NETECCOVID-19 Webinar Series:
Healthcare Workers and Masks
The What, How and Why of masks for healthcare workers caring for patients during the COVID-19 outbreak
Welcome

Angie Vasa, RN, BSN, CCN
Welcome: Angie Vasa, RN, BSN, CCN

The What: Kate Boulter, RN, BAN, MPH

The How: Kate Boulter, RN, BAN, MPH

The Why: Jill Morgan, RN, BSN

Innovations: Angie Vasa, RN, BSN, CCN

Decontamination Strategies: Kate Boulter, RN, BAN, MPH

Questions and Answers with NETEC
Welcome

National Emerging Special Pathogens Training and Education Center

Mission

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
# NETEC Overview

## 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**

## 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**
The What

Kate Boulter, RN, BAN, MPH
Preferred: N95 or higher respirator

Acceptable: Facemask

CDC Guidelines

www.cdc.gov/coronavirus

What is an N95 Respirator

Filtering Facepiece Respirators

Reduce exposure to inhaled particles

Several styles, filtering efficiency and designations

- N - indicates not resistant to oil
- R - Somewhat resistant to oil
- P - Strongly resistant to oil
- 95 - 95% of airborne particles
- 99 - 99% of airborne particles
- 100 - 99.97% of airborne particles

https://www.cdc.gov/niosh/npptl/topics/respirators/disp_part/default.html
What Makes an N95 Respirator Work

Filtration Mechanisms

- Inertial impaction
- Interception
- Diffusion
- Electrostatic attraction

https://blogs.cdc.gov/niosh-science-blog/2009/10/14/n95/
Annual N95 fit testing is vital to ensure that personnel is wearing the correct N95 style and size.
Surgical / Procedure Masks
The How

Kate Boulter, RN, BAN, MPH
Preparing to Don a N95 or Medical Mask

- Donning should occur in a CLEAN space
- Gather necessary PPE equipment
- Hand sanitizer, trash bin
- Tie long hair back
- Secure hair away from face, eyes
- Secure eyeglasses so they do not slide
- Remove any jewelry that might be a hazard to you and your PPE
The CDC has a guide to facial hair and respirator compatibility.

What about Facial Hair

(Careful! Chin hair may easily cross the seal)
N95 Respirators

- Check to ensure the N95 is free from defects
- Perform hand hygiene
- Cover nose, mouth and chin
- Top strap on crown of head
- Bottom strap at the nape of the neck under the ears
- Mold the nose piece
- Perform a seal check
How to Remove an N95
Healthcare Workers and Masks: The How

How to Don and Doff a Surgical or Procedure Mask

- Mask should cover nose
- Mask should cover mouth
- Mask should cover chin

Surgical Mask

Procedure Mask
Healthcare Workers and Masks: The How

How NOT to Wear an N95 Respirator

- NO DOUBLE CROWN
- NO CRISS-CROSS
- NO DOUBLE NECK
How NOT to Behave When Wearing an N95 Respirator

- **DO NOT ADJUST RESPIRATOR**
- **DO NOT EAT OR DRINK**
- **DO NOT PRESS OBJECTS AGAINST THE RESPIRATOR**
How NOT to Wear Your Procedure Mask

NO

NO

NO

NO

NO
Protecting the Mask and Respirator
The Why

Jill Morgan, RN, BSN
# CDC Understanding the Difference Between Masks and Respirators

## Understanding the Difference

<table>
<thead>
<tr>
<th></th>
<th>Surgical Mask</th>
<th>N95 Respirator</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Testing and Approval</strong></td>
<td>Cleared by the U.S. Food and Drug Administration (FDA)</td>
<td>Evaluated, tested, and approved by NIOSH as per the requirements in 42 CFR Part 84</td>
</tr>
<tr>
<td><strong>Intended Use and Purpose</strong></td>
<td>Fluid resistant and provides the wearer protection against large droplets, splashes, or sprays of bodily or other hazardous fluids. Protects the patient from the wearer’s respiratory emissions.</td>
<td>Reduces wearer’s exposure to particles including small particle aerosols and large droplets (only non-oil aerosols).</td>
</tr>
<tr>
<td><strong>Face Seal Fit</strong></td>
<td>Loose-fitting</td>
<td>Tight-fitting</td>
</tr>
<tr>
<td><strong>Fit Testing Requirement</strong></td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>User Seal Check Requirement</strong></td>
<td>No</td>
<td>Yes. Required each time the respirator is donned (put on)</td>
</tr>
<tr>
<td><strong>Filtration</strong></td>
<td>Does NOT provide the wearer with a reliable level of protection from inhaling smaller airborne particles and is not considered respiratory protection</td>
<td>Filters out at least 95% of airborne particles including large and small particles</td>
</tr>
<tr>
<td><strong>Leakage</strong></td>
<td>Leakage occurs around the edge of the mask when user inhales</td>
<td>When properly fitted and donned, minimal leakage occurs around edges of the respirator when user inhales</td>
</tr>
<tr>
<td><strong>Use Limitations</strong></td>
<td>Disposable. Discard after each patient encounter.</td>
<td>Ideally should be discarded after each patient encounter and after aerosol-generating procedures. It should also be discarded when it becomes damaged or deformed; no longer forms an effective seal to the face; becomes wet or visibly dirty; breathing becomes difficult; or if it becomes contaminated with blood, respiratory or nasal secretions, or other bodily fluids from patients.</td>
</tr>
</tbody>
</table>

**Healthcare Workers and Masks: The Why**

**How Masks are Evaluated**

**BFE** – Bacterial Filtration Efficiency
For medical/surgical masks, must filter out 95% of bacterial sized particles, tested with real bacteria.

**PFE** – Particle Filtration Efficiency, medical/surgical masks must be able to filter out particles of about 0.1micron in size

**Delta P** – airflow resistance across the filter, equates to work of breathing

**Fluid Resistance** – Levels 1 - 3 for ability to repel synthetic blood at increasing pressure

**PROCEDURE MASK**
Reorder: PG4-1001

<table>
<thead>
<tr>
<th>LEVEL 1 BARRIER</th>
<th>BFE (%)</th>
<th>≥ 95</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PFE (%)</td>
<td>≥ 95</td>
</tr>
<tr>
<td></td>
<td>ΔP (mmH₂O/cm²)</td>
<td>&lt; 4.0</td>
</tr>
<tr>
<td></td>
<td>Fluid Resistance</td>
<td>80 mm Hg</td>
</tr>
<tr>
<td></td>
<td>Flame Spread</td>
<td>Class 1</td>
</tr>
</tbody>
</table>

AS PER ASTM F2100-11 (2011) • Actual data available upon request
Tight-fitting respirators need a tight seal between the respirator and the face and/or neck of the respirator user in order to work properly.

Tight-fitting respirators must be fit tested with the respirator selected for your use, this is not one-size-fits-all!

- A user seal check is a quick check performed by the wearer each time the respirator is put on. It determines if the respirator is properly seated to the face or needs to be readjusted.

What about the relaxation of the OSHA rules?

Perform initial fit tests with the same model, style, and size respirator that the worker will be required to wear for protection against COVID-19.

Inform workers that the employer is temporarily suspending the annual fit testing of N95 filtering facepiece respirators to preserve and prioritize the supply of respirators for use in situations where they are required to be worn;

- Explain to workers the importance of performing a user seal check (i.e., a fit check) at each donning.

Workers should visually inspect the N95 respirator to determine if the structural and functional integrity of the respirator has been compromised. Over time, components such as the straps, nose bridge, and nose foam material may degrade, which can affect the quality of the fit and seal. If the structural and functional integrity of any part of the respirator is compromised, or if a successful user seal check cannot be performed, discard the respirator and try another respirator.

Coughs move quickly!

You have probably heard a lot about aerosol generating procedure lately – that really means “things that make people cough”

Without any cover over a mouth and nose, droplets and particles can move toward an observer faster than we can react
This is why having SOURCE CONTROL in place is such an important first step

A schlieren optical study of the human cough with and without wearing masks for aerosol infection control, Volume: 6, Issue: suppl_6, Pages: S727-S736, DOI: (10.1098/rsif.2009.0295.focus)
You can see the airflow being diverted by the loose-fitting mask upward and downward, meaning less is likely to directly impact someone standing right in front of them.
If possible, have the patient wear a mask
Universal Masking

- Reduce risk from asymptomatic shedders
- Everyone entering the facility
- Instructions to keep a distance
- Perform hand hygiene
- Don a mask
Ok, let’s talk about cloth masks...

When is something better than nothing?

Better option for general public, anyone when they must be out in public especially where social distancing may be impossible or unpredictable – leave the surgical/isolation and N95’s for HCW’s

SUGGESTIONS

- Closely woven (180 thread count or higher) cotton outside (Wake Forest research)
- Flannel inside
- Multiple layers are important
- Check strong light source through mask
- Filtration becomes academic if fit allows air to enter all around the mask
In settings where facemasks are not available, HCP might use homemade masks (e.g., bandana, scarf) for care of patients with COVID-19 as a last resort.

However, homemade masks are not considered PPE, since their capability to protect HCP is unknown. Caution should be exercised when considering this option. Homemade masks should ideally be used in combination with a face shield that covers the entire front (that extends to the chin or below) and sides of the face.

A cluster randomized trial of cloth masks compared with medical masks in healthcare workers

**Objective** The aim of this study was to compare the efficacy of cloth masks to medical masks in hospital healthcare workers. **Setting** 14 secondary-level/tertiary-level hospitals.

**Participants** 1607 hospital HCWs aged ≥18 years working full-time in selected high-risk wards.

**Intervention** Hospital wards were randomised to: medical masks, cloth masks or a control group (usual practice, which included mask wearing). Participants used the mask on every shift for 4 consecutive weeks.

**Main outcome measure** Clinical respiratory illness (CRI), influenza-like illness (ILI) and laboratory-confirmed respiratory virus infection.

**Results** The rates of all infection outcomes were highest in the cloth mask arm, with the rate of ILI statistically significantly higher in the cloth mask arm (relative risk (RR)=13.00, 95% CI 1.69 to 100.07) compared with the medical mask arm. Cloth masks also had significantly higher rates of ILI compared with the control arm. An analysis by mask use showed ILI (RR=6.64, 95% CI 1.45 to 28.65) and laboratory-confirmed virus (RR=1.72, 95% CI 1.01 to 2.94) were significantly higher in the cloth masks group compared with the medical masks group.

**Penetration of cloth masks by particles was almost 97% and medical masks 44%**.

[https://bmjopen.bmj.com/content/5/4/e006577.short](https://bmjopen.bmj.com/content/5/4/e006577.short)
Healthcare Workers and Masks: The Why

Aerosol Penetration Thru Various Cloth Masks

1. Cut coffee filter

2. Fold filter in center of folded bandanna. Fold top down. Fold bottom up.

4. Place rubber bands or hair ties about 6 inches apart.

5. Fold side to the middle and tuck.

How to Wear a Cloth Face Mask

A cloth face mask should:

• Fit snugly but comfortably against the side of the face
• Be secured with ties or ear loops
• Include multiple layers of fabric
• Allow for breathing without restriction
• Be able to be laundered and machine dried without damage or change to shape

Coughing and Aerosolization

While wearing – DO NOT TOUCH the mask or respirator.

You don’t want to help any particles to make it thru the filter.

You don’t want to contaminate your hands or to get even gloved hands that close to your eyes/nose/mouth.

That means – NO pulling it down to talk, or to scratch your nose, or to take a drink.

No wearing it on your chin, under your nose or on top of your head.

Credit: Corri Levine – UTMB - https://twitter.com/CBLevineMS/status/1249740489454161920
Increasing the distance between the patient and worker to 183 cm (72 inches) reduced the exposure to influenza that occurred immediately after a cough by 92%.

Results show that cough-generated aerosol particles spread rapidly throughout the room, and that within 5 min, a worker anywhere in the room would be exposed to potentially hazardous aerosols.
During testing of an influenza-laden cough aerosol with a volume median diameter (VMD) of 8.5 μm, wearing a face shield reduced the inhalational exposure of the worker by 96% in the period immediately after a cough. The face shield also reduced the surface contamination of a respirator by 97%.

When a smaller cough aerosol was used (VMD = 3.4 μm), the face shield was less effective, blocking only 68% of the cough and 76% of the surface contamination.

Increasing the distance between the patient and worker to 183 cm (72 inches) reduced the exposure to influenza that occurred immediately after a cough by 92%.

### Other Means of Decreasing HCW Exposure

- Have patient hold tissue or towel over their mouths when coughing
- Drape an absorbent pad over vent connections when you must break the circuit
- Turn the patient’s head away from you when performing close tasks
- Hold a child facing away from you
- Leave the room after instructing a patient to perform pulmonary toilet, if possible
- Keep patient room door shut when possible
- Do not use portable fans in patient room
- Ask maintenance about in-room airflow, have staff stand when possible between air output and patient
Innovations

Angie Vasa, RN, BSN, CCN
New Uses for Old Materials

- Hospitals that have excess supplies of surgical drapes are using them to create masks.
- Research and patterns for masks that have been noted to pass fit tests and claim to offer 99.9% filtration are available online.
- Surgical draping is tested for bacteria and fluid penetration but not typically viruses which are notably smaller than bacteria.
- Surgical drape manufacturers do not endorse the use of their material for this purpose at this time.
Innovations to Help with Comfort

Healthcare Workers and Masks: Innovations
## Potential Strategies to Protect the Skin During Respirator Extended Use

### No skin breakdown

<table>
<thead>
<tr>
<th>CAVILON</th>
<th>Allkare</th>
<th>MEPILEX LITE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>No Sting Barrier Film</strong></td>
<td><strong>Protective barrier wipe</strong></td>
<td><strong>This can be used if you have skin breakdown or to prevent skin breakdown</strong></td>
</tr>
<tr>
<td><em>This is applicable if you do not already have skin breakdown</em></td>
<td><em>This is applicable if you do not already have skin breakdown</em></td>
<td></td>
</tr>
<tr>
<td>• Apply to skin of nose and cheeks</td>
<td>• Apply to skin of nose and cheeks</td>
<td>• Cut &amp; place a piece of Mepilex Lite foam where the mask will be touching on your nose and cheeks</td>
</tr>
<tr>
<td><em>Caution: Do not get near eyes</em></td>
<td><em>Caution: Do not get near eyes</em></td>
<td>• Make sure you press down your mask and have a good seal between the mask and Mepilex foam</td>
</tr>
<tr>
<td>• Allow at least 1 minute to dry before application of a mask</td>
<td>• Allow at least 1 minute to dry before application of a mask</td>
<td>Share the Mepilex Lite with coworkers or save remaining pieces for next shifts—DO NOT waste</td>
</tr>
<tr>
<td><strong>Benefits:</strong></td>
<td><strong>Drawbacks:</strong></td>
<td></td>
</tr>
<tr>
<td><em>Little or no smell</em></td>
<td><em>Little or no smell</em></td>
<td></td>
</tr>
<tr>
<td><em>Doesn’t sting (sensitive skin)</em></td>
<td><em>Doesn’t sting (sensitive skin)</em></td>
<td></td>
</tr>
<tr>
<td><em>Not as tacky feeling</em></td>
<td><em>Not as tacky feeling</em></td>
<td></td>
</tr>
<tr>
<td><em>The film will wear off the skin and does not require removal</em></td>
<td><em>The film will wear off the skin and does not require removal</em></td>
<td></td>
</tr>
</tbody>
</table>

### Skin breakdown

**Important!**

Ensure that any prevention or treatment strategy you use does not compromise the fit and seal of your mask.
Healthcare Workers and Masks: Innovations

More Innovations to Enhance HCW Protection

3D printed face shield

Custom made intubation box
A Phoenix-based toy company designed a prototype intubation shield for doctors to use while treating COVID-19 patients.

(Photograph: Kim Van Der Deen)

Healthcare Workers and Masks: Innovations

PPE Extenders

Staff Support

The role of the PPE extender is to coach and mentor all staff working in departments providing care to patients suspected or confirmed to have COVID-19.

PPE extenders should be used to observe and coach staff on:

- Proper use of PPE to include donning and doffing (techniques and proper sequence)
- Extended use and reuse of N95s
- Observe IPC practices and reinforce concepts of clean and dirty spaces
- PAPR use, cleaning, disinfection and storage
Decontamination Strategies

How to Remove a Surgical or Procedure Mask

- Reuse after Decontamination
- Hydrogen Peroxide
- Ultraviolet Light Germicidal Irradiation

Vaporized hydrogen peroxide for disinfection was first developed in the late 1980s and patented in the early 1990’s for sterilization of surgical equipment.

Uses for hydrogen peroxide disinfection are intended for materials that cannot tolerate high temperatures and humidity (plastics, electrical devices, and metal alloys susceptible to corrosion.

Hydrogen peroxide $\text{H}_2\text{O}_2$ decomposes into non-toxic byproducts: water ($\text{H}_2\text{O}$) and oxygen (O).

Ionized Hydrogen Peroxide: EPA listed as a Binary Ionization Technology (BIT) solution.

This reprocessing method is currently one of three (VHP, UVGI, moist heat) methods described by the Centers for Disease Control and Prevention under its crisis standards of care decontamination recommendations.

## Ionized Hydrogen Peroxide vs. Vaporized Hydrogen Peroxide

<table>
<thead>
<tr>
<th></th>
<th>Ionized Hydrogen Peroxide</th>
<th>Vaporized Hydrogen Peroxide</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concentration</td>
<td>7.8%</td>
<td>30-35%</td>
</tr>
<tr>
<td>Particle size</td>
<td>1-2 microns</td>
<td>8-12 microns</td>
</tr>
<tr>
<td>Humidity Monitoring Required</td>
<td>No</td>
<td>Yes, dehumidifying required if higher than 70%</td>
</tr>
<tr>
<td>Temperature Monitoring Required</td>
<td>No</td>
<td>Yes, must occur at &gt; 70 degrees F</td>
</tr>
<tr>
<td>Contact Time</td>
<td>15 minutes</td>
<td>30 minutes</td>
</tr>
<tr>
<td>Biological Indicator</td>
<td>Recommended for initial validation but not required</td>
<td>Yes, usually Geobacillus stearothermophilus spores (7-day incubation period)</td>
</tr>
<tr>
<td>Chemical Indicator</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Enzyme Indicator</td>
<td>Yes, Adenylate kinase with rapid luminescence assay</td>
<td>Yes</td>
</tr>
<tr>
<td>Special Shipping or Storage Requirements</td>
<td>No</td>
<td>Yes, Hazardous material shipping and storage required</td>
</tr>
</tbody>
</table>
**STERAMIST N-95 DISINFECTION**
This Activity would be performed by trained EVS Tech

---

**Start Process**

Sanitize hands, don PPE to include gown, mask, face shield and gloves

Remove N-95 masks from soiled transport cart. Take inside processing room

Inspect condition of each mask; dispose if damaged or visibly soiled

Mark bottom of mask with notch on upper right corner. Dispose after third notch

Fully open each mask with notch on upper right corner. Display with open side down on rack

Begin inspection of Steramist equipment

Check fill level of solution; **MUST** be above red line (1000ML)

Confirm USB drive is inserted

Check scrubber outlet is fully inserted

Check each scrubber dial is set to #5 setting

Check fogger units and fans are set-up in opposing directions. Do not point fans directly at the N-95 masks

Turn on Steramist system and begin programming (See page 2 for operation)

Exit room, zip-up door, close door, seal bottom of door with tape and activate system once outside

Once hydrogen peroxide has reached <1.0 PPM it is safe to enter the room

Collect disinfected masks and place in clean paper bag.

Complete documentation for each batch in disinfection log.
Decontamination Strategies

N95 Reuse after Decontamination

UVGI
Guidance for Respiratory and Eye Protection: Extended Use, Reuse & Reuse After Decontamination

1. Write name and date on N95
2. Prepare brown bag
3. Remove N95
4. Place in brown bag

- First Initial and Last Name
- Department/Unit Location
- Date of First use
- Tally Marks for Decontamination Cycles
  - These Marks are Added by the UVGI Staff
Guidance for Respiratory and Eye Protection: Extended Use, Reuse & Reuse After Decontamination
NETEC will continue to build resources, develop online education, and deliver technical training to meet the needs of our partners.

**NETEC is Here to Help**

Send questions to info@netec.org - they will be answered by NETEC SMEs.

Submit a Technical Assistance request at NETEC.org.
Slide 7: CDC - Use Personal Protective Equipment When Caring for Patients with Confirmed or Suspected COVID-19:

Slide 8: CDC - NIOSH - Approved Particulate Filtering Facepiece Respirators:
https://www.cdc.gov/niosh/npptl/topics/respirators/disp_part/default.html

Slide 10: CDC - N95 Respirators and Surgical Masks:
https://blogs.cdc.gov/niosh-science-blog/2009/10/14/n95/

Slide 15: CDC - Facial Hairstyles and Filtering Facepiece Respirators:

Slide 24: CDC - Understanding the Difference Between Surgical Masks and N95 Respirators:

Slide 26: U.S. Department of Labor – Transcript for the OSHA Training Video Entitled Respirator Types:
Resources

Slide 27: U.S. Department of Labor – Healthcare Respiratory Protection Annual Fit-Testing for N95 Filtering Facepieces During the COVID-19 Outbreak:

Slide 28 & 29: A Schlieren Optical Study of the Human Cough With and Without Wearing Masks for Aerosol Infection Control:
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2843945/

Slide 33: CDC – Strategies for Optimizing the Supply of Facemasks:

Slide 34: BMJ - A Cluster Randomized Trial of Cloth Masks Compared with Medical masks in Healthcare Workers:
https://bmjopen.bmj.com/content/5/4/e006577.short

Slide 35: Oxford Academic – Performance of Cloth Masks and Common Fabric Materials Against 20-1000nm Size Particles:
https://doi.org/10.1093/annhyg/meq044

Slide 36 & 37: CDC – Use of Cloth Face Coverings to Help Slow the Spread of COVID-19:
Slide 39: Efficacy of Face Shields Against Cough Aerosol Droplets From a Cough Simulator:

Slide 40: Efficacy of Face Shields Against Cough Aerosol Droplets From a Cough Simulator:

Slide 48: University of Nebraska / Nebraska Medicine: Innovative Device Contains Exhaled Virus Particles

Slide 51: CDC - Decontamination and Reuse of Filtering Facepiece Respirators:

Slide 52: EPA – Disinfectants for Use Against SARS-CoV-2
https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2

Slide 52: CDC - Decontamination and Reuse of Filtering Facepiece Respirators:

UNMC Universal Mask Policy and FAQs:
<table>
<thead>
<tr>
<th>Resource</th>
<th>URL</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDC - N95 Respirators and Surgical Masks:</td>
<td><a href="https://blogs.cdc.gov/niosh-science-blog/2009/10/14/n95/">https://blogs.cdc.gov/niosh-science-blog/2009/10/14/n95/</a></td>
</tr>
<tr>
<td>CDC/NIOSH – Respirator Filter Classes</td>
<td><a href="https://www.cdc.gov/niosh/npptl/pdfs/N95RespirClassesInfographic-508.pdf">https://www.cdc.gov/niosh/npptl/pdfs/N95RespirClassesInfographic-508.pdf</a></td>
</tr>
<tr>
<td>Mask Protection Standards and Medical Face Mask Information for Use</td>
<td><a href="https://www.primed.ca/clinical-resources/astm-mask-protection-standards/">https://www.primed.ca/clinical-resources/astm-mask-protection-standards/</a></td>
</tr>
</tbody>
</table>
Questions and Answers
# Contact

## NETEC eLearning Center
- courses.netec.org

## NETEC Skill videos
- YouTube.com/thenetec

## Join the Conversation!
- @theNETEC
- @the_NETEC
- Use hashtag: #NETEC

## Website
- netec.org

## Repository
- repository.netecweb.org

## Email
- info@netec.org