Post Outbreak Report: Measles April-May 2019

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Measles Update:
Between June 20 and July 9, 2019, LAC DPH confirmed 4 new measles cases bringing the total number of cases this year in county residents to 12. Clinicians are encouraged to join the Los Angeles Health Alert Network (LAHAN) to be notified of new outbreaks or important changes to measles prevention and/or control.
Visit the DPH Measles homepage to view the press releases about new cases.

The recent measles outbreak in Los Angeles County ended on June 15, 2019 because two 21-day incubation periods elapsed from the end of the infectious period of the last known outbreak-related measles case in a resident of LA County. This report summarizes the first LA County measles cases of 2019 and the related outbreak control efforts and reminds health care providers of key clinical actions to prevent and control new cases.

The LA County Department of Public Health (DPH) confirmed 8 cases of measles in residents between April and May of 2019. These include 1 isolated outbreak that resulted in a total of 5 cases in which a county resident returned from international travel with measles and infected 3 people who then infected 1 additional person. The other 3 cases were not a part of the outbreak and were each linked to different exposures associated with international travel. The age of the 8 measles cases ranged from late teens to fifties, and the median age was 24 years. The immunization status of the 8 cases were as follows: 5 were unvaccinated, 2 did not know their vaccination status, and 1 had received a single dose of measles, mumps, and rubella (MMR) immunization. There were no deaths and 1 patient was hospitalized.

During this time period, DPH investigated a total of 2,982 measles exposures in LA County residents. This number includes exposures to the 8 local cases as well as to additional measles cases who were not residents of LA County. All 2,982 people were assessed for immunity by DPH and affected health care facilities and a total of 1,183 persons were put under quarantine. There were no new cases identified within this group of contacts.

*The LA County health jurisdiction does not include Pasadena and Long Beach, which each had one confirmed measles case during this time.

Take Home Points
While the April-May measles outbreak is over, new cases continue to be imported due to widespread outbreaks of measles in the U.S. and internationally. Health care providers are reminded to:

- Ask patients about any planned international travel and vaccinate travelers aged 6 months or older for whom there is no documentation of immunity.
- Make sure your patients (adult and pediatric) are up-to-date with their MMR immunizations. See the LA County DPH Measles Immunization Recommendations below.
- Consider measles, along with other etiologies, when evaluating a patient with an acute febrile rash illness. History of recent travel or exposure to measles in the month preceding rash onset should increase suspicion of measles, regardless of vaccination history. If you suspect measles, follow the step-by-step guidance in the updated DPH Checklist for Measles for Clinicians. The recent DPH Measles Situation Update and Revised Clinical Guidance (LAHAN May 24, 2019) contains more detailed information on how to evaluate a patient with a febrile rash illness for possible measles based on a combination of clinical presentation and specific measles risk factors.
- Immediately contact your local public health department by phone if you have a suspect measles case. For suspect measles cases in LA County call: 888-397-3993; after hours, call 213-974-1234 and ask for the physician on call.
- Join the Los Angeles Health Alert Network (LAHAN) to receive email updates for health care professionals on measles, other disease outbreaks, and emerging health risks.
Conclusions

The first measles cases of 2019 in LA County led to an enormous effort to control the spread of disease and caused a great disruption of two university campuses and the lives of thousands of exposed persons. Measles spread was controlled in part, due to the prompt recognition, reporting, and diligence of community clinicians. During this situation, the unique characteristics of contact management within large campus settings were deftly handled by our university partners with guidance from DPH. In addition, public health measures (e.g., isolation of cases, contact investigation, provision of post-exposure prophylaxis, quarantine of contacts) played a role in containment. However, given that thousands of people were exposed and there were very few transmissions, the presence of community immunity was likely the primary factor in curbing the spread of this highly infectious disease. This highlights the critical importance of immunization to prevent measles.

We are grateful for the commitment and assistance of our community partners during this outbreak. Your direct involvement in case reporting and support of measles outbreak suppression efforts was very much appreciated. Thank you to all the LA County health care providers and staff for your continued efforts to immunize your patients against measles and other vaccine-preventable diseases as well as your recognition and prompt reporting of suspect measles cases.

LA County DPH Measles Immunization Recommendations

See Measles Prevention in LA County, LAHAN April 26, 2019 for additional details.

Children 18 years or younger

- **Two doses of MMR** are recommended for all school-aged children (and required for school entry) with the first dose at age 12 months and the second dose routinely recommended at 4 through 6 years of age. If international travel is planned, the second dose is recommended prior to travel and can be given any time after 28 days from the first dose.

- **One dose of MMR** is recommended for infants aged 6 through 11 months of age who will be traveling internationally. This dose does not count towards completion of the routine schedule.

Adults 19 years or older

- **Two doses of MMR** are recommended for adults at increased risk of acquiring severe disease or spreading measles, including the following:
  - Students at post-high school educational institutions, including universities
  - Staff at schools (pre-kindergarten through post-high school educational institutions) and daycares
  - Health care personnel or any person working in a hospital
  - International travelers
  - Household contacts, close personal contacts, or caregivers of immunocompromised persons with no evidence of immunity to measles
  - Persons with HIV infection with CD4 count ≥200 cells/μL for at least 6 months and no evidence of immunity to measles
  - Persons caring for infants or living in households with infants
  - Women of childbearing age who are not pregnant but may be planning to get pregnant in the future

- **At least one dose of MMR** is recommended for all other adults.

Related Reading

How Measles Detectives Work to Contain an Outbreak, *California Healthline, June 10, 2019*.

Resources

- **Measles in LA County - Communicating with Parents and Patients about Immunizations**: This *Rx for Prevention* brief shares messages that providers can use to promote the measles, mumps, and rubella vaccine as well as vaccine communication tips and other resources. http://rx.ph.lacounty.gov/RxVaccineCommunication0419

- **Measles Posters, FAQs, and Other Resources**: http://publichealth.lacounty.gov/media/measles/

- **Specimen Collection for Common Vaccine Preventable Diseases Poster**: http://publichealth.lacounty.gov/media/docs/SpecimenCollectionPoster.pdf

- **Disease Management Toolkits for Providers**: http://publichealth.lacounty.gov/ip/providers_resources.htm

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