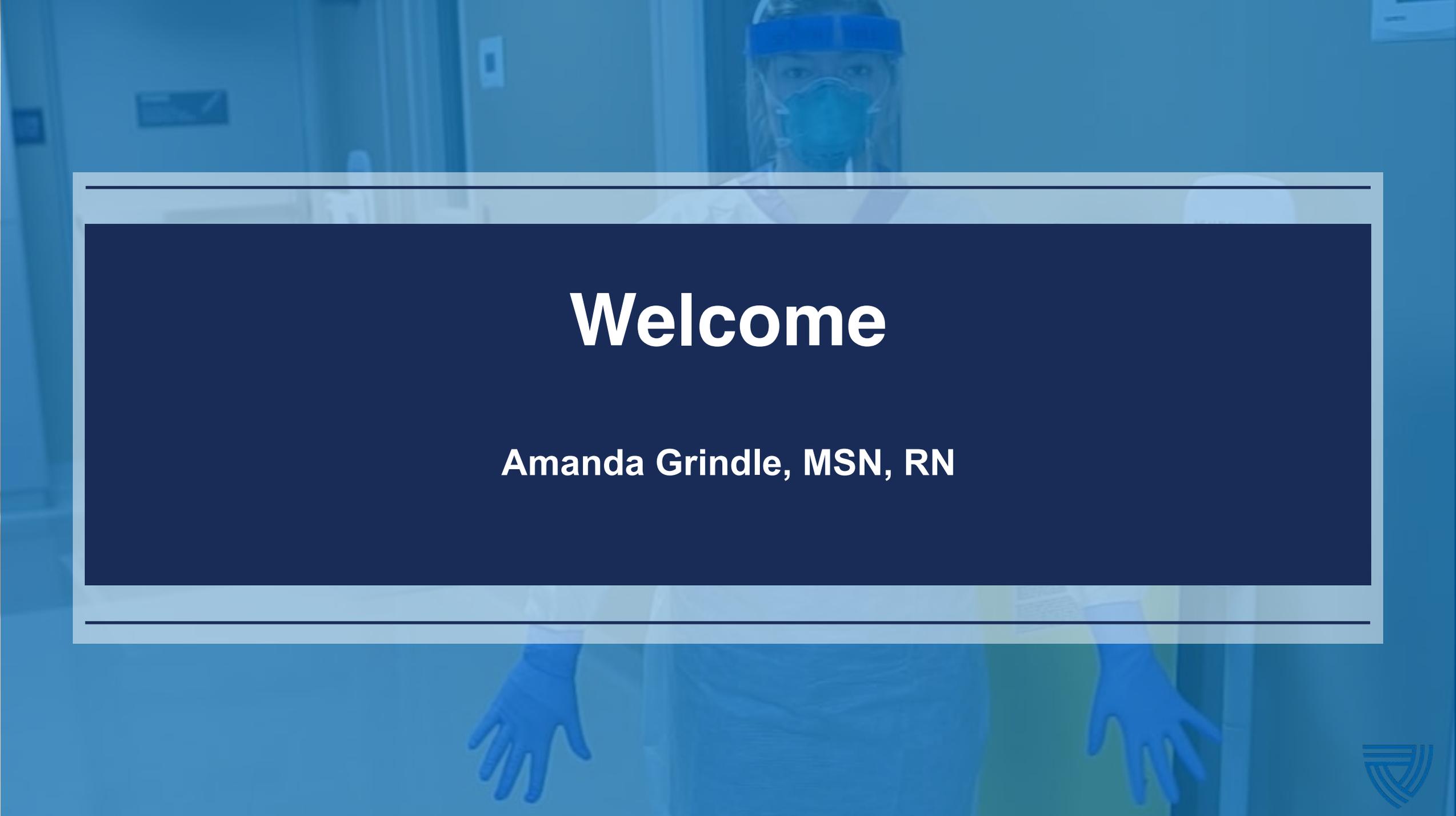


NETEC COVID-19 Webinar Series:

Got Masks? PPE Compliance and Fatigue in the First Responder Realms



Welcome

Amanda Grindle, MSN, RN



➤ **Welcome:** Amanda Grindle, RN, MSN

➤ **PPE Compliance and Fatigue in First Responder Realms**

Questions and Answers: Lekshmi Kumar, MD, MPH
Michael Carr, MD
Ben Tysor, NRP
Wade Miles, NRP

➤ **Questions and Answers with NETEC:**

➤ **NETEC Resources:** Amanda Grindle, RN, MSN

National Emerging Special Pathogens Training and Education Center

Mission Statement

To increase the capability of the United States public health and health care systems to safely and effectively manage individuals with suspected and confirmed special pathogens

For more information

Please visit us at www.netec.org
or email us at info@netec.org



Assessment

Empower hospitals to gauge their readiness using
Self-Assessment

Measure facility and healthcare worker readiness using
Metrics

Provide direct feedback to hospitals via
On-Site Assessment

Education

Provide self-paced education through
Online Trainings

Deliver didactic and hands-on simulation training via
In-Person Courses

COVID-19 focused
Webinars

Technical Assistance

Onsite & Remote Guidance

Compile
Online Repository of tools and resources

Develop customizable
Exercise Templates based on the HSEEP model

Provide
Emergency On-Call Mobilization

Research Network

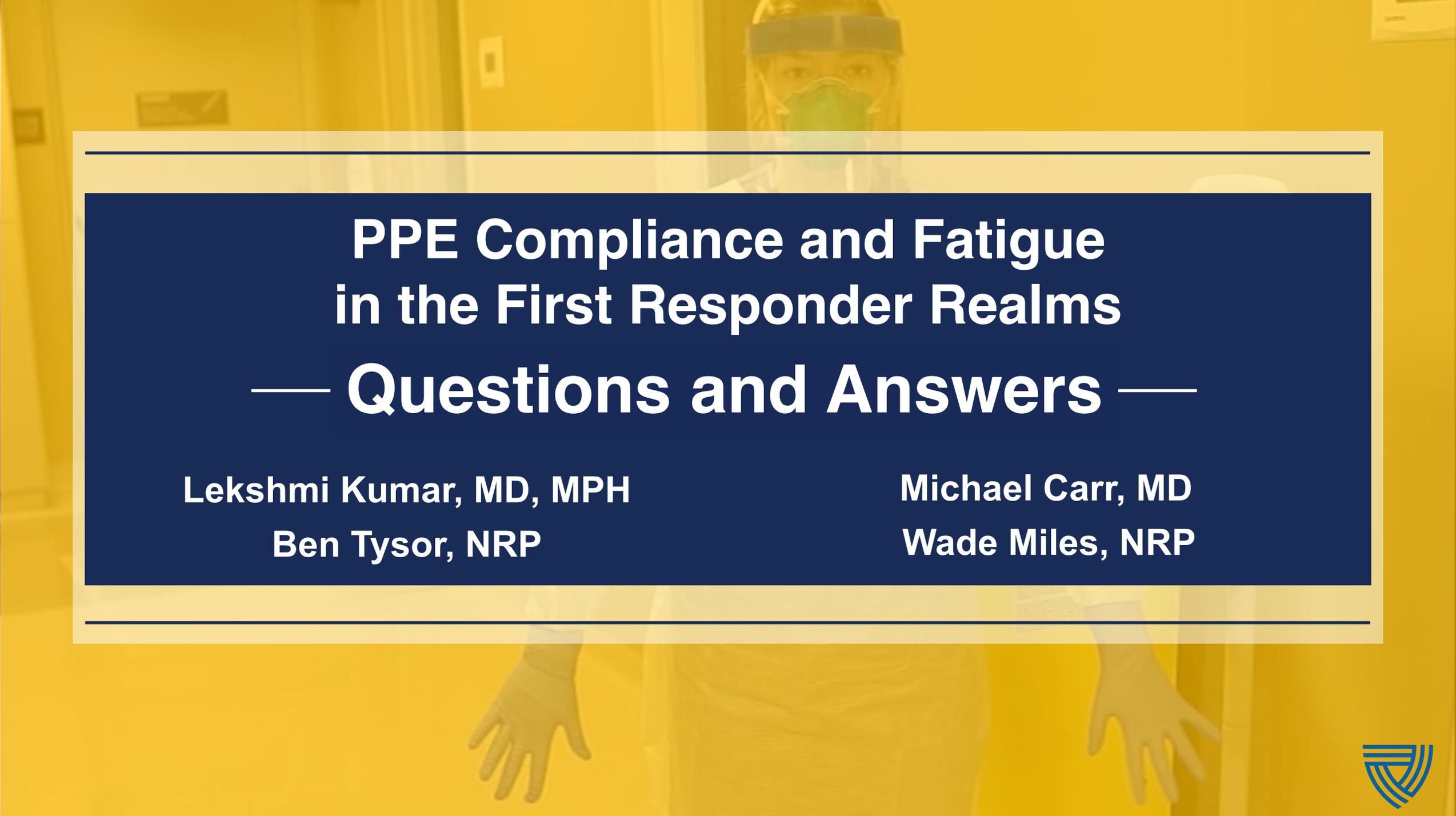
Online Repository
Built for rapid implementation of clinical research protocols

Develop Policies, Procedures and Data Capture Tools to facilitate research

Create infrastructure for a
Specimen Biorepository



Cross-Cutting, Supportive Activities



PPE Compliance and Fatigue in the First Responder Realms

— Questions and Answers —

Lekshmi Kumar, MD, MPH

Ben Tysor, NRP

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QUESTION 1:

“I had COVID-19 in July. I recovered and I’m now back at work. Do I need to wear all of the same PPE as those who haven’t had it or am I immune to it?”

Immunity

- **SARS-CoV-2-specific antibodies identified**
- **Neutralizing antibodies**
- **Cell-mediated component**
- **Varying degrees of immunity**

Re-infection

- **Testing positive after recovery – what does it mean?**
- **No symptomatic re-infection within 3 months identified**
- **Ongoing antibody trend studies**
- **Not enough known to recommend against PPE after recovery**

PPE Guidelines Should Continue to be Followed

- ✓ **Healthcare: Airborne, contact, eye shield as indicated**
- ✓ **Community: Masks, social/physical distancing**
- ✓ **Public health measures: stay-at-home, public gathering bans, travel restrictions**

QUESTION 2:

“My employer has provided us with several different types of PPE since March, but they have not provided us guidance on how to use it. How can I educate myself to make sure I’m using it properly?”

- ✓ **OSHA requires employer to ensure EMS are medically cleared, properly trained, and fit tested to use a respirator such as an N95 or PAPR. Gowns and coveralls may have manufacturer recommendations for use**
- ✓ **Use checklists for donning and doffing**
- ✓ **Use buddy system for donning and doffing**



CENTERS FOR DISEASE
CONTROL AND PREVENTION

<https://www.cdc.gov>



<https://netec.org>



<https://asprtracie.hhs.gov>

“Fatigue is rising, what techniques can we utilize to continue to meet PPE compliance?”

Cochrane Database of Systematic Reviews

Barriers and facilitators to healthcare workers’ adherence with infection prevention and control (IPC) guidelines for respiratory infectious diseases: a rapid qualitative evidence synthesis

Cochrane Systematic Review - Qualitative | Version published: 21 April 2020

<https://doi.org/10.1002/14651858.CD013582>

✉ Catherine Houghton | Pauline Meskell | Hannah Delaney | Mike Smalle | Claire Glenton | Andrew Booth | Xin Hui S Chan
| Declan Devane | Linda M Biesty

Barriers to HCW adherence to PPE

- Task burden
- Infection prevention / control guidelines
- Education and training
- Supplies and environment
- Ensuring compliance

QUESTION 4:

“Given limited resources of N-95 masks should we be saving our masks and PPE for COVID positive patients?”

➤ **Extended use versus Reuse**

➤ **Proper donning, doffing, storage**

➤ **Discard soiled respirators**

➤ **Follow manufacturer’s instructions**



<https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/eye-protection.html>

<https://www.cdc.gov/niosh/topics/hcwcontrols/recommendedguidanceextuse.html>

“What if we respond to an MVA and do not suspect the patient has the virus, do we still need to wear a mask?”

In a pandemic

Existing infection protocols will/should be followed until declared “over”

Local incidence

- Higher incidence = higher risk
 - ✓ COVID-19 data tracker for your region
 - ✓ CDC website: <https://covid.cdc.gov/covid-data-tracker/>

Asymptomatic transmission

- Percentage of asymptomatic infections estimated to be 20-50% (ASPR and CDC)
- “Current Best Estimate”
 - **40%** asymptomatic
 - **50%** transmission occurring prior to symptom onset

Pandemic - protocols prevent spread

- Community: masks, social/physical distancing
- Public health measures
 - Based on local infection rates
 - Region-specific guidelines

“What if it’s an inter-facility transfer and the patient is known negative?”

**Standard precautions
(at all times)**

AND

**Transmission-based precautions
(if required based on the suspected diagnosis)**

➤ Patient PPE - Face mask on patient for source control

➤ Provider PPE - Gloves, eye protection and N95

➤ PPE selection if aerosolizing procedures are anticipated - Gloves, N-95 facemask, eye protection, gown or coverall

- Leave back and side doors open and exhaust fans on high if possible**

➤ Limit the number of providers in patient compartment to one

- Unless more are required to provide life-saving patient care**

“Should we be wearing masks and socially distancing at our EMS headquarters?”

- **EMS personnel should wear a facemask at all times while in service, including in breakrooms or other spaces where they might encounter co-workers!**
- **Non-essential personnel should be encouraged to work from home**
- **Continue symptom screening**
- **Continue practicing physical distancing**

Important to remember

SARS-CoV-2 is not limited to direct patient care interactions

QUESTION 8:

“I work for a fire service, so I spend a lot of time with the same people. Do we really need to wear masks and socially distance at the station?”

Common policy in fire stations is to wear a mask or face covering while on shift

Physical distancing alternatives to wearing a mask for entire shift:

- Traffic flow
- Stagger mealtimes
- Isolated physical fitness
- Sleeping and study area
- Meal preparation

Must wear PPE to do our part in protecting ourselves and our families



There have been more COVID-19 deaths in the fire service than all the other combined line of duty deaths this year

“My partner and I are on shift and in the ambulance together for 12 hours, do we really need to wear a mask when we are not transporting a patient?”

In general

The more closely you interact with others and the longer that interaction, the higher the risk of COVID-19 spread

➤ **How well do you *really* know your partner?**

- Family members with symptoms?
- Immunocompromised / elderly family members?

➤ **Asymptomatic transmission:**

- Remember: Percentage of asymptomatic infections estimated to be 20-50% (ASPR and CDC)
- Are you or your partner:
 - Asymptomatic spreaders? - OR - Pre-symptomatic spreaders?

In the ambulance:

- Considered a “healthcare workplace”
- Roll windows down
- Wear a mask if < 6 feet apart
- Vent on high – not “Max AC” or recirculation

**“Once I take my mask or other PPE off for a break, can I put the same stuff back on?
Where do I leave my mask or store it?”**

- **Know when to discard**
- **Hang used respirators in a designated storage area or keep them in a clean, breathable container such as a paper bag between uses**
- **Careful donning and doffing**
- **Always perform a seal check when donning**



<https://www.cdc.gov/niosh/topics/hcwcontrols/recommendedguidanceextuse.html#:~:text=Extended%20use%20is%20favor ed%20over%20reuse%20because%20it,transmission%20and%20other%20risks%20involved%20in%20these%20practices.>

<https://www.youtube.com/watch?v=Cfw2tvjiCxM>

“I see healthcare workers in the hospitals wearing less and less PPE. Why do I still have to wear full PPE on every single patient encounter?”

Fatigue is not unique to first responders!

Full vs. Appropriate PPE

- **Agency rules vary**
- **Different environmental conditions may require PPE variances**

Pre-hospital Responses

- **Contaminants in home**
- **No controlled airflow**
- **One provider in “Full” PPE performs an assessment**

“I like to follow the rules and support wearing a mask at the fire station, but my coworkers tell me it’s not necessary, and none of them wear masks. My boss isn’t enforcing the mask mandate when at the station. What can I do to deal with this situation?”

Be a good example:

- Always wear a mask if you’re going to ask others to comply
- Have extras to share
- Masks as a fashion statement / conversation starter
- Silently reinforce desired behavior through visual cues
- Step back when someone approaches you to talk without a mask

Educate with reliable sources (not social media):

- Boston hospital system (MGB) system study in JAMA
- CDC MMWR: C-19 positive hair stylists wore masks
- Increasing acceptance based on survey data: 500 adults
 - April 7: 62% would wear mask → May 13: 76% would wear mask

Escalate if necessary

- Supervisor’s responsibility to protect workers
- Encourage policy development within your workplace
- Consider anonymous reporting system



Photo credit: Dr. Carr

Theme mask: Yellowstone National Park Buffalo mask

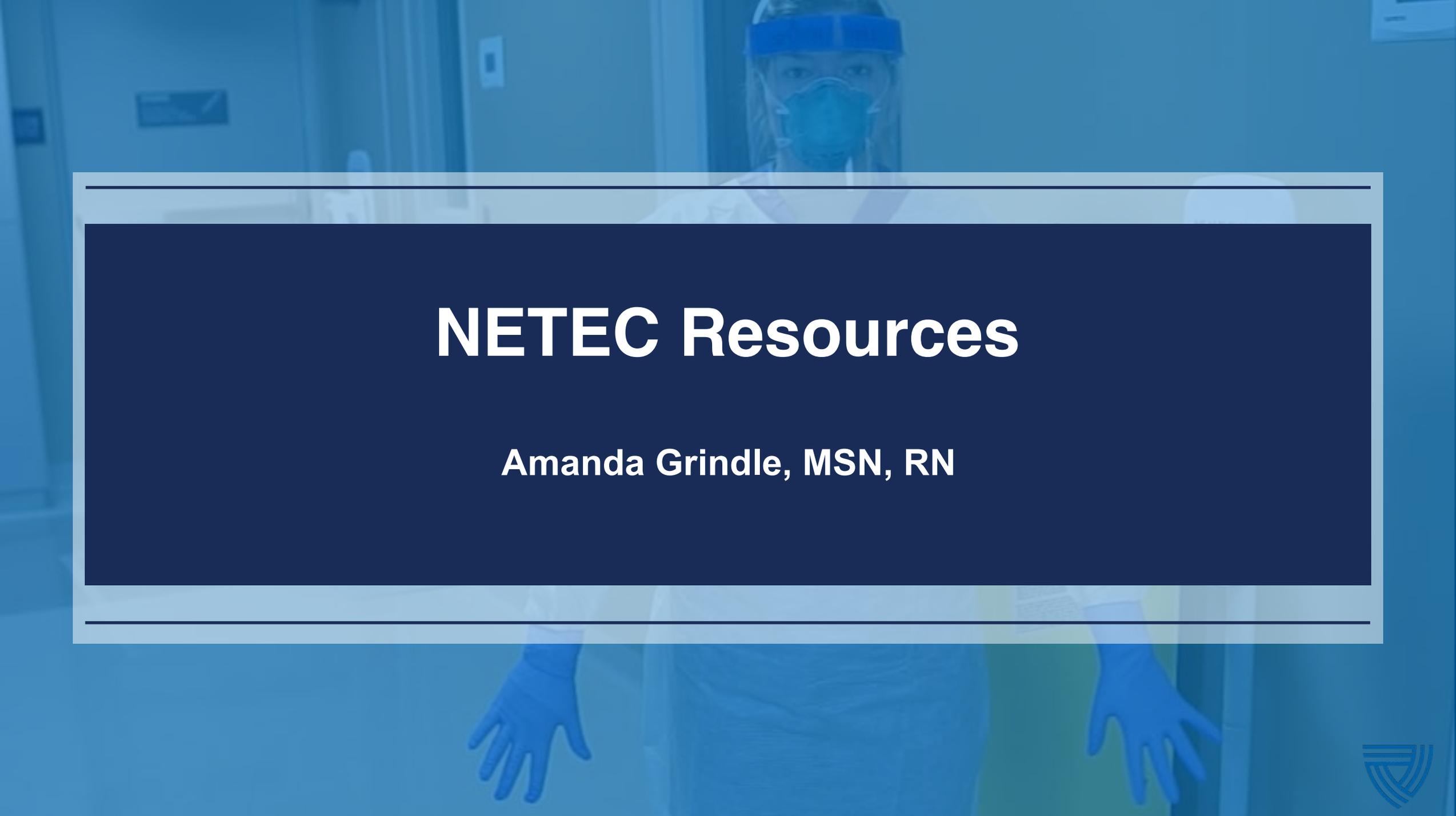
“Given we are in a truck and staged versus transporting a patient for most of the shift, it is tough to follow handwashing guidelines like you would in the hospital. Do you have suggestions on how pre-hospital providers can deal with this issue?”



- ✓ **Hand hygiene should be performed before and after all patient contact, contact with potentially infectious material, and before donning and after doffing PPE, including gloves. Hand hygiene after removing PPE is particularly important**
- ✓ **Ideally, hands will be washed with soap and water for at least 20 seconds**
- ✓ **When soap and water is not available, an alcohol-based hand sanitizer with 60-95% alcohol is recommended**
- ✓ **It is very important to use soap and water anytime hands are visibly soiled**
- ✓ **Wash hands prior to leaving the hospital**
- ✓ **Stop at a local fire department (if allowed) to use restroom to wash hands**
- ✓ **Always make sure you have plenty of alcohol-based hand sanitizer available in cab of ambulance**

Questions and Answers





NETEC Resources

Amanda Grindle, MSN, RN



NETEC is Here to Help

NETEC will continue to build resources, develop online education, and deliver technical training to meet the needs of our partners

Ask for help!

- ➔ Send questions to info@netec.org - they will be answered by NETEC SMEs
- ➔ Submit a Technical Assistance request at [NETEC.org](https://www.netec.org)

NETEC eLearning Center

courses.netec.org

NETEC Skill videos

youtube.com/thenetec

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