelter-linked case on March 7, nearly 900 MMR vaccine doses were administered to residents of that shelter. To date, over 6000 MMR vaccines have been administered to residents across the new arrival shelter system and landing zone with the support of healthcare partners (Figure 2). Over 75 shelter-based MMR vaccine events have been performed. Preliminary modelling data from CDC suggests that this effort, along with active case surveillance within the shelter system, has stemmed a wider outbreak.

Figure 2. Measles-Containing Vaccines Given in New Arrival Shelters

Clinician Recommendations:
1. Maintain heightened suspicion for measles in patients presenting with a febrile rash illness and report suspected cases immediately.
   - To report suspect cases of measles and request testing authorization, complete this form: https://redcap.link/reportmeasles
2. Know that “breakthrough” infections are possible, especially in the context of repeated or prolonged exposure to measles virus (i.e., household contacts).
   - Clinical presentation of these cases might be atypical.
3. Be aware of public or school exposure locations.
   - If your patients present with concerning symptoms, ask if they’ve been to these locations which are listed on our public measles dashboard: www.chicago.gov/measles
4. All providers should ensure their patients are up to date on their measles-containing vaccines, including adult providers and their adult patients.
   - Identify and schedule appointments for children in your practice who are behind on MMR and other routine immunizations. Refer to AAP guidance on reminder and recall strategies.
   - Nonpregnant adults born after 1957 without evidence of immunity should also receive MMR.
   - Remember to document all vaccine doses in ICARE.
5. Prenatal providers should consider adding measles IgG to standard prenatal screening labs for Chicago residents, especially for those born abroad or living in shelter settings.
   - See the Practice Advisory from American College of Obstetricians and Gynecologists
6. People 6 months and older should be protected from measles before leaving for international trips.
   - See CDC guidelines for special vaccine recommendations before international travel
7. A second MMR dose can be given as long as at least 28 days have passed after first dose.
   - An “early” 2nd dose for children ages 1–4 years is considered valid and is recommended before international travel. It should also be considered during periods of increased measles transmission for children who have recently arrived to the US from Central or South America since January 1, 2022 or are currently residing in a congregate setting.
Weekend IDPH Laboratory Hours:

**Weekend Testing Cadence:**
Saturday (4/6) testing will begin at 1:00 PM. On Sunday (4/7) there is no scheduled testing. If a critical testing need arises, please contact CDPH.

**Specimen Delivery to Chicago Laboratory**
All specimens must be delivered to the back loading area of the Chicago laboratory and not the Taylor Street entrance. Weekend receiving hours are:
- Saturday 8:00 AM – 1:00 PM - IDPH Receiving staff and Security staff are available to receive specimens. Ring Buzzer on Receiving Room Door. If no one answers, call the Receiving Department at 312.793.4753
- Sunday – Receiving is closed.