May 3, 2019

Update from CDC on Nationwide Measles Outbreaks and Adult Vaccination Recommendations including Local Chicago Preparations

Summary and Action Items:
- Measles is spreading across the United States and this health alert serves to update current recommendations.
- Report suspect measles cases to CDPH immediately at 312-743-9000 (or 311 and ask to speak to the communicable disease physician on call) to initiate timely confirmation of diagnosis with measles RT-PCR.
- **DO NOT** send Measles IgM testing without calling CDPH to request RT-PCR testing.
- There is no recommendation for an adult catch-up program for persons born before 1989.
- Vaccination recommendations may change over time depending on local activity but current vaccination efforts in Chicago should focus on routine, on-time vaccination of children (tips provided below) and high-risk infants and adults.

Background: On April 29, 2019 CDC released an MMWR article: Increase in Measles Cases — United States, January 1–April 26, 2019 (https://www.cdc.gov/mmwr/volumes/68/wr/mm6817e1.htm?s_cid=mm6817e1_w). As of April 26, 2019, CDC had reported 704 cases of measles in the United States since the beginning of 2019, representing the largest number of cases reported in the country in a single year since 1994, when 963 cases occurred, and since measles was declared eliminated in 2000. The median age of the patients reported was 5 years; about 1 out of every 4 cases was a child between 16 months and 4 years old. 195 (26%) measles cases were reported in adults ≥18 years of age. 71% of the individuals with measles were unvaccinated, and another 18% had an unknown vaccination status. 11% were vaccinated. Overall, 66 (9%) patients were hospitalized and 24 (3%) had pneumonia. No deaths or cases of encephalitis were reported to CDC. Six of 13 outbreaks reported in 2019 occurred in under immunized close-knit communities and account for almost 90% of all cases. New York and New York City have accounted for 67% of all of the reported measles cases this year so far. The vast majority (98%) of the cases were U.S. residents. Forty-four of the cases were the result of an international traveler (usually a U.S. resident) becoming infected in another country and returning to the United States. 9 out of 10 of those individuals who became infected during international travel were either unvaccinated or had an unknown vaccination status, although all were eligible to get vaccinated according to their ages. The top three countries where U.S. travelers became infected with measles so far in 2019 include the Philippines, Ukraine, and Israel.

Clarification of Adult Vaccination Recommendations: One dose of MMR vaccine, or other presumptive immunity, is sufficient for most U.S. adults born during or after 1957. Seroprevalence of measles IgG in the U.S. for persons 20-49 years of age ranges from 87.9% to 93.3% (Lebo et al., OFID 2017). Some adults may have received a killed measles vaccine during the 1960s. The killed measles vaccine was available from 1963 to 1968 and administered to less than 5% of adults. The ACIP recommendation is to re-vaccinate anyone who received the killed vaccine. However, this only affects a very small proportion of adults who were vaccinated during those years. (https://www.cdc.gov/mmwr/preview/mmwrhtml/rr6204a1.htm).

Presumptive evidence of measles immunity includes:
- Birth before 1957
- Laboratory evidence of immunity
- Laboratory confirmation of disease
Certain adults are considered to be high risk and need two doses of MMR, each dose separated by at least 28 days, unless they have other presumptive evidence of measles immunity, as listed above. These adults include:

- students at post-high school educational institutions
- healthcare personnel
- international travelers

**There is no recommendation for an adult catch-up program for persons born before 1989.** Vaccination recommendations may change over time depending on local activity. Current vaccination efforts in Chicago should focus on:

- Routine, on-time vaccination of children
- Vaccination of 6-11 month-old infants travelling to international or domestic locations where measles outbreaks are occurring ([https://www.cdc.gov/measles/cases-outbreaks.html](https://www.cdc.gov/measles/cases-outbreaks.html)).
- Vaccination of high-risk adults such as students in post-secondary education, health care workers, and travelers to international or domestic locations where measles outbreaks are occurring.
  - If adults are travelling, those with documentation of one dose of MMR vaccine should get a second dose.
  - Adults who do not have evidence of immunity against measles should get two doses of MMR vaccine, separated by at least 28 days.

**TIPS FOR OUTPATIENT PRACTICES**

1. **Call in patients in your practice who are overdue for MMR vaccination.** Use your EMR or the “Immunizations Due” report in I-CARE to determine who is due for MMR vaccination, and call those patients into your practice.
2. **Consider extending your office hours and promoting vaccine-only visits to make vaccination more accessible for your patients.**
3. **Establish standing orders for MMR vaccination.** Don’t miss any opportunity to vaccinate your patients and protect them against measles. Find an example of standing orders from immunize.org [here](https://www.immunize.org).
4. **Regularly check the Chicago Measles Health Alert Network (HAN) page for updates.** Be sure you are signed up to receive updates from the Chicago Measles HAN page ([https://www.chicagoohan.org/measles](https://www.chicagoohan.org/measles)), so you are alerted as soon as local measles activity or recommendations change. Sign up with the HAN here: [https://www.chifrontline.org/](https://www.chifrontline.org/).
5. **Consider posting this Measles Provider Job Aid in common areas.** This will help all of your clinic staff know who and how to test suspect measles cases.
6. **Avoid sending routine measles titters for any patient with fever and rash.** IgM can be falsely positive or falsely negative depending on pre-test probability, concurrent viral illnesses, and duration from onset of rash. Clinical consultation with CDPH is recommended.

### Running an “Immunizations Due” report in I-CARE 3.0:

- **Immunizations Due** - Generate a list of all patient immunizations due that match the search criteria.