Good to Know

■ Continuing education documents only for the live webinar will be provided by Tuesday, June 23, 2020.

■ The webinar is being recorded and will be available on the TMC COVID-19 Resource Page.

■ Handouts are located on the right side of your screen.

Handouts for today’s webinar. Click to download.
Disclaimer

- Karen Gregory RN is an employee of Total Medical Compliance.
- She is a Hu-Friedy Key Opinion Leader, a consultant for SciCan and serves on the OSAP Board of Directors.
- This does not serve as legal or medical advice.

CASES Reported to the CDC: January 21 – June 17, 2020

USA
2,132,738 TOTAL CASES
CDC | Updated: Jun 17 2020 3:49PM

USA
116,878 TOTAL DEATHS
CDC | Updated: Jun 17 2020 3:49PM

www.cdc.gov/covid-data-tracker/#cases
Managing Risk.

This information may change before the end of this session.

Objectives

At the end of this session, the attendee will:

- List resources to ensure your practice remains up to date on this still changing situation.
- Define the hierarchy of controls.
- Discuss three measures to reduce the likelihood of the spread of infection as patient care increases.
Community Transmission

- Asymptomatic and pre-symptomatic transmission
  - Reduce facility risk
  - Isolate symptomatic patients ASAP
  - Protect healthcare personnel
  - Hospital capacity
- Source Control
  - Patients and visitors wearing masks
  - Cloth or disposable
  - Preserve practice supply of PPE


Hierarchy of Controls

- Elimination/Substitution
  - Symptom Screening
  - Telehealth
- Engineering controls
  - AIIR
  - Barriers
  - Dental dams
- Administrative
  - Sick leave policies
  - Respiratory Protection Plan
- Work Practice
  - Resp Hygiene/Cough Etiquette
  - Mask Up Zone
- Personal Protective Equipment

https://www.cdc.gov/niosh/topics/hierarchy/default.html
Critical Patient Communication

- Communicate in advance what the practice is doing to ensure the safety of the patient. For example, current with CDC guidelines.
- Monitoring local and state recommendations for safety.
- Examples:
  - When possible come to the appointment by yourself
  - We may ask you to wait in the car until your appointment time
  - We will ask screening questions again and your temperature will be taken as you enter the practice
  - To protect others in the practice, please wear a mask when you arrive.
  - Please use the alcohol handrub will be provided as you enter the practice
  - Contact the practice if COVID – 19 symptoms occur within 48 hours of the visit

Critical Employee Communication

- Stay home if you have any COVID – 19 symptoms or other illness.
- Screening questions and temperatures will be performed at the beginning of the workday.
- Temperatures taken on non-working days.
- Masks should be worn when entering the practice and throughout the workday.
  - In between procedures requiring surgical masks/respirators cloth masks can be worn
  - Contamination risk, hand hygiene, launder daily
  - Include eye protection
- Clearly outline the level of PPE the practice will provide.
Pre-visit Screening

- When making an appointment
- Inquire about fever
- 100.4 indication of illness

Coronavirus Disease (COVID-19)
Patient Triage Questions

<table>
<thead>
<tr>
<th>Patient Name:</th>
<th>DOB:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Age:</td>
</tr>
</tbody>
</table>

| Phone Number: | |

<table>
<thead>
<tr>
<th>Questions</th>
<th>Pre-Screen Date:</th>
<th>On Arrival Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Have you had a fever greater than 100.4 in the past 48 hours?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>2. Do you have a sore throat?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>3. Do you have a cough?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>4. Are you experiencing any shortness of breath or difficulty breathing?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>5. Have you lost your sense of taste/smell in the past 48 hours?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>6. Have you experienced vomiting or loose stools recently?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>7. Do you have body or muscles aches?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>8. Have you traveled outside of your country in the past 14 days? Where?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>9. Do you have heart, kidney, or lung disease?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>10. Do you have any other condition that might increase your risk of infection?</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

NOTE: Ask the patient to take their temperature the evening before and the morning of their appointment.
Elimination or Substitution

- Testing prior to entry into practice
- Limit encounters with COVID-19 patients
  - Thoroughly screened regarding history of COVID illness and test results
  - Providing emergent care to non-COVID-19 patients
- Telemedicine
- Vaccination
- Utilize interim measures to reduce infection and delay treatment until COVID-19 illness has resolved.
- Reduce aerosol generating procedures when possible
Engineering Controls

- For open areas are treatment areas without doors, consider placing dividers of some sort between care area
  - May consider plastic drape to cover entry into care area
  - Must be disinfected in-between cases generating aerosols
- Dental dams
- High volume evacuation for hygienist and dentists
- HEPA filters

HVAC

- Increasing filtration efficiency to the highest level compatible with the HVAC system.
- Ability to safely increase the percentage of outdoor air supplied through the HVAC system.
- Limiting the use of demand-controlled ventilation, such as leaving the fan running, including bathroom exhaust fans during work hours, and when feasible, up to two hours after the end of the workday.
- Appropriate use/placement of a portable HEPA air filtration unit while the patient is actively undergoing, and immediately following, an aerosol-generating procedure.
- Use of upper-room ultraviolet germicidal irradiation (UVGI) as an additional solution.
Patient Arrival

- Triage ALL patients outside of the practice when possible
- PPE for patient triage workers
- Respiratory hygiene/cough etiquette
  - Provide mask if patient is not wearing a personal mask
  - Mask shortage – mask should be utilized for healthcare providers
- Wash Your Hands!
- Remove magazines, toys, remotes
- Establish a plan for routine surface disinfection
Reception Desk

- Consider what patients sign/fill out
- Pens for each patient – marketing
- Hand hygiene option at counter
- Mask/eye protection
- Limit sharing or equipment
- Frequent disinfecting
Lobby Area

Our New Lobby Is Your Car!!

Please call us or text us to let us know you have arrived!

Remember Social Distancing

Delivery of Care

- Limit individuals in the care area
- Use and disposal of required PPE
  - Gowns
  - Masks
  - Respirators
- Appropriate process for removal of PPE
- Process for cleaning and disinfection
- Reminder: Ask patient to notify practice if COVID-19 symptoms occur within 48 hours of encounter
OSHA Guidance on Preparing Workplaces for COVID-19

Very High Exposure Risk

Very high exposure risk jobs are those with high potential for exposure to known or suspected sources of COVID-19 during specific medical, postmortem, or laboratory procedures. Workers in this category include:

- Healthcare workers (e.g., doctors, nurses, dentists, paramedics, emergency medical technicians) performing aerosol-generating procedures (e.g., intubation, cough induction procedures, bronchoscopies, some dental procedures and exams, or invasive specimen collection) on known or suspected COVID-19 patients.

Workers, including those who work within 6 feet of patients known to be, or suspected of being, infected with SARS-CoV-2 and those performing aerosol-generating procedures, need to use respirators:

Dental Guidance

Aerosol-generating procedures (e.g., use of dental handpieces, air/water syringe, ultrasonic scalers)

- If necessary, for emergency care, use four-handed dentistry, high evacuation suction and dental dams to minimize droplet spatter and aerosols.
- Limit number of DHCP present during the procedure
- N95 respirator or a respirator that offers a higher level of protection

Elements of Standard Precautions

- Hand hygiene
- Use of personal protective equipment
- Respiratory hygiene/cough etiquette
- Safe injection practices
- Instrument management
- Environmental surfaces cleaning and disinfection

CDC PPE Guidance

- Identify and gather the proper PPE to don.
- Perform hand hygiene.
- Put on gown.
- Put on NIOSH-approved N95 filtering facepiece respirator or higher.
  - use a facemask if a respirator is not available.
- Put on face shield or goggles.
- Perform hand hygiene before putting on gloves.
- Enter patient room.

Face Shield, Goggle and N95

- When wearing an N95 respirator or half facepiece elastomeric respirator,
- Select the proper eye protection to ensure that the respirator does not interfere with the correct positioning of the eye protection
- Eye protection does not affect the fit or seal of the respirator. Face shields provide full face coverage.
- Goggles also provide excellent protection for eyes, but fogging is common

OSHA PPE Guidance - Dentistry

<table>
<thead>
<tr>
<th>Well patients</th>
<th>Dental procedures not involving aerosol-generating procedures</th>
<th>Dental procedures that may or are known to generate aerosols</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work clothing, such as scrubs, lab coat, and/or smock, or a gown</td>
<td>Gloves</td>
<td>Gloves</td>
</tr>
<tr>
<td>Gloves</td>
<td>Gown</td>
<td>Gown</td>
</tr>
<tr>
<td>Eye protection (e.g., goggles, face shield)</td>
<td>NIOSH-certified, disposable N95 filtering facepiece respirator or better*</td>
<td>Eye protection (e.g., goggles, face shield)</td>
</tr>
<tr>
<td>Face mask (e.g., surgical mask)</td>
<td>NIOSH-certified, disposable N95 filtering facepiece respirator or better*</td>
<td>NIOSH-certified, disposable N95 filtering facepiece respirator or better*</td>
</tr>
</tbody>
</table>

Patients with suspected or confirmed COVID-19

<table>
<thead>
<tr>
<th>Dental procedures not involving aerosol-generating procedures</th>
<th>Dental procedures that may or are known to generate aerosols</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gloves</td>
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</tr>
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</tr>
</tbody>
</table>

https://www.osha.gov/SLTC/covid-19/dentistry.html
Surgical Masks

- FDA reviews and clears; class II medical device.
- Different thicknesses and ability to protect from contact with liquids.
- Block large-particle droplets, splashes, sprays, or splatter.
  - Protect the environment from the wearer
- Reduce exposure of the worker’s secretions.
- Do not provide complete protection because of the loose fit.


**ASTM Mask Levels**

**ASTM LEVEL 3**
- High Fluid Resistance: 160 mmHg
- Filtration Efficiency: BFE ≥ 98%
- Breathability - Delta P: < 5.0 mm H₂O/cm²
- Flame Spread: Class 1

**ASTM LEVEL 2**
- Moderate Fluid Resistance: 120 mmHg
- Filtration Efficiency: BFE ≥ 98%
- Breathability - Delta P: < 5.0 mm H₂O/cm²
- Flame Spread: Class 1

**ASTM LEVEL 1**
- Low Fluid Resistance: 80 mmHg
- Filtration Efficiency: BFE ≥ 95%
- Breathability - Delta P: < 4.0 mm H₂O/cm²
- Flame Spread: Class 1

**LOW PERFORMANCE**
- Surgical Molded Utility Mask
- Physical Barrier Only
- No LEVEL Performance Level
- Filtration Efficiency: N/A

**N/A** unless mask manufacturer certifies mask meets ASTM performance Level 1.
Examples of Mask Use - Dental

<table>
<thead>
<tr>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Patient exams</td>
<td>• Limited oral surgery</td>
<td>• Complex oral surgery</td>
</tr>
<tr>
<td>• Op cleaning</td>
<td>• Endodontics</td>
<td>• Crown prep</td>
</tr>
<tr>
<td>• Impressions</td>
<td>• Prophy</td>
<td>• Implant</td>
</tr>
<tr>
<td>• Lab work (trim/polish)</td>
<td>• Restorative</td>
<td>• Periodontal surgery</td>
</tr>
<tr>
<td>• Orthodontics</td>
<td>• Sealants</td>
<td>• Ultrasonic scaling</td>
</tr>
</tbody>
</table>

Crosstex Secure Fit Mask Technology

TRANSMISSION-BASED PRECAUTIONS
NIOSH Approved Respirators

- **Filtering facepiece respirator (FFP)** – Disposable, single use and removes at least 95% of airborne particles.
- **Elastomeric half facepiece respirator** – Reusable facepiece and replaceable canister, cartridges or filters used to filter user’s breathing air.
- **Powered air-purifying respirator (PAPR)** – Powered by batteries and pulls air through attached filters or cartridges
  - **Loose fitting**: Does not require fit testing.
  - **Tight fitting**: Fit testing required.

https://www.cdc.gov/niosh/npptl/topics/respirators/factsheets/respsars.html

Counterfeit Respirators

- FDA Website lists acceptable respirators from China.
Respiratory Protection

- 29 CFR 1910.134
- Written Respiratory Protection Program (RPP)
- Applies:
  - Exposed to a hazardous level of an airborne contaminant; or
  - Required by the employer to wear respirator
- Training
- Fit testing

Elements of the RPP

- Designation of a program administrator
- Policies and procedures
  - Hazard evaluation and respirator selection
  - Medical evaluation of respirator wearers
  - Fit testing procedures for tight-fitting respirators
  - Procedures for proper use, storage, maintenance, repair, and disposal of respirators
  - Training
  - Program evaluation including consultation with employees
  - Recordkeeping
Medical Evaluation

- Prior to fit testing, change in worker health status or job demand
- The medical evaluation
  - physician or other licensed healthcare professional review responses to the questionnaire
  - "in-person" medical examination that obtains the same information
- Confidential health information

FIT TESTING PROCESS
This memorandum expands temporary enforcement guidance provided in OSHA’s March 14, 2020, memorandum to Compliance Safety and Health Officers for enforcing annual fit-testing requirements of the Respiratory Protection standard, 29 CFR § 1910.134(f)(2), with regard to supply shortages of N95s or other filtering facepiece respirators (FFRs) due to the coronavirus disease 2019 (COVID-19) pandemic. OSHA field offices will exercise enforcement discretion concerning the annual fit-testing requirements, as long as employers have made good-faith efforts to comply with the requirements of the Respiratory Protection standard and to follow the steps outlined in the March 14, 2020 memorandum.

Further, given additional concerns regarding a shortage of fit-testing kits and test solutions (e.g., Bitrex™, isoamyl acetate), employers are further encouraged to take necessary steps to prioritize use of fit-testing equipment to protect employees who must use respirators for high-hazard procedures.

In the absence of quantitative or qualitative fit-testing capabilities required under mandatory Appendix A to 29 CFR § 1910.134 Appendix A, the following additional guidance is provided to assist with decision-making with respect to use of N95s or other FFRs. Most respirator manufacturers produce multiple models that use the same basic head form for size/fit. Manufacturers may have a crosswalk (i.e., a list of their respirators with equivalent fit). Therefore, if a user’s respirator model (e.g., model x) is out of stock, employers should consult the manufacturer to see if it recommends a different model (e.g., model y or z) that fits similarly to the model (x) used previously by employees.

During this COVID-19 pandemic, OSHA field offices should exercise additional enforcement discretion regarding compliance with 29 CFR § 1910.134(f) when an employer switches to an equivalent-fitting make/model/size/style N95 or other filtering facepiece respirator without first performing an initial quantitative or qualitative fit test.

**Fit Under Fire**

**Situational Strategies to Achieve the Best Respirator Fit During Crisis**

- **Under serious outbreak conditions** in which respirator supplies are severely limited, however, you may not have the opportunity to be fit tested on a respirator before you need to use it.
- **While this is not ideal, in this scenario, you should work with your employer to choose the respirator that fits you best, as, even without fit testing, a respirator will provide better protection than a facemask or using no respirator at all.**
Removing PPE

- Remove gloves.
- Remove gown.
- Healthcare personnel may now exit patient room.
- Perform hand hygiene.
- Remove face shield or goggles.
- Remove and discard respirator (or facemask if used instead of respirator). Do not touch the front of the respirator or facemask.
- Perform hand hygiene after removing the respirator/facemask and before putting it on again if your workplace is practicing reuse.


PPE Removal – In the Room
Storage

- Manufacturers provide instructions for cleaning, sanitizing, repairing, inspecting, and storing their respirators.
- Packed or stored so that the respirators do not become damaged or deformed.
- Never store disposable respirators in pockets, plastic bags, or other confined areas.
- Remove the respirator and either hang it in a designated area or place it in a bag
  - *Label respirators with a user's name before use*
After Patient Discharge

- Disinfect surfaces with EPA registered hospital level disinfectant
- EPA list of products
- American Chemistry

Breaking News: CDC Update

The recommendation to wait 15 minutes after completion of clinical care and exit of each patient without suspected or confirmed COVID-19 to begin to clean and disinfect room surfaces has been removed to align with CDC Interim Infection Prevention and Control Recommendations for Patients with Suspected or Confirmed Coronavirus Disease 2019 (COVID-19) in Healthcare Settings.
### AIR EXCHANGE

https://www.engineeringtoolbox.com/air-change-rate-room-d_867.html

<table>
<thead>
<tr>
<th>ACH</th>
<th>Time (minutes) required for removal 99% efficiency</th>
<th>Time (minutes) required for removal 99.9% efficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>138</td>
<td>207</td>
</tr>
<tr>
<td>4</td>
<td>69</td>
<td>104</td>
</tr>
<tr>
<td>6</td>
<td>46</td>
<td>69</td>
</tr>
<tr>
<td>8</td>
<td>35</td>
<td>52</td>
</tr>
<tr>
<td>10</td>
<td>28</td>
<td>41</td>
</tr>
<tr>
<td>12</td>
<td>23</td>
<td>35</td>
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<tr>
<td>15</td>
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<td>28</td>
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<tr>
<td>20</td>
<td>14</td>
<td>21</td>
</tr>
<tr>
<td>50</td>
<td>6</td>
<td>8</td>
</tr>
</tbody>
</table>

* [https://www.cdc.gov/infectioncontrol/guidelines/environmental/appendix/air.html#tableb1](https://www.cdc.gov/infectioncontrol/guidelines/environmental/appendix/air.html#tableb1)

+ Denotes frequently cited ACH for patient-care areas.

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### Optimize PPE Supply

- Aware of PPE inventory and supply chain.
- Aware of PPE utilization rate.
- Aware of status of community spread.
- Facilities have already implemented other engineering and administrative control measures including:
  - Reduction in number of patients seen
  - Reducing face-to-face HCP encounters with patients
  - Maximizing use of telemedicine
- Training for any changes to normal processes.

Surge Capacity

- **Conventional capacity**: No change in the delivery of patient care.
- **Contingency capacity**: May change daily practices but may not have any significant impact on the care delivered to the patient or the safety of healthcare personnel.
- **Crisis capacity**: Are not commensurate with U.S. standards of care. These measures, or a combination of these measures, may need to be considered during periods of known facemask shortages.


Gowns

- Change gown if it becomes soiled.
- Disposable gowns should be discarded after use.
- Cloth gowns should be laundered after each use.

## When N95 Supplies are Running Low

### Personal Protective Equipment: Respiratory Protection and Facemasks

| Use of respirators beyond the manufacturer-designated shelf life for healthcare delivery | + |
| Use of respirators approved under standards used in other countries that are similar to NIOSH-approved respirators | + |
| Limited re-use of N95 respirators | + |
| Use of additional respirators beyond the manufacturer-designated shelf life for healthcare delivery that have not been evaluated by NIOSH | + |
| Prioritize the use of N95 respirators and facemasks by activity type | + |


---

## Extended Use: N95 Respirator

- Wearing the same N95 respirator for close contact encounters with several patients, without removing the respirator between patient encounters
- Involves less touching of the respirator and therefore less risk of contact transmission
- Extended use can cause additional discomfort to wearers from wearing the respirator longer than usual
Limited Reuse: N95 Respirators

- Using the same N95 respirator, for multiple encounters, different patients BUT removing it after each encounter.
- Do NOT share N95 and other disposable respirators


Reuse

- Consult with manufacturer regarding maximum uses.
  - No guidance available: no more than 5 uses
- Reinforce the need for proper respirator donning techniques including inspection of the device for physical damage
  - Are straps stretched out so much that they no longer provide enough tension for the respirator to seal to the face?
  - Is the nosepiece or other fit enhancements broken?
  - Any visible soiling?
Contamination is a Risk

- Discard grossly contaminated respirators.
- Use a face shield or facemask over the respirator to reduce/prevent contamination of the N95 respirator.
- Use clean pair of gloves when re-using, donning or adjusting a previously worn N95 respirator.
- Discard gloves and perform hand hygiene after the respirator is donned or adjusted.

NOTE:

- Use of a cleanable face shield is strongly preferred to a surgical mask to reduce N95 respirator contamination. Concerns have been raised that supplies of surgical masks may also be in limited supply during a public health emergency and that the use of a surgical mask could affect the function of the N95 respirator. (17)

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

Worker Exposure?

48 hours after appointment

HEALTHCARE PERSONNEL (HCP) POTENTIAL EXPOSURE DETERMINATION
(HEALTHCARE SETTING TO PATIENTS, VISITORS, OR OTHER HCP WITH CONFIRMED COVID-19)

<table>
<thead>
<tr>
<th>EXPOSURE</th>
<th>PERSONAL PROTECTIVE EQUIPMENT USED</th>
<th>DESCRIPTION</th>
</tr>
</thead>
</table>
| HCP who had prolonged close contact* with a patient, visitor, or HCP with confirmed COVID-19 | - HCP not wearing a respirator or face mask
- HCP not wearing eye protection if the person with COVID-19 was not wearing a cloth face covering or facemask
- HCP not wearing all recommended PPE (i.e., gown, gloves, eye protection, respirator while performing an aerosol-generating procedure) | - Exclude from work for 14 days after last exposure
- Advise HCP to monitor themselves for fever or symptoms consistent with COVID-19
- Any HCP who develop fever or symptoms consistent with COVID-19 should immediately contact their established point of contact (e.g., occupational health program) to arrange for medical evaluation and testing |
Worker Tests Positive?

- Contact the Health Department for direction on how to proceed.
  - Identify close contacts – other workers/patients.
- Critical to have documentation of employee screening daily.
- Masks and eye protection should be worn when near workers/patients who do not have on mask.
New Checklist

Best Practices for Infection Control in Dental Practices During the COVID-19 Pandemic

OSAP/DOP
BEST PRACTICES FOR INFECTION CONTROL IN DENTAL CLINICS DURING THE COVID-19 PANDEMIC

Good to Know

- A copy of handouts will be emailed along with the continuing education document, only for the live webinar, will be emailed by Tuesday, June 23, 2020.
- The webinar is being recorded and will be available on the TMC COVID – 19 Resource Page.
Thank you!

Karen Gregory, RN
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Service@totalmedicalcompliance.com
888.862.6742