PREPAREDNESS CHECKLIST FOR PUBLIC HEALTH
Measles Clusters and Outbreaks

Purpose

The purpose of this document is to provide a checklist of key activities that state, tribal, local, and territorial jurisdictions should consider to be prepared for a potential measles cluster or outbreak[1]. If all these activities are not feasible to complete prior to the identification of a measles case or outbreak detection for preparedness purposes, they will still be valuable to consider after a measles case or outbreak is identified.

Preparedness Checklist for Public Health | Measles

PREPARE YOUR HEALTH DEPARTMENT FOR MEASLES, *IN THE SHORT-TERM*

☐ **Review the Incident Management System (IMS)/Incident Command System (ICS) structure in the event of a measles outbreak.**
- ✓ Be sure to have a specific set of criteria for activation and deactivation (e.g., benchmarks for containment) based on risk stratification
- ✓ Review and, as needed, update IMS/ICS organizational chart considering the breadth of response activities needed for a measles cluster or outbreak (e.g., community engagement, surveillance, laboratory, communications)
- ✓ Pre-identify key personnel required for infectious disease emergency response across health systems and governmental agencies

☐ **Review and, as needed, update protocols and procedures for:**
- ✓ epidemiologic investigation and surge staffing for investigation and monitoring of contacts in large exposure settings or settings with limited resources
- ✓ isolation and quarantine protocols and resources
- ✓ measles laboratory testing (including ensuring sufficient supplies)
- ✓ obtaining vaccine records from immunization registries
- ✓ obtaining and administering MMR vaccine and immune globulin (intramuscular (IM) and intravenous (IV))
- ✓ mass vaccination campaigns or points of dispensing (PODs), including ability to provide vaccination in evenings or on weekends for those unable to be vaccinated during business hours
- ✓ data reporting and visualization
- ✓ communication/education materials and language and cultural competence capacity, including for translation and interpretation
- ✓ infection control procedures for congregate and healthcare settings

☐ **Ensure staff have been evaluated, vaccinated, medically cleared, and trained to manage measles cases and contacts.**
- ✓ Assess measles immunity status for any staff that might conduct site visits to interview cases/contacts, obtain specimens, or administer MMR vaccine or post-exposure prophylaxis
- ✓ Review Respiratory Protection Program, including list of individuals with current or expired certifications and respirator fit testing
- ✓ Prepare Go Kits with supplies and PPE for possible at home testing or testing in other non-medical settings, and provide training on appropriate specimen collection
- ✓ Review and update "just in time" trainings for surge staff

☐ **Ensure staff are trained on current protocols for management of suspect measles cases.**
- ✓ Create or know where to find existing case and contact investigation forms. Find CDC template forms at: **Measles: Information for Public Health Professionals** (www.cdc.gov/measles/php/guidance/index.html)
- ✓ Train staff on case classification and investigation, contact tracing, and interpretation of laboratory results, including:
  - Measles signs and symptoms, differential diagnoses, incubation period, and infectious period
  - Importance of PCR testing for clinically suspicious cases, particularly in unvaccinated persons with recent travel, known measles exposure, or exposure in a high-risk setting (e.g., healthcare facility, shelter, childcare, school)
  - Sensitivity and specificity issues with IgM serology (e.g., possibility of false positive results)

CDC

- Steps to differentiate between infections with wild-type virus and vaccine reactions in people who were recently vaccinated (e.g., considerations for Measles Vaccine [MeVA] Assay)
- Available diagnostics and process pathways for specimens
- Assessing reasons for non-immunization with cultural sensitivity

  Refer to the case classification: (ndc.services.cdc.gov/case-definitions/measles-2013/)

✓ Consider setting up a clinical duty officer line to assist in triaging calls from providers

✓ Periodically check to ensure that data management plans are up to date

✓ Draft templates which can be used to notify people of measles exposures, including during travel (e.g., airline exposure notifications that are sent by CDC via EpiX) or in congregate settings (e.g., shelters, childcare, schools)

✓ Ensure staff know to report any suspect or identified measles cases to their jurisdictional health departments and CDC via **email** (measlesreport@cdc.gov)

✓ Ensure staff know how and when to reach the Division of Global Migration Health (DGMH) Port Health Station in their jurisdiction if a suspect or confirmed measles case is identified in a person who recently traveled by air or ship. See the **DGMH Port Health Station contact list:** (www.cdc.gov/port-health/stations/port-health-station-contact-list.html)

❑ **Prepare for laboratory testing needs.**

✓ Identify laboratories that can conduct rapid RT-PCR and serologic testing (including after hours and over weekends)

✓ Establish criteria for prioritizing weekend testing

✓ Know the capabilities of your public health laboratory and reference laboratories for RT-PCR testing of nasopharyngeal and oropharyngeal swabs and urine, as well as testing serum samples for IgM and IgG

✓ Review and update protocols and training for specimen packing, transport, shipping, and storage

✓ Know points of contact and requirements for shipping specimens to your designated Association of Public Health Laboratories (APHL) Vaccine-Preventable Diseases Reference Center. Find information at: **Vaccine Preventable Diseases** (www.aphl.org/programs/infectious_disease/Pages/VPD.aspx)

✓ If shipping samples to CDC, review the specimen acceptance requirements for the lab test requested: **CDC Test Directory** (www.cdc.gov/laboratory/specimen-submission/list.html)

✓ Review requirements for requesting testing with the Measles Vaccine-specific RT-PCR assay (MeVA). Find additional information about MeVA at: **MeVA Assay CDC Infosheet** (www.aphl.org/Materials/ID/MeVA_assay_CDC_Infosheet_Updated_2025.pdf)

✓ Provide guidance to commercial or hospital labs to alert any provider requesting testing for a suspect measles case to notify public health immediately, and not wait until test results are available (also prevents isolated serologic testing)

✓ Provide guidance to commercial or clinical laboratories of the need to refer all RT-PCR positive samples to CDC or the VPD Reference Centers for genotyping

✓ Work with electronic health record (EHR) systems to integrate pop-up alerts that remind providers regarding appropriate testing for measles (RT-PCR and serology) and to notify public health when measles testing is ordered for suspect cases

❑ **Plan for data needs and assess capacity for reporting.**

✓ Consider whether to leverage software (e.g., TIMS, Twillio, REDCap) for contact monitoring and management

✓ Develop dashboards (e.g. Power BI or Tableau) to display measles outbreak case and vaccination data with predetermined update cadence

✓ Agree on geographic granularity and demographics of case data to be released

✓ Create or update a targeted communication plan

✓ For populations at risk of measles outbreaks due to low vaccine coverage: Include culturally sensitive educational materials in preferred languages and at appropriate reading levels on the signs and symptoms of measles, as well as guidance on what individuals should do if they develop symptoms (e.g., call your healthcare provider in advance of an in-person healthcare visit)

✓ For the general public: Strongly recommend individuals to be up-to-date with all vaccinations, including MMR vaccine with **specific international travel MMR vaccine guidance** (www.cdc.gov/measles/travel/index.html)

✓ Provide templates for communication materials (e.g., pre-drafted press releases, health advisories for providers, educational materials, etc.). CDC materials available at: **Be Ready for Measles Toolkit** (www.cdc.gov/measles/php/toolkit/index.html)

❑ **Identify locations for isolation and/or quarantine of persons who cannot stay in their current location, particularly high-risk contacts (e.g., infants, pregnant women) who reside in congregate settings (e.g., shelters) or other settings where isolation or quarantine on-site would not be possible.**

❑ **Survey healthcare facilities on availability of IVIG (intravenous immune globulin) and IMIG (intramuscular immune globulin) for post-exposure prophylaxis. Consider developing educational materials or trainings on administration of post-exposure prophylaxis.**

PREPARE YOUR HEALTH DEPARTMENT FOR MEASLES, *IN THE LONG-TERM*

☐ **Identify sub-populations within your jurisdiction with lower rates of measles vaccination, specifically, close-knit communities with persistently low vaccination rates or poor access to healthcare and prior vaccine-preventable disease outbreaks, as well as settings at high risk for transmission such as schools, daycares, and shelters.**

  ✓ Assess feasibility and accuracy of jurisdictional Immunization Information Systems (IIS) to identify sub-populations that are at risk

  ✓ Focus on culturally competent community engagement, education, and vaccination efforts

  ✓ Identify and establish relationships with trusted community partners who work with these sub-populations who can amplify messages that raise measles awareness (including during international travel) and the importance of vaccinations

  ✓ Ensure health systems that directly serve these sub-populations are prepared to identify and respond to measles cases including testing, isolation, case investigations, contact tracing, post-exposure prophylaxis, and quarantine with symptom monitoring

  ✓ Review and update plans for larger scale vaccination efforts for potential measles cases in settings with low vaccination rates (e.g., planning for mobile vaccine clinics)

  ✓ Consider partnerships with local immunization or health coalitions

  ✓ Consider the development of a grass-roots community health worker program or intervention

☐ **Review current policies on vaccination requirements (e.g., schools, daycares, healthcare facilities, shelters, asylum refugee centers, new arrival landing zones/receiving centers).**

☐ **Consider additional strategies such as school immunization audits or immunization registry reviews.**

☐ **Keep abreast of global measles outbreaks and travel patterns within the jurisdiction.**

☐ **Educate your community.**

  ✓ Create general reminders or campaigns on the importance of keeping children up to date on all childhood vaccinations, including measles

  ✓ Provide outreach and information about the risk of measles to individuals traveling abroad, especially before spring and summer vacations. Remind people to be **up-to-date on MMR vaccination before their travel:** (www.cdc.gov/measles/travel/index.html)

☐ **Educate your healthcare providers.**

  ✓ Provide guidance on recognition, triage, diagnosis, and management of measles cases

  ✓ Share the **AAP Project Firstline poster** (downloads.aap.org/AAP/PDF/ThinkMeasles-final.pdf) with providers that contains information on the importance of reporting suspect cases immediately and not waiting for lab confirmation

  ✓ Ensure that providers know how to contact **local public health** (www.naccho.org/membership/lhd-directory) or **state, tribal,** or **territorial public health** (resources.cste.org/epiafterhours) in their jurisdiction regarding suspect case reporting and testing

  ✓ Vaccinate travelers accordingly before international travel as recommendations for international travel differ from routine MMR vaccine recommendations

  ✓ Encourage all healthcare personnel, including ancillary staff, to have appropriate evidence of immunity with 2 MMR vaccine doses, and to have evidence of immunity readily available to the health system if measles exposures occur

  ✓ Encourage healthcare systems and providers to have pop-up alerts in place in their electronic health record (EHR) systems to remind providers when vaccines, including MMR, are due

  ✓ Prepare to provide **guidance to healthcare personnel who may have been exposed to measles** (www.cdc.gov/infection-control/hcp/healthcare-personnel-epidemiology-control/measles.html)

☐ **Consider conducting tabletop exercises on responding to an outbreak with exposures in multiple settings (e.g., schools, healthcare, and in a higher-risk setting, such as a shelter) that would also require identifying areas for isolation of cases and/or higher-risk contacts not able to safely isolate or quarantine at home.**

Considerations for Special Settings | Measles

HEALTHCARE SYSTEMS PREPAREDNESS

- ☐ **Ensure healthcare personnel have presumptive evidence of immunity to measles. In this context, healthcare personnel are defined as paid and unpaid persons serving in healthcare settings who have the potential for direct or indirect exposure to patients on infectious materials.**

- ☐ **Increase awareness for front-line staff, especially if a measles case has been identified in your jurisdiction.**
  - ✓ Place signs at entrances to primary or acute care settings for patients and visitors to alert staff, patients and visitors about signs and symptoms of measles, especially for patients after recent international travel or exposure to measles. See an example from CDC: **Measles Isn't Just a Little Rash Fact Sheet** (www.cdc.gov/measles/resources/measles-isnt-just-a-little-rash-infographic.html)
  - ✓ Post **AAP Project Firstline posters** (downloads.aap.org/AAP/PDF/ThinkMeasles-final.pdf) in medical and nursing staff areas. CDC also has fact sheets for healthcare personnel in **English and Spanish** (www.cdc.gov/measles/hcp/communication-resources/clinical-diagnosis-fact-sheet.html)

- ☐ **Train staff, including front desk and triage staff, to know how to recognize suspected cases of measles, to be alert for suspected cases of measles and to immediately isolate suspected cases and minimize exposure to others (**www.cdc.gov/infection-control/hcp/measles/index.html**).**
  - ✓ Encourage patients or providers to call ahead to ensure patients are met at an access point that limits exposures (e.g., a back or side door)
  - ✓ Identify room(s) for isolation of suspect cases (airborne infection isolation room [AIIR] preferred, but at a minimum a private room with a door)
  - ✓ Healthcare providers should be familiar with appropriate infection prevention and control procedures, including use of respiratory protection (N95 or higher) when caring for a suspected case of measles
  - ✓ Be prepared to identify all patients, visitors, and staff who may have been exposed during the period when the appropriate transmission-based precautions were not in place
  - ✓ Review exposure classification criteria (i.e., high risk, low risk)
  - ✓ Review **guidance on infection prevention for healthcare personnel** (www.cdc.gov/infection-control/hcp/index.html)

- ☐ **Ensure coordination with other healthcare providers and public health.**
  - ✓ Be sure that other key clinical care partners know how to triage, manage, and report concerns, as well as manage exposures (e.g., Emergency Medical Services) and provide education on what and when to communicate with public health
  - ✓ Consider targeted outreach to healthcare settings in proximity to areas of lower measles vaccination rate, as these areas are more likely to see index cases and outbreaks
  - ✓ Encourage healthcare system partners to have established protocols for measles testing (e.g., routing PCR specimens to public health laboratories, if appropriate) and administering IVIG and IMIG for post-exposure prophylaxis

SCHOOL, DAYCARE, AND SUMMER CAMP/PROGRAM PREPAREDNESS

- ☐ **Meet with Department of Education, Child Care Resource and Referral organizations, and regulatory offices that oversee daycares and summer camps to discuss planning and response to measles outbreaks.**

- ☐ **Obtain current data on school and daycare vaccination rates and post data publicly when feasible via a school vaccination dashboard, including comparisons between measles and other childhood vaccinations.**

- ☐ **Prepare letters in advance for notifying parents and staff about potential measles exposures.**