What the Vaccine Means for EMS Operations
Today

- Latest on COVID vaccines and variants
- The science behind staying vigilant
- How vaccines impact patient care, operations, quarantine and more
- Preparing for the next pandemic, now
- Questions
Today’s Speakers

► CDR Bryan E. Christensen, PhD, MEPC
  ► Epidemiologist and Industrial Hygienist, US Centers for Disease Control and Prevention
  ► Environmental Health Officer, US Public Health Service

► Kenneth A. Scheppke, MD, FAEMS
  ► State EMS Medical Director, Florida
  ► Chief Medical Officer for several fire-rescue agencies

► Jon Krohmer, MD, FACEP, FAEMS
  ► Director, NHTSA Office of EMS
  ► EMS/Prehospital Team Lead, Federal Healthcare Resilience Working Group
Vaccines, Exposure and Risk

CDR Bryan E. Christensen, PhD, MEPC
WHERE WE ARE NOW: CASE RATE

CDC COVID Data Tracker, March 25, 2021
**WHERE WE ARE NOW: VACCINATION RATE**

<table>
<thead>
<tr>
<th>Total Vaccine Doses</th>
<th>At Least One Dose</th>
<th>Fully Vaccinated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delivered 169,223,125</td>
<td>85,472,166</td>
<td>46,365,515</td>
</tr>
<tr>
<td>Administered 130,473,853</td>
<td>85,234,448</td>
<td>46,298,888</td>
</tr>
</tbody>
</table>

Learn more about the distribution of vaccines.

<table>
<thead>
<tr>
<th>People Vaccinated</th>
<th>At Least One Dose</th>
<th>Fully Vaccinated</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of Total Population</td>
<td>25.7%</td>
<td>14%</td>
</tr>
<tr>
<td>Population ≥ 18 Years of Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>% of Population ≥ 18 Years of Age</td>
<td>33%</td>
<td>17.9%</td>
</tr>
<tr>
<td>Population ≥ 65 Years of Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>% of Population ≥ 65 Years of Age</td>
<td>70.3%</td>
<td>43.8%</td>
</tr>
</tbody>
</table>

Read more about how these data are reported.

CDC COVID Data Tracker, March 25, 2021
VACCINE EFFICACY AND DURATION

► Reactions
  ▶ Injection site pain, mild flu-like symptoms

► Effectiveness
  ▶ 72 – 95% (preliminary)

► Immunity
  ▶ Under investigation
  ▶ Manufacturers estimate 2-3 years
IPC CHALLENGES

► PPE Quality
► PPE selection and usage
  ▶ Respirator type: FFR, PAPR, elastomeric
  ▶ Gowns vs coveralls
► Ventilation
  ▶ Air change rate
► Cleaning and disinfection
  ▶ EPA List N disinfectants
HIERARCHY OF CONTROLS – COVID-19

Most Effective

Pre-hospital screening, home isolation, contact tracing
Use other medications to limit aerosol generating procedures
Ventilation, cleaning & disinfection, hand hygiene
HCP vaccination, IPC training, HCP screening, sick leave
Appropriate PPE, adequate supplies, training, auditing, competency

Least Effective

Elimination
Substitution
Engineering Controls
Administrative Controls
PPE
VACCINES, PPE AND QUARANTINE

- Continued IPC practices
- Post-exposure quarantine status
- Unchanged guidance
  - Travel
  - Testing
  - Use of PPE
    - Universal PPE (facemasks and eye protection)
WHERE DO WE GO

► Increase vaccination rates
► Continue IPC training
► Improve messaging
► Maintain vigilance
► Focus on resiliency
► Follow the science
COVID-19 Pandemic and Vaccination
What are the Lessons for EMS

Kenneth A. Scheppke, MD, FAEMS
State EMS Medical Director
Florida Department of Health
THIS IS NOT THE LAST PANDEMIC!!

- World is set up for pandemics
- Mass Travel
- Encroachment on wilderness/new pathogens/zoonoses
- Population Density
Recent Influenza Pandemics

• 1918 H1N1 “Spanish Flu” 50M dead worldwide, 625k dead in USA
• 1957 H2N2 “Asian Flu” 1.1M dead worldwide, 116k dead in USA
• 1968 H3N2 avian flu 1M dead worldwide, 100k dead in USA
• 2009 H1N1 “Swine Flu” estimated 150 to 500k dead worldwide, 12.5k dead in USA
Have Pandemics Ever Changed EMS Behavior?

- *EMERGENCY!* First aired in 1972

- HIV Pandemic First Recognized in USA in 1981

- Gloves are now universal
Will Masks Ever Go Away... NO!!

To Prevent Influenza!

Do not take any person’s breath.
Keep the mouth and teeth clean.
Avoid those that cough and sneeze.
Don’t visit poorly ventilated places.
Keep warm, get fresh air and sunshine.
Don’t use common drinking cups, towels, etc.
Cover your mouth when you cough and sneeze.
Avoid Worry, Fear and Fatigue.
Stay at home if you have a cold.
Walk to your work or office.
If sick, use a gauze mask like in illustration.
Frontline Role in COVID Pandemic Will Change EMS Forever
Thoughts on Vaccine Decision by EMS

• Pandemic will be with us until 80% or more have immunity

• Choose: Vaccine or Disease

• Disease is Russian Roulette, Vaccine is a Known Entity
Paid Time off or Sick Leave Time??

Vaccination Begins
Families First Coronavirus Response Act: Employee Paid Leave Rights

**EXPIRED**
**DEC 31, 2020**

Two weeks (up to 80 hours) of paid sick leave at the employee’s regular rate of pay where the employee is unable to work because the employee is quarantined (pursuant to Federal, State, or local government order or advice of a health care provider), and/or experiencing COVID-19 symptoms and seeking a medical diagnosis; or

Two weeks (up to 80 hours) of paid sick leave at two-thirds the employee’s regular rate of pay because the employee is unable to work because of a bona fide need to care for an individual subject to quarantine (pursuant to Federal, State, or local government order or advice of a health care provider), or to care for a child (under 18 years of age) whose school or child care provider is closed or unavailable for reasons related to COVID-19, and/or the employee is experiencing a substantially similar condition as specified by the Secretary of Health and Human Services, in consultation with the Secretaries of the Treasury and Labor; and

Up to an additional 10 weeks of paid expanded family and medical leave at two-thirds the employee’s regular rate of pay where an employee, who has been employed for at least 30 calendar days, is unable to work due to a bona fide need for leave to care for a child whose school or child care provider is closed or unavailable for reasons related to COVID-19.
<table>
<thead>
<tr>
<th>Vaccines are up to 95% Effective at Preventing Symptoms Who Pays for Time off Now??</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quarantine post exposure</td>
</tr>
<tr>
<td>Outbreaks</td>
</tr>
<tr>
<td>Staffing/Overtime due to Outbreaks</td>
</tr>
<tr>
<td>Peer Pressure for Unvaccinated – Masks in Station</td>
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<tr>
<td>Work Comp for Long Haulers?</td>
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</tbody>
</table>
Pandemic Planning and Other Side Effects of COVID Response

• Learning how to vaccinate
• Learning how to interact with DOH/Other New partners
• Role in Testing, Infection Control Teaching, Countermeasure Administration

• **Community Paramedicine**
• Payment for service rather than transports
• Vaccine Technology Improvements
Where Can I Find the Latest Information on the Vaccines?

- https://www.cdc.gov/vaccines/covid-19/info-by-product/clinical-considerations.html
  
  **Just Updated March 5, 2021**

  Regular updates to common issues and concerns are addressed on this page

Information on Underlying Conditions Found Here:

Thank You!
Questions?
Please submit questions through the webinar platform

For info on COVID-19 and EMS:
ems.gov/projects/coronavirus_covid-19_resources.html

Latest Information from the CDC:
cdc.gov/coronavirus/2019-nCoV/index.html

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Dr. Jon Krohmer • jon.krohmer@dot.gov
Visit [ems.gov](https://ems.gov) for more info on COVID-19 and other national EMS initiatives.
Thank You

TAK THE SHOT