


+  
○ · Ripping Your Hair  
Out: How to Roll  
Out Vaccine X

Presented by: Amber Tirmal, MPH and Tom McCleaf


Philadelphia Department of Public Health and Pennsylvania Department of Health




# COVID Background

- Global pandemic.
  - Novel virus with no readily available vaccine.
  - Health departments had months to prepare for vaccine, but no clear deadline until days before vaccine arrived.
  - Unexpected rollout leadership (Operation Warp Speed).
  - Guidance on who was to be vaccinated immediately was changed rapidly.
  - Cadence of vaccine delivery was unknown at first.
- 


# COVID Vaccine Challenges

- Vaccine product was a “new” type (mRNA).
  - Vaccine required specialized storage and handling to maximize expiration dates.
  - Vaccine product initially came in very large quantity packages.
  - Messaging going to public at the same time as program.
  - Demand outstripped supply.
  - By the time supply was ample, demand was dropping.
- 


# COVID Vaccine Successes

- Strong focus on equitable distribution.
  - Increased funding to programs allowed for new partnerships which we hope to maintain long term.
  - Public/Private partnerships helped to create and distribute large amounts of vaccine quickly.
  - COVID Vaccines have saved an estimated 3 million lives in the U.S. and over \$1 Trillion in healthcare costs.
  - Staff have gotten a large amount of experience and subject matter expertise during a high pressure and compressed amount of time.
- 


# Mpox Background

- Relatively rare disease, spread through person-to-person contact.
  - Symptoms include rash on hands, feet, chest, face, mouth, or on or near genitals.
  - Other symptoms include fever, chills, exhaustion, muscle aches, cold symptoms.
  - In spring 2022, increase in cases were being reported in the U.S.
  - Cases were primarily affecting men who have sex with men.
  - While previously called Monkeypox the name was changed to Mpox to help avoid stigma.
- 


# Mpox Vaccine Challenges

- Vaccine existed, but not originally recommended.
  - No mass production.
  - Only available through Strategic National Stockpile (SNS).
  - Different ordering system.
  - Limited recommendation to subpopulation.
  - Many cooks in the kitchen (CDC, ASPR, Etc.).
  - Changes to administration type (IM to ID) midstream (and almost too late), ID left marks on a community that is already isolated (stigma).
  - Extremely limited distribution.
- 

# Mpox Vaccine Successes


- Vaccine already existed, just needed to be recommended.
  - Partnerships established during COVID were leveraged to assist with vaccine distribution.
  - Collaboration with STD and HIV partners which allowed use of their existing networks.
  - Strong partnerships among state and local health departments, including the Pennsylvania and Philadelphia departments and their immunization programs.
  - Vaccinations lead to declining case counts.
- 

# RSV Background


- Respiratory Syncytial Virus (RSV) is a common respiratory virus that infects the nose, throat, lungs and breathing passages.
  - RSV can be serious for infants, toddlers, and adults over 60.
  - In children <1, annually it leads to about 2.1 million outpatient visits, 58,000-80,000 hospitalizations, and about 100-300 deaths in children younger than 5.
  - Additionally in adults over 65, it leads to about 6,000-10,000 deaths annually
  - Prior to the 2023/2024 season there were no vaccines, and the only monoclonal antibody was only recommended to high-risk babies (and it was expensive)
- 



# Nirsevimab Challenges

- New monoclonal antibody for neonates and young babies entering their first RSV season approved in 2024.
  - Target providers not enrolled in VFC Program everywhere.
  - Not enough product for demand due to typical new product algorithm used by manufacturers.
  - No ordering caps upfront from CDC, so disproportionate ordering occurred across the country.
  - CDC “borrowing” messaging was confusing and often conflicted with local policy.
  - New MAB rolled out at the same time as new vaccines for older adults/pregnant persons which caused confusion and some incorrect administrations.
- 

# Nirsevimab Successes

- VFC Program enrollment by birthing hospitals increased equitable access.
  - White House involvement helped increase production.
  - Nirsevimab is shown to be 90% effective at preventing RSV-associated hospitalization in infants during their first RSV season.
  - This first season of having an immunization product available has been a great learning experience and improvements will be implemented for 2024-2025 season and beyond.
  - This will include additional nirsevimab being available to meet demand.
- 

# Explanation and Transition to Tabletop Scenarios