

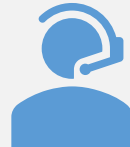
2024 ClinOps Training Series

Preparing for Measles: Review of Point of Dispensing Operations

*Presented by:
NYS DOH Epidemiology
Preparedness Unit and Office of
Health Emergency Preparedness*



The webinar will begin momentarily.



Audio will be connected directly through WebEx.



This webinar will be recorded and posted to the LMS for future viewing

Housekeeping

- Please mute yourself
- Polling / Knowledge Checks via Slido
- To Ask a Question
 - Use the Chat
 - We will have dedicated time at the end
- Complete the Post Event Survey that will be available immediately following the webinar



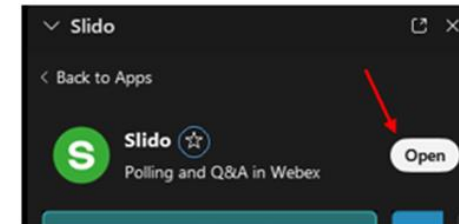
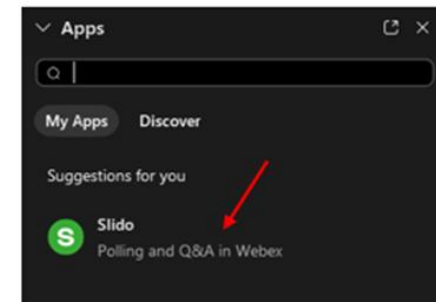
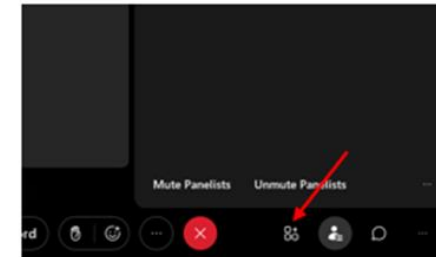
Department
of Health

Preparing for Measles: Review of Point of Dispensing Operations

David Casey, MA, MPH, RN
Deborah Trahan, MPH, MSN,
PPCNP-BC
Epidemiology Preparedness Unit
March 15, 2024

Steps to Using Slido

- Click on the “Apps” icon
- An “Apps” page section should appear on the right side of the Webex window with different selections. Click on the “Slido (Polling and Q&A)” app selection.
- Click "Open"
- You will see the Slido panel under your Participant panel.
- When a polling or quiz question is activated, you will see it show up here.
- Keep Slido Panel open
 - Do not "X" it out





<https://www.theguardian.com/world/2024/jan/02/japan-airlines-plane-fire-tokyo-haneda-airport>

March 2024

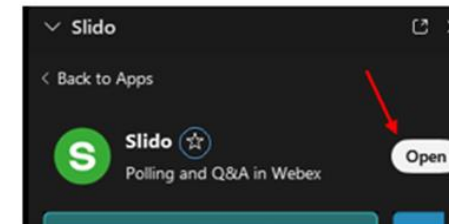
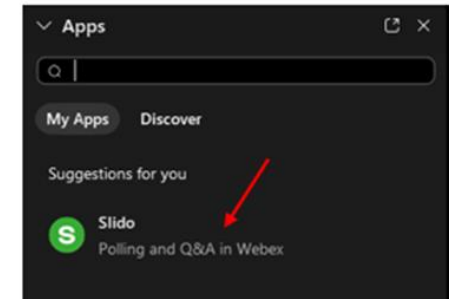
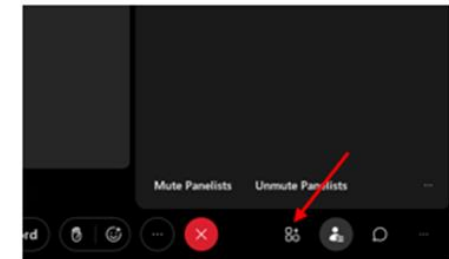
Objectives

By the end of this webinar, participants will be able to:

- List two reasons why measles is such a big public health concern
- Describe elements of a timely measles outbreak response
- Identify four important considerations when planning for measles outbreak, including Point of Dispensing (POD) activation
- Identify available resources to assist in measles outbreak and measles post-exposure prophylaxis (PEP) planning

Polling Questions

- How well prepared do you feel you and your department are for handling a measles outbreak?
 - Very prepared, we got this!
 - Somewhat prepared
 - Not very prepared
 - Yikes; Today??!!
- Have you looked at your current medical countermeasure (MCM) distribution plans specifically in consideration of a measles or similar outbreak?
 - Yes
 - No
- Do you feel there are any gaps in your disease outbreak plans? Type in your response in the provided textbox.



Measles Background

Epidemiology of Measles

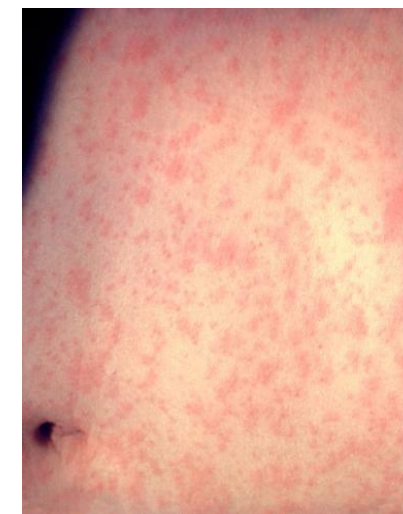
- One of the most communicable of all infectious diseases
 - Transmitted by infectious droplets (cough, sneeze)
 - Attack rate: 90% in close contacts
 - 95% herd immunity needed to stop ongoing transmission
 - In NYS, only 79.4% of children have one dose of MMR by 2 years of age
- Morbidity and mortality
 - Pneumonia, encephalitis
 - Case fatality rate: 1-3 of every 1000 cases reported
- Prevention measures: Routine immunization: 2-dose series
 - 1st dose at 12-15 months
 - 2nd dose at 4-6 years of age, before entering school
- Measles vaccine saves lives
 - **Measles vaccination prevented approximately 57 million deaths between 2000 and 2022**

<https://www.health.ny.gov/diseases/communicable/measles/vaccine/>

March 2024

Clinical Features of Measles

- Viral disease; acute onset
- Fever, rash, and the 3 C's
 - Cough
 - Coryza (runny nose)
 - Conjunctivitis (red eyes)
- Generalized rash
 - Looks like other morbilliform rashes, but starts on face and proceeds down the body
 - Initially discrete, then confluent
- May also have:
 - Koplik spots inside mouth, malaise, diarrhea, anorexia, lymphadenopathy



https://www.health.ny.gov/diseases/communicable/measles/providers/docs/2024-01-31_health_advisory.pdf <https://www.cdc.gov/measles/symptoms/photos.html>

Measles Complications

- Children younger than 5 years of age, adults older than 20 years of age, and immunocompromised persons are more likely to suffer from measles complications
- Ear infections - occurs in about 1 in 10 children with measles (may result in permanent hearing reduction)
- Pneumonia - as many as 1 in 20 children with measles gets pneumonia - the most common cause of death from measles in young children
- Death – 100-300 per 100,000 measles cases
- Measles during pregnancy increases the risk of early labor, miscarriage, and low birth weight infants
- Measles virus infects immune cells, causing acute immune suppression.

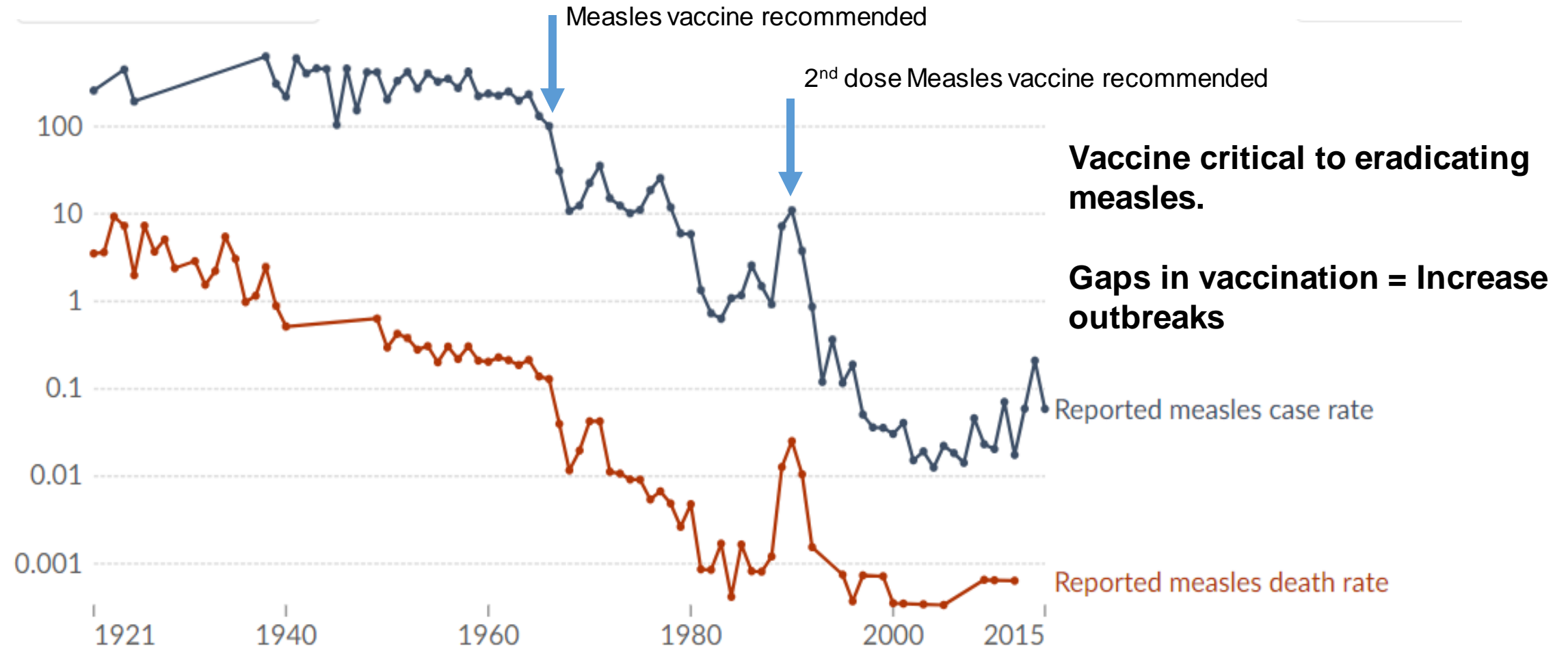
<https://www.health.ny.gov/diseases/communicable/measles/>

<https://www.cdc.gov/measles/symptoms/complications.html>

https://www.science.org/doi/10.1126/science.aay6485?utm_source=substack&utm_medium=email

March 2024

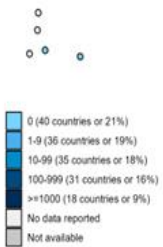
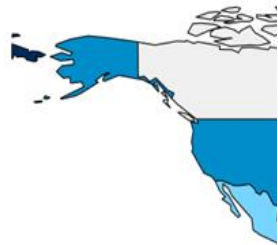
U.S. Measles Case Rates and Mortality



March 2024

Measles is Worldwide

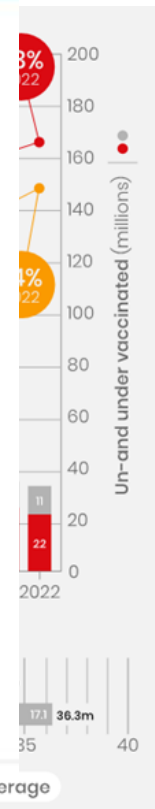
Number of Reported Measles Cases in the WHO European Region (July-December 2023) (MCV)



World Health Organization
Map production: IAV
Data source: IVB

A 30-fold rise of measles cases in 2023 in the WHO European Region warrants urgent action

14 December 2023 | News release | Reading time: 2 min (675 words)



● No MCV1 ● No MCV2 ○ MCV1 coverage ○ MCV2 coverage

WHO/UNICEF Estimates of National Immunization Coverage (WUENIC)
<https://www.who.int/europe/news/item/14-12-2023-a-30-fold-rise-of-measles-cases-in-2023-in-the-who-european-region-warrants-urgent-action>

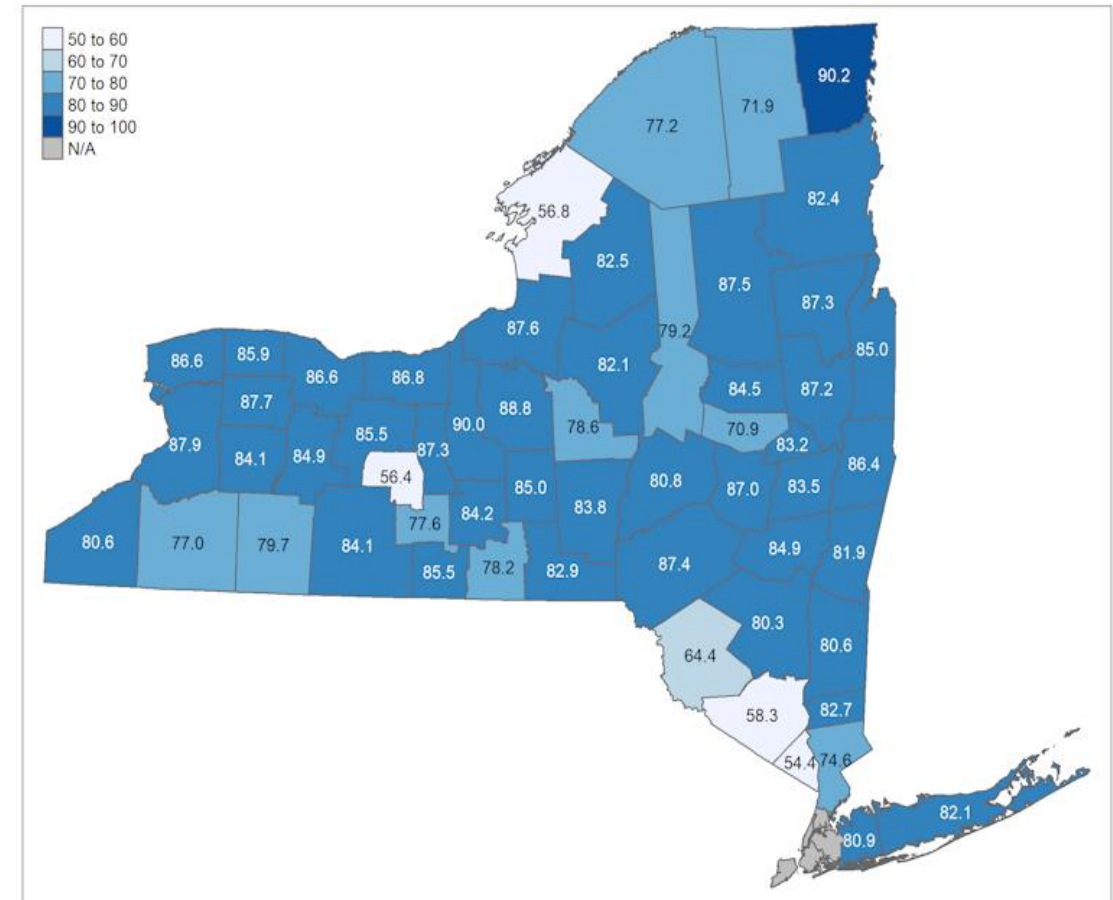
March 2024



Why does this matter to NYS?

- NYS outbreak in 2018-2019: 426 cases
- Recently reported cases in New York City and neighboring states
- There are susceptible individuals all over NYS
 - Unvaccinated
 - Partially-vaccinated
- No county is immune to a measles outbreak; more likely **WHEN** not **If**

MMR Vaccination Rates by County
Receipt of 1 MMR dose by 2 years of age



Knowledge Check #1

Why is measles such a concern even if there is only one confirmed case?

Check all that apply:

- Easily transmitted through the air
- Easily transmitted through surface contact
- Highly infectious
- Needs a high level of herd immunity to stop transmission

Reminder Join Slido Quiz and wait for first question to appear

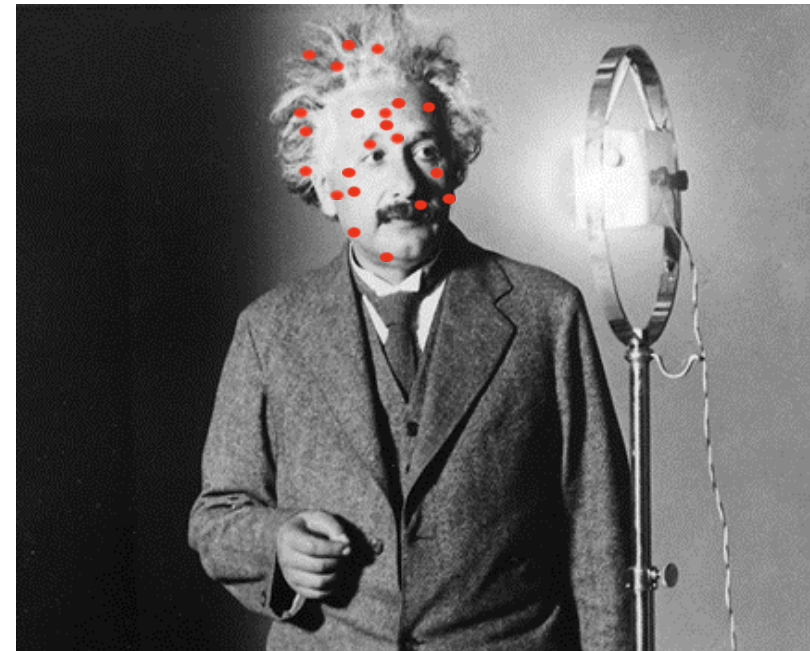
Answer: All of them! Measles virus can live on contaminated surfaces and in the air for 2 hours. It has a high attack rate and needs at least 95% measles containing vaccine (MCV) immunization coverage.

Knowledge Check #2

True or False: It is easy to tell the difference between measles and a bad day with an irritating shampoo.

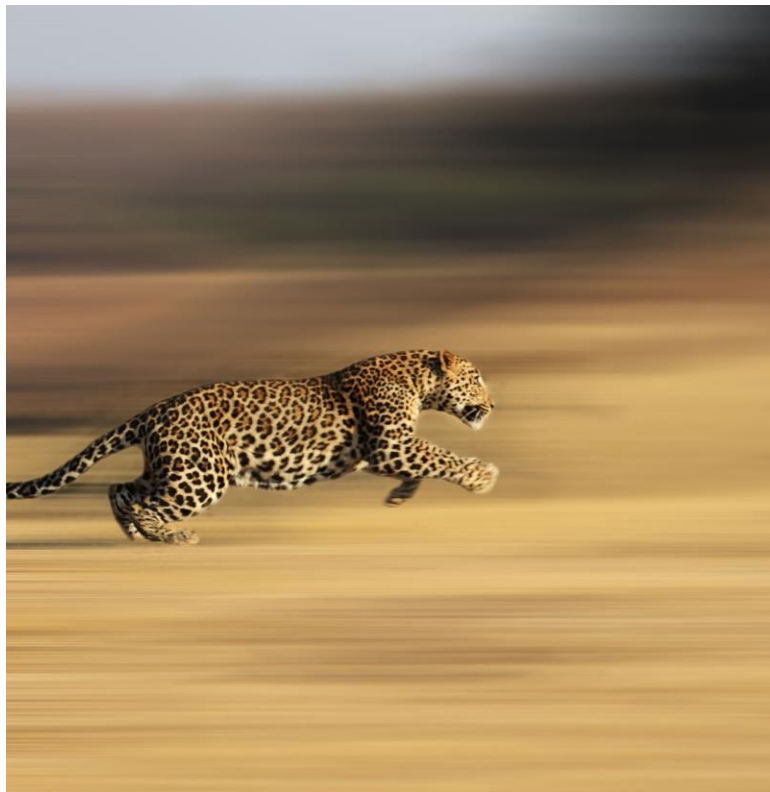
- True
- False

Answer: It depends! It depends on whether you have ever seen a measles rash before, or a bad day with an irritating shampoo! Since most providers have had limited experience with measles patients in the US, this can be a challenge for many.



Measles Outbreak Response

Act *FAST!*



Before Outbreak:

- Review plans
- Make sure you have needed supplies
- Train / review plans & procedures with staff

Outbreak Identification:

- CDC - 'Isolate, Notify, Test, Manage, Vaccinate'
- Isolate contacts
- Notify NYS DOH
- Sample collection, efficient handling, lab testing
- Conduct case investigation
- Contact tracing

Within **72 hours!**

- Identify exposures, those at risk
- Provide Post-Exposure Prophylaxis (PEP)

Measles Case Management and Post-Exposure Prophylaxis

- Treatment of Confirmed Cases
 - There is no treatment for measles; provide symptomatic care
- Post-Exposure Prophylaxis (PEP)
 - **Eligibility** = Exposed to person with measles + Not vaccinated, under-vaccinated + No confirmation of disease or immunity + Birth after 1957 = Susceptible = Give PEP
- Medical Countermeasure (MCM)
 - Measles containing vaccine (MMR / MMRV)
 - Measles immune globulin
 - Infants (Intramuscular)
 - Pregnant people and severely immunocompromised persons (Intravenous IG – only given in hospital)

See 2019 New York State Department of Health (NYSDOH) Guidance Summary

https://commerce.health.state.ny.us/HCSRestServices/HCSContentServices/docs?docPath=/hcs_Documents/Source/hin/hinSrc/10CC53121B222B59E0630447A8C0E074.pdf

<https://www.cdc.gov/measles/hcp/#treatment>

March 2024

COVID-19 vs. Measles Medical Countermeasures

COVID-19:

- Storage and Handling
 - Ultra-cold freezer to refrigerator temps
 - Careful cold-chain transport planning

- Countermeasures - Covid-19 vaccines
 - MRNA, Sub-unit protein
 - 1/2/3 doses for complete series
 - One vial + diluent for some
 - Different doses / vials for different ages

- Vaccine Administration - Give Intramuscularly
 - Everyone should be vaccinated

- Fact Sheet for Recipient and Caregiver

- ***You remember all of this! ...whether you want to or not! :)***

Measles:

- Storage and handling
 - Regular freezer to refrigerator temps
 - Common vaccine transport planning

- Countermeasures - MMR, MMRV, Immune Globulin
 - Live virus vaccine; one vial + diluent
 - 2 doses for complete series
 - Vaccine can be given to 6-11 month olds – but must repeat
 - MMRV; if available, only 12 months – 12 years
 - IMIG for <12 months

- Vaccine Administration - Give IM or SQ
 - Only those not already immune need PEP

- Vaccine Information Statement (VIS)

Knowledge Check #3

What measles post-exposure prophylaxis medical countermeasures (MCM) can be administered in a POD?

Check all that apply:

- Measles containing vaccine (MMR / MMRV vaccines)
- Antibiotics
- Measles immune globulin, given intravenously
- Measles immune globulin, given intramuscularly
- Antivirals

If you accidentally closed out of Slido, click on:
Apps (3 squares at bottom of screen) >Slido >Open

Answer: MMR/MMRV

and possibly Measles immune globulin, given intramuscularly to infants (maybe; for some Local Health Departments).

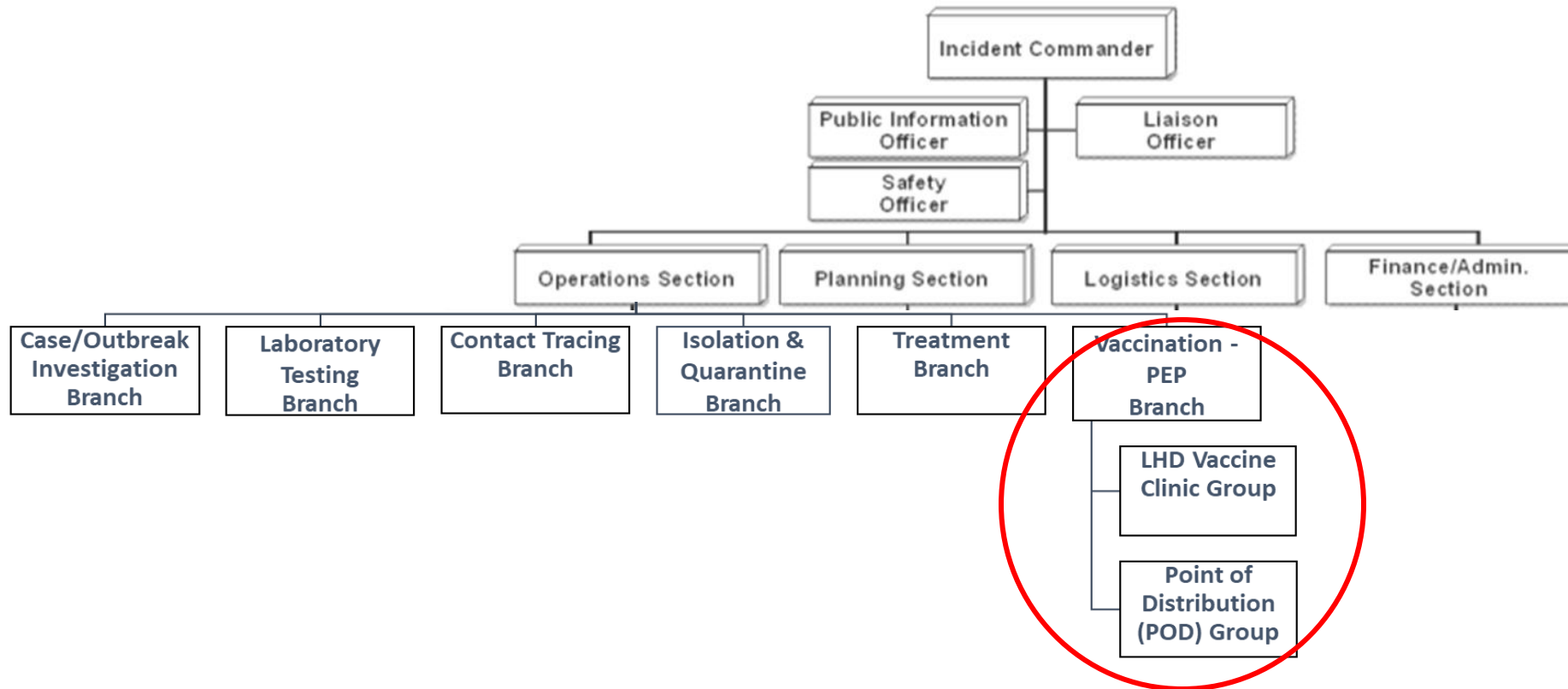
Measles is a viral infection so antibiotics would not help. There is no antiviral for measles infection. And some exposed persons need immune globulin given IV, but this would not be done in a POD setting.

Measles Medical Countermeasure (MCM) Clinic Planning

Operations Overview

- Review Local Health Department Medical Countermeasure Clinical Operations Planning Guidance and Recommendations
- The Operations section in the Incident Management Structure is typically the largest section in any response

ICS Organizational Structure and Elements



...Of course, incident size dictates response size.

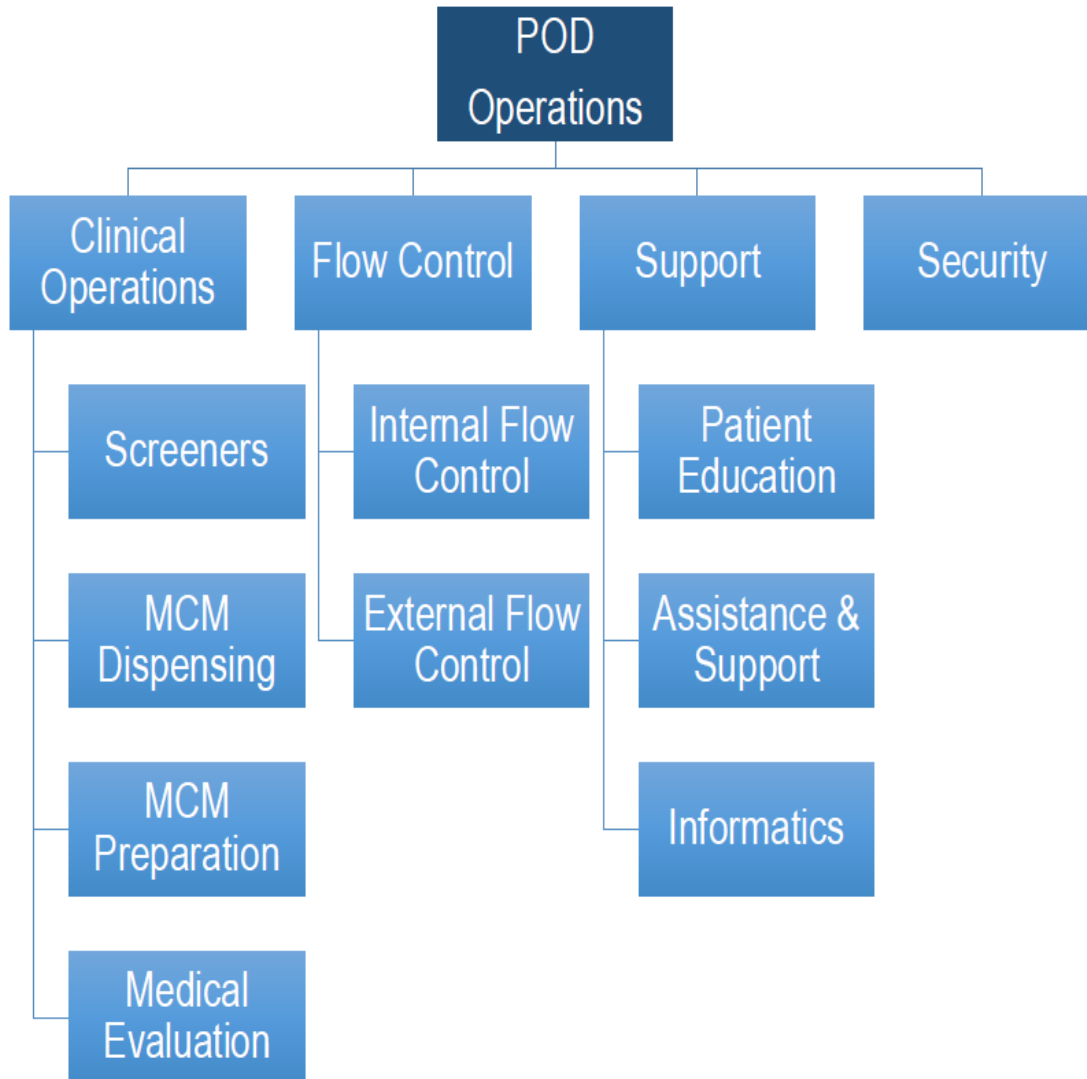
Medical Countermeasure Clinic Checklist

Clinic Details	Special Considerations	
Infection Control	Adequate air circulation is important – Heating Ventilation and Air Conditioning (HVAC), patient flow, identification/handling of symptomatic individuals, PPE – staff/visitors, biohazard disposal, hand-washing, cleaning, etc.	<input type="checkbox"/>
Space	Contracts/MOUs up to date, all building facilities operational (again, HVAC and cleaning), parking, exits, fire, internet, telephones, pharmacy area, privacy, quiet area, etc.	<input type="checkbox"/>
Training	Just In Time Training (JITT), Job Action Sheets, shadowing, mentoring, resource binders, etc.	<input type="checkbox"/>
Safety	Site security, reporting close calls and adverse events, non-medical and medical adverse event planning, violent persons, clinic/POD closure plan, emergency communications, notifications, etc.	<input type="checkbox"/>
Supplies	Tables, chairs, computers, cables, paper/pens, refrigeration, vaccine, syringes and needles in range of sizes, sharps containers, POD kits ready, etc. For logistics needs – use Finance/purchasing, NYS OEM (last resort)	<input type="checkbox"/>
Communication/ Signage/ Language needs	Public signage, communications capabilities (verbal, telephone, text, email, radio, etc.), have paper forms available for downtime operation, foreign language assistance, Vaccine Information Statements (VISs) in multiple languages, etc.	<input type="checkbox"/>
Roles	Security, Greeters, Triage, Registration, Vaccinators, Data Operators, Medical Evaluation, Patient Observation, POD Manager, Safety Officer, Information Officer, Logistics Leader, etc.	<input type="checkbox"/>
Procedures	Medical countermeasure (MCM) management and administration procedures in place as needed	<input type="checkbox"/>
Eligibility	Exposure, age, contraindications, current illness(es), VIS given, consent obtained	<input type="checkbox"/>
Documentation	Vaccine temp logs, vaccine receipt, staffing schedules/logs, CDMS registrations/records, shift reporting, adverse event reporting, VAERS, ICS Forms (if used), etc.	<input type="checkbox"/>
Control Checks / Quality Improvement	Proper vaccine administration verified, correct documentation (CDMS), patient through-put, staffing issues, etc.	<input type="checkbox"/>

Measles-Specific Clinic Checklist

Clinic Details	Measles Considerations	
Screen for symptomatic recipients	Pre-Triage, know measles symptoms	<input type="checkbox"/>
Perform medical screening for MCM contraindications	Review MMR/MMRV/IMIG CDMS Forms to become with vaccine medical screening questions	<input type="checkbox"/>
Demonstrate proper MCM dispensing / administration	MMR/MMRV vaccine - proper shipping/handling/storage, proper diluent, proper preparation, IM or SQ injection, etc. Vaccine should be administered immediately after reconstitution Measles Immune Globulin – correct dose calculation, proper preparation, intramuscular injection for infants, etc.	<input type="checkbox"/>
Access measles-specific reference materials	MMR/MMRV/IMIG - Non-patient specific standing orders, administration guidance, FDA package insert	<input type="checkbox"/>
Document MCM administration, refusals, referrals and all other issues	MMR/MMRV/IMIG CDMS Form, or other means of New York State Immunization Information System (NYSIIS) reporting	<input type="checkbox"/>
Provide patient-appropriate education, anticipatory guidance, etc.	Measles Vaccine Information Sheets (VIS), other appropriate handouts, Parental safety concerns	<input type="checkbox"/>

Measles POD Operations



Consider the following:

- Review Public Health Asset Distribution (PHAD) Plan in consideration of measles response requirements
- Are POD Plans relevant for measles?
 - ✓ Appropriate location (close to those exposed and / or at risk?)
 - ✓ Ventilation on site?
 - ✓ Cleaning
 - ✓ Pharmacy / vaccine preparation area (storage, freezer, refrigerator, etc.?)
 - ✓ Infant / child areas?
 - ✓ Vaccinator experience?
 - ✓ Medical Evaluator experience?

General POD Staff Briefing Checklist

New York State Department of Health (NYSDOH)
 Medical Countermeasure (MCM) Clinical Operations (C/Ops)
 Point of Dispensing (POD) Operations Job Aid – Briefings and Trainings Checklist

POD Staff General & Safety Briefing (Pre-Operations)
 This is a briefing conducted between the POD Manager, Operational Staff.

Lead	Items
POD Manager	<ul style="list-style-type: none"> Welcome Operational Goals General Incident
Safety Officer	Safety Briefing: <ul style="list-style-type: none"> Social Distancing Tripping Hazards Site Specific Accidents
Security Lead	Security Briefing: <ul style="list-style-type: none"> General Access Emergency Aggression
Logistics Lead	<ul style="list-style-type: none"> Radiation Reception IT Work
Planning & Admin Lead	<ul style="list-style-type: none"> Scheduling Staffing Supplies
POD Manager	<ul style="list-style-type: none"> Summary Questions

POD Station Area Briefings and Just-in-Time Training (JITT) (Pre-Operations)
 Following the General and Safety Briefing, Station Areas should be broken down to have Station Area leads provide Staff Briefings and JITT. Each Station Area briefing should review or reinforce the following:

✓	Briefing Item	Added Notes
	Station Function	
	Movement of Recipients prior to and post from the Station (Flow)	
	Station Resources (Equipment, supplies, forms)	
	Station Specific Safety Considerations	
	Review of all Job Action Sheets (JAS) and Job Aids	
	Station and Workstation specific JITT	
	Operational and Access Test of all Equipment	

Clinical Briefing (Pre-Operations)
 Due to the clinical nature of a POD as an emergency operation, the clinical workstations (Vaccine Administration, Medical Evaluation, Observation Area, etc.) should also be briefed on the following additional items:

✓	Briefing Item	Added Notes
	Vaccine Storage and Handling	
	Sharps Safety and Handling	
	Sharps & Biohazard Waste	
	PPE Considerations	
	Patient Privacy and Information Security	

- POD logistics overview (parking, exits, facilities, dress, food, stations, schedules, etc.)
- Station areas, leaders, staff positions
- Job Action Sheets (JAS), job aids, Just In Time Training (JITT), shadowing, mentoring, feedback
- Reporting (through-put, shift, incident, etc.)

CDMS May be Just the Right Tool

- Your criteria will vary and can include:
 - Number of persons at risk
 - Patient ability and willingness to get vaccinated
 - Patient ability and willingness to get to POD
 - Time available to vaccinate
 - Available staff and resources
 - Many other factors
- It is the LHD's decision to use CDMS:
 - CDMS is efficient when properly used
 - CDMS data transfers to NYSIIS
 - Not required, but helpful

**If no Event or Form exists for your operation,
email: cdms@health.ny.gov

March 2024



In HCS go to:
Groups > LHD > Preparedness >
Medical Countermeasure > MCM ClinOps

Or go to:
[R2 CDMS Planning Guide](#)

Health Commerce System (HCS)

HCS has a library of resources. To find resources:

First, in the **upper right corner** of the HCS home page, click on **My Content**, and **Documents by Group**

Then you can look for many kinds of resources – diseases, emergency preparedness, and many other topics, such as the following:

- Measles:

Groups ▶▶ LHD ▶▶ Diseases and Conditions ▶▶ Vaccine Preventable Diseases ★ *Add to Fav.*

- Medical Countermeasure (MCM) Clinical Operations:

Groups ▶▶ LHD ▶▶ Preparedness ▶▶ Medical Countermeasure Operations ▶▶ MCM Clinical Operations



MCM Clinical Operations Dispensing Plans Guidance Documents

Show entries

Change this to “100” to ensure you see all the documents available!

March 2024

Knowledge Check #4

What are the three C's of signs of measles?

Check all that apply:

- Cough
- Colon Cleanse
- Conjunctivitis (red eyes)
- Coryza (runny nose)
- Congenital Cyclopia

Answer: Cough - - Conjunctivitis - -
Coryza

If you accidentally closed out of Slido, click on:
Apps (3 squares at bottom of screen) >Slido >Open

Knowledge Check #5

Who would be eligible to receive measles post-exposure prophylactic? Select all that apply.

Check all that apply:

- A. Anyone born before 1957
- B. Anyone unvaccinated or under-vaccinated
- C. Anyone who has no laboratory confirmation of disease or immunity
- D. A and B
- E. B and C

Answer: E. Anyone unvaccinated or under-vaccinated AND Anyone who had no laboratory confirmation of disease or immunity to disease. Those born before 1957 have presumed immunity.

Join Slido Quiz and wait for first question to appear

Knowledge Check #6

If planning for a POD to respond to a measles outbreak, what measles-specific details should you consider?

Check all that apply:

- Measles is extremely contagious; screen for those with symptoms
- Measles is extremely contagious; consider droplet and airborne precautions and PPE
- Measles vaccine is given subcutaneously; need smaller needles
- Measles immune globulin is only for some; those <12 months, pregnant, severely immunocompromised
- Measles vaccine has been given for years; those not familiar still need training

Join Slido Quiz and wait for first question to appear **Answer:** All of them! See Q&A document for information on vaccine administration

NYS Department of Health Resources

NYS DOH website:

<https://www.health.ny.gov/diseases/communicable/measles/>

January 31, 2024 - Health Advisory: Be Vigilant for Measles Cases

https://www.health.ny.gov/diseases/communicable/measles/providers/docs/2024-01-31_health_advisory.pdf

Medical Countermeasures (MCM) Clinical Operations (ClinOps) Guidance & Recommendations

https://commerce.health.state.ny.us/HCSRestServices/HCSContentServices/docs?docPath=/hcs_Document s/Source/hin/hinSrc/B34FB7F135AC2B2CE0530547A8C08849.pdf

Measles Outbreak Postexposure Prophylaxis (PEP), Voluntary Restriction (VR), and Monitoring:

https://commerce.health.state.ny.us/HCSRestServices/HCSContentServices/docs?docPath=/hcs_Document s/Source/hin/hinSrc/10CC53121B222B59E0630447A8C0E074.pdf

Measles Outbreak Control Guidelines November 2019:

https://commerce.health.state.ny.us/HCSRestServices/HCSContentServices/docs?docPath=/hcs_Document s/Source/hin/hinSrc/06FE6C738EDB0DEDE0630547A8C0CD63.pdf

Measles Resources

Measles Response Outbreak Guidance

<https://iris.who.int/bitstream/handle/10665/360891/9789240052079-eng.pdf?sequence=1>

CDC Clinical Outreach and Communication Activity

<https://emergency.cdc.gov/newsletters/coca/2024/012524.html>

Manual for the Surveillance of Vaccine-Preventable Diseases

<https://www.cdc.gov/vaccines/pubs/surv-manual/chpt07-measles.html>

Global Measles Outbreaks

<https://www.cdc.gov/globalhealth/measles/data/global-measles-outbreaks.html>

Immunize.Org - MMR standing order templates for children and teens and adults

<https://www.immunize.org/wp-content/uploads/catg.d/p3079a.pdf>

<https://www.immunize.org/wp-content/uploads/catg.d/p3079.pdf>

Point of Dispensing (POD) Resources

New York State Health Emergency Preparedness Coalition. NYSDOH Point of Dispensing (POD) Resources

<https://www.urmc.rochester.edu/emergency-preparedness/covid-19-pod-resources-and-training/nysdoh-point-of-dispensing-pods-resources.aspx>

CDC, Health Care Closed Points of Dispensing

<https://www.cdc.gov/orr/readiness/resources/healthcare/closedPODtoolkit.htm>

NACCHO POD toolkit

<https://toolbox.naccho.org/pages/index.html#>

HHS ASPR, Technical Resources, Assistance Center, and Information Exchange (TRACIE)

<https://asprtracie.hhs.gov/>

Thank You!

Questions?



March 2024