Project Firstline **Session Plans**

Topic Eleven:
PPE Part 3 – Respirators

Contents

Overview of Sessions

The following Session Plans for **Topic Eleven: PPE Part 3 – Respirators** are to help guide you, as a provider of the Project Firstline training, with the necessary support to use Project Firstline materials to create well-rounded training events and educate your audience about infection control.

Facilitator Instructions

Choose Your Session

There are three different session lengths for you to choose from based on time available for training:

- 60 minutes (e.g., dedicated training session)
- 20 minutes (e.g., "Lunch and Learn" or agenda add-on)
- 10 minutes (e.g., "micro-learning" or agenda add-on)

Due to time constraints, the 10- and 20-minute sessions will have less opportunity for interactive discussion. We invite you to extend sessions for greater engagement whenever possible. We have also provided recommendations for using chat functions and other activities to draw your audience into the materials when you are limited to only a short amount of time.

These time lengths are not intended to be prescriptive and are instead provided simply as a tool that you may tailor to best match your specific audience and needs. When you schedule your session, use your knowledge of your audience's availability and learning needs to adapt these materials as needed.

Session Materials

- Four different Session Plans: 60 minutes, 20 minutes, 10 minutes (Respirators and N95s), and 10 minutes (N95 User Seal Check)
- Corresponding PowerPoint slide decks: 60 minutes, 20 minutes, 10 minutes (Respirators and N95s), and 10 minutes (N95 User Seal Check)
- Links to *Inside Infection Control* by CDC's Project Firstline videos: Episodes 11 and 12, Why Are Gloves Recommended for COVID-19? and Why Are Gowns Recommended for COVID-19?

Using the Materials

The sample materials are presented in sequence, with the expectation that participants will progress through the series. You may, however, mix and match content to meet participant needs. Things to know:

- Use the plans and slides as guides for your presentation.

- The slide numbers in the Session Plans correspond to the companion slide decks provided.

- We encourage you to customize the look and feel of the presentations and to adapt the facilitator script to better match your own voice and audience.

- The time recommendations are provided simply as a guide for the minimum amount of time needed for each section. We encourage you to take more time, as needed, with specific sections.

Conducting a Session

Schedule and announce the sessions according to your organization's needs and requirements.

Each session should include, at a minimum:

- Specific learning objectives
- Presentation of core content
- Opportunities to understand and engage with the key messages for each topic

Each session should also give participants the opportunity to learn more, to understand and connect internally with the content, and to act on their learning and engage with others.

Additional guidance for facilitators and information about other topics covered in the series is provided in the Project Firstline Facilitator Toolkit Guide.

Educational Content Outline

Topic Eleven: PPE Part 3 – Respirators

Content Summary: Respirators keep the wearer from inhaling infectious particles in the air. An N95 is a type of respirator that keeps the person wearing it from inhaling very small particles, including small droplets that can carry virus. N95s achieve this protection because of the filtering material they're made of, and because of their snug fit. Doing a user seal check each time you use your N95 is important to make sure it's doing its job.

Inside Infection Control **Videos***:*

[Episode 13: What is a Respirator?](#)

[Episode 14: What is an N95 Respirator?](#)

[Episode 15: How Do I Test the Seal on my N95?](#)

Inside Infection Control **Video Content Outlines:** For reference, [Content Outlines](#) for the videos presented in this session are provided as an appendix to this document.

Learning Objectives

- Describe one (1) job of a respirator.
  - ▶ To keep the wearer from inhaling potentially harmful particles or droplets.
- Describe two (2) aspects of N95s that protect the wearer from inhaling very small particles.Gowns protect the wearer by keeping germs off of your clothes.
  - ▶ N95s are made of a special filtering material that NIOSH has tested to prove that it filters out at least 95% of very small particles in the air.
  - ▶ N95s fit snugly to ensure the air you are breathing in goes through the filter and doesn't leak in around the edges.
- Explain one (1) way to perform an N95 user seal check and why it is important.
  - ▶ How to perform a user seal check:
    - Put on the N95 correctly.
    - Put your hands lightly over the surface of the N95 and try to cover as much of the area with your hands as possible.
    - Breathe out gently. While breathing out, make sure there's a little buildup of air inside the N95 and that air doesn't leak around the sides.

▶ Why it is important to perform a user seal check each time an N95 is used:

- It's possible to put on an N95 using the correct technique and still not have a good seal around all the edges.
- A good seal is important to make sure all the air you're breathing in passes through the filtering material of the N95.
- If there's a leak or bad seal, then it's likely you'll breathe in unfiltered air, which could have germs in it, from around the edges of the N95.

▶ Discuss two (2) possible actions you can take if a leak in the N95 is detected.

- Use both hands to mold the metal nose strip to the bridge of your nose, starting from the top.
- Move the straps to different areas at the top and base of your head to get the best possible fit.

Sessions at a Glance

Topic Eleven:

PPE Part 3 – Respirators

Session Plans and When to Use:

- 60 minutes (e.g., dedicated training session)
- 20 minutes (e.g., "Lunch and Learn" or agenda add-on)
- 10 minutes (e.g., "micro-learning" or agenda add-on) – Respirators and N95s
- 10 minutes (e.g., "micro-learning" or agenda add-on) – N95 User Seal Check

Format:

- Online, synchronous

Special Supplies:

- Registration list
- Participant booklet
- Session feedback form
- Timekeeper

Please note, in this session, participants will need to be able to access the internet (while still connected to the meeting) to view a designated vlog episode on their own. This could be done from a computer, tablet, or smartphone. Encourage participants to come prepared to do so.
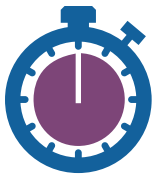
60-Minute Session Plan
Facilitator Notes and Sample Scripts

1. Session Start

PPT

Slide 1: Opening Slide
Participants log in and get settled.

2. Agenda, Introductions, and Learning Objectives

10 minutes

PPT

Slide 2: Agenda

Facilitator Notes

- Welcome the group and add a greeting to the chat box.
- If this session is part of an ongoing series, you may choose to say "welcome back," "thank you for joining us again," etc.
- Announce housekeeping notes, either orally or via chat.
  - ▶ If needed, provide additional notes specific to the platform you're using (e.g., how to "raise your hand," how to post questions).
- Provide an overview of the agenda.
- Adapt this section of the session as needed: for instance, you may choose to spend additional time on introductions if there are new faces, or if participants do not know each other.

Sample Script

"Welcome to Project Firstline. Over the next hour, we'll explore respirators, especially one type that's commonly used in healthcare, the N95. Please keep your videos on, to the extent possible, and keep your microphone muted when you are not contributing to the discussion. It's great to see you all here today!

"Today we'll talk about the job of a respirator, and about topics that are specific to N95s, including their special role in infection control in healthcare, and how to perform a user seal check."

PPT **Slide 3: Learning Objectives**

Facilitator Notes

Provide an overview of the session's learning objectives.

Sample Script

"Here is what we expect to learn today. By the end of today's training, you will be able to describe the job of a respirator and important aspects of the N95 respirator – including one way to make sure you have a good seal when you wear one."

PPT **Slide 4: Introductions**

Facilitator Notes

- These questions will give you a better understanding of your participants' backgrounds, experience, and level of knowledge.
  - ▶ If you know that your audience is unlikely to be familiar with respirators, you may wish to preface the question with the assurance that it's okay to answer, "I don't know."
- Tailor your slide delivery for the virtual format and platform, and the number of participants:
  - ▶ You may wish to call on participants individually.
  - ▶ You may wish to add role- or facility-specific questions to the introductions.
  - ▶ If you have a large group, you may decide to skip oral introductions and use the chat.
  - ▶ If your group meets regularly, you may wish to skip or shorten the introductions, or use a different "icebreaker" approach.
- Be sure to introduce yourself, and anyone who is assisting you.

Sample Script

"Let's take a minute to get to know each other. Please share in 30 seconds or less your name, your role, and the answer to this question: **Do you regularly wear respirators on the job?**"

PPT **Slide 5: Recommended PPE for COVID-19**

Facilitator Notes

- Transition to discussion about respirators and other PPE recommended for COVID-19.
- If this session is part of a series, you may choose to indicate that future sessions will focus on other pieces of PPE.

Sample Script

"Respirators are part of the recommended PPE for COVID-19. In other sessions, we'll examine other types of PPE."

PPT **Slide 6: How Do You Use Respirators?**

Facilitator Notes

- Based on the responses to the icebreaker question, invite volunteers to share details and describe in their own words how, and when, they use a respirator on the job.
  - ▶ Allow brief responses. If needed, you could prompt additional information with questions such as:
    - "**When do you wear a respirator?**"
    - "**What type of respirator do you use?**"
  - ▶ Depending on the experience of participants, they may be well-versed in the topic, or some may be wondering, what is a respirator anyway? Explain that they will have an opportunity to learn about respirators in this session.
- You may choose for them to respond orally or via chat.
- You may consider capturing their responses, either on a new slide or in the chat.
- While it is not necessary for everyone to reply, be sure to solicit and affirm participant responses before moving on, and to thank participants for sharing.
- Affirm that today's session will focus on explaining the concept of a respirator and on the special role of N95s.

Sample Script

"Thank you, and welcome again! It looks like many of us use respirators on the job. **Would anyone care to offer more details about how you use a respirator?** Please feel free to come off mute or type in the chat."

(*Pause for responses.*)

"Thank you, that's great! Today, we're going to talk about what respirators do and the different types of respirators we might use. We'll focus on N95s, which many of you use every day!"

3. Video and Discussion

15 minutes (video 6:40)

PPT **Slide 7: Respirators**

Facilitator Notes

- Introduce the first video and explain that we will watch it to make sure everyone is on the same page.
- Invite participants to make notes as they watch:
  - ▶ A simple definition of a respirator
  - ▶ Three types of respirators commonly used in healthcare

Sample Script

"Let's start with the basics. We'll check in with the CDC's Dr. Abby Carlson to make sure we're all on the same page as we answer the question, **what is a respirator anyway?** As you watch, please make note of a simple definition of a respirator and three types of respirators commonly used in healthcare. Please jot down your thoughts in your Participant Booklet."

PPT **Slide 8: Video: What is a Respirator?**

Facilitator Notes

- Access the video here:
  CDC Website: https://www.cdc.gov/infectioncontrol/projectfirstline/videos/EP13-Respirator-LowRes.mp4
- OR
  Project Firstline YouTube Playlist: https://www.youtube.com/watch?v=Cwf9tM8Tguk&list=PLvrp9iOILTQZQGtDnSDGViKDdRtIc13VX&index=14

PPT   **Slide 9: What did you learn about respirators?**

Facilitator Notes

- Invite participants to review the notes they wrote down during the video and share, either orally or in the chat, a simple definition of a respirator and three types of respirators commonly used in healthcare.
- Acknowledge responses. Answers may include:
  - ▶ *A respirator's job is to keep you from breathing in things in the air that might hurt you, like germs, dust, chemicals, and other dangerous things.*
  - ▶ *In healthcare, we use respirators when we think we're going to be in a situation when we could breathe in air that's carrying infectious material – like particles containing viruses.*
  - ▶ *Types of respirators used in healthcare:*
    - ● *Filtering facepiece respirator (FFR), the type most commonly used in healthcare*
    - ● *Powered air-purifying respirator (PAPR)*
    - ● *Elastomeric respirator*
- You may wish to refer to the Content Outline for Episode 13 of *Inside Infection Control* for additional discussion points.

Sample Script

"Take a moment to review the notes you took during the video. **How would you define a respirator? What are some respirators that are used in healthcare?**"

(*Pause for responses.*)

"That's great, thank you!"

PPT   **Slide 10: What do you want to know more about?**

Facilitator Notes

- Invite participants to share additional questions that they have about respirators in healthcare.
  - ▶ You may choose for participants to respond orally or in the chat.
  - ▶ You may choose to summarize key points on a slide or in the chat.
- Link the questions to the next vlog episodes and discussion.

Sample Script

"I'll pause here to ask, after that introduction to respirators, **what else would you like to know about respirators in healthcare?**"

(*Pause for responses.*)

"Thank you! Our next activity focuses on a few of these topics, so let's get to it!"

4. Video and Breakouts

25 minutes (Episode 14 – 6:20. Episode 15 – 7:10)

Slide 11: More About N95s

Facilitator Notes

- Transition to small-group breakouts and discussion of N95s.
- You may wish to refer to earlier discussion and note whether participants specifically mentioned using N95s on the job.

Sample Script

"We started by learning about respirators and how they keep you from breathing in infectious particles. Now, let's dig a little deeper into the N95, which some of you mentioned is the respirator that you use on the job. We'll break into two groups."

Slide 12: Breakout Groups

Facilitator Notes

- Use breakout rooms appropriate to your virtual platform to divide participants into two groups.
  - ▶ As needed, provide instructions related to the breakout room format, such as how to ask questions.
  - ▶ Plan to have the hyperlinks to the videos ready to share with participants in the chat.
- Explain that one group will watch Episode 14 of *Inside Infection Control*: What is an N95 Respirator?
  - ▶ Access the video here:
    CDC Website: https://www.cdc.gov/infectioncontrol/projectfirstline/videos/EP14-N95-LowRes.mp4
  - ▶ OR
    Project Firstline YouTube Playlist: https://www.youtube.com/watch?v=_0koFmL-h9E&list=PLvrp9iOILTQZQGtDnSDGViKDdRtIc13VX&index=15

- Explain that the other group will watch Episode 15 of *Inside Infection Control*: How Do I Test the Seal on my N95?
  - ▶ Access the video here:
    CDC Website: https://www.cdc.gov/infectioncontrol/projectfirstline/videos/Ep15-Seal-LoRes.mp4
  - ▶ OR
    Project Firstline YouTube Playlist: https://www.youtube.com/watch?v=bQ8zZ31LLOw&list=PLvrp9iOILTQZQGtDnSDGViKDdRtIc13VX&index=16
- Each group will then discuss the questions on the slide:
  - ▶ *What are the important points from this video? How would I explain it to others?*
  - ▶ *Why should I care? What's the relevance to my work?*
  - ▶ Inform the groups that they have 15 minutes to work together.
  - ▶ Ask each group to identify a spokesperson who will share the group's ideas when everyone reconvenes.
- After the small groups have gathered, depending on your virtual platform, you may use the broadcast message feature or another means to send reminders of the questions, how much time is remaining, etc. You may also choose to "visit" each group to encourage conversation and to hear their thoughts.

Sample Script

"Group 1 will watch Episode 14 of *Inside Infection Control*: What is an N95 Respirator? Group 2 will watch Episode 15of *Inside Infection Control*: How Do I Test the Seal on my N95? The first video focuses on why N95s work, and the second on why it's important to test the seal on your N95 every time you wear it and how to do a user seal check.

"After you watch the video together, take a few minutes to discuss these questions: **What are the important points from this video? How would I explain it to others?** and **Why should I care? What's the relevance to my work?**

"You'll have about 15 minutes to work, and then we'll come back together as a large group to share our ideas. Please decide on one person from your group to report out your thoughts. I'll give you a warning when you have 2 minutes left."

PPT **Slide 13: Report Out**

Facilitator Notes

- After 15 minutes, reconvene the group.
- In turn, invite one person from each group to share their responses to the questions.
- After each group's report, acknowledge the responses.
  - ▶ You may choose to capture high-level summaries of their responses on a slide or in the chat.
  - ▶ You may wish to refer to the Content Outlines for Episodes 14 and 15 of *Inside Infection Control* for additional discussion points and to connect their discussion to the Learning Objectives for this session:
    - Describe one (1) job of a respirator.
    - Describe two (2) aspects of N95s that protect the wearer from inhaling very small particles.
    - Explain one (1) way to perform a user seal check and why it is important.
    - Discuss two (2) possible actions you can take if a leak in the N95 is detected.
- After the reports, lead a group discussion of strategies that they could employ to explain these concepts to others.
  - ▶ You may choose for participants to respond orally or in the chat.
  - ▶ You may choose to summarize the group's ideas on a slide or in the chat.
- Encourage participants to think about how they can use their knowledge about respirators at work, and how they can share that knowledge with others.
  - ▶ If appropriate to your audience, you may consider building on the suggested strategies and asking the group to reflect on any new ideas that might be helpful in their daily work.

Sample Script

"Welcome back. I'd like for each group to report on your discussion, and I'll capture some high-level points as you share. Group 1, let's start with you!"

(Acknowledge and react to their reports.)

"Great. Thank you for sharing your ideas! When you're on the job in healthcare, it's important to understand how your respirator works and to make sure it's working correctly so it can do its job of keeping you from breathing in germs.

"Now let's think about how you can use what you know about respirators at work, and how you can share your knowledge with others. **Does anyone have any ideas?**"

(Pause for responses.)

"Thanks for the good ideas!"

5. Reflection and Wrap-Up

10 minutes

Slide 14: Reflection

Facilitator Notes

- Thank participants for the discussion.
  - ▶ If this session is part of a series, you may wish to remind the group of key points from other sessions.
- Invite participants to reflect on what they learned during the session.

Sample Script

"You all did a great job of sharing your observations and coming up with useful, good strategies for sharing your knowledge. Remember, if you're ever unsure about what to do, such as how to do a user seal check, you can always talk with your supervisor or your colleagues.

"Let's use our last few minutes together to reflect on what we've learned and think about how we can put what we've learned into practice."

Slide 15: What did you learn today?

Facilitator Notes

- Invite participants to share something that they learned about respirators, how N95s keep the wearer from inhaling infectious particles, or how to do a user seal check.
  - ▶ You may wish to refer to the Content Outlines for *Inside Infection Control* Episodes 13, 14, and 15 to prompt or reinforce the discussion.
- You may choose for participants to respond orally or in the chat.
  - ▶ Acknowledge responses and consider reading them aloud if they are in the chat.
- Invite additional, remaining questions.
  - ▶ Encourage participants to share questions that they would like Project Firstline to address in future offerings.

- As above, if the answers are information that is already included in this session, please respond.
- If the questions address content that is not covered in this session, please do not attempt to answer. Instead, take note of the questions and consult with CDC resources to follow up with answers after the session.

Sample Script

"I hope you've learned a lot today. Before we go, I'd like for you to share with me one thing you learned about respirators, how N95s work, or how to do a user seal check on your N95. I'd also like to hear how you plan to use your knowledge in your daily work. Please feel free to come off mute or to respond in the chat."

(Pause for responses.)

PPT · **Slide 16: Questions?**

Facilitator Notes

- Invite additional, remaining questions.
    - ▶ You may choose to ask participants to respond orally, in the chat, or both.
    - ▶ Encourage participants to share questions that they would like Project Firstline to address in future offerings.
- As above, if the answers are information that is already included in this session, please respond.
- If the questions address content that is not covered in this session, please do not attempt to answer. Instead, take note of the questions and consult with CDC resources to follow up with answers after the session.

Sample Script

"Thank you all for your time! We covered a lot today. **Does anyone have any questions still remaining or items I can clarify about respirators and N95s?** And related to that, **are there questions about infection control – PPE or any other aspect of infection control in healthcare – that you would like Project Firstline to address?**"

(Address questions as appropriate.)

"Thank you for sharing those questions. Project Firstline is actively collecting your questions to help inform more training resources as they're developed. I've written them down, and I will get back to you with responses."

PPT **Slide 17: Key Takeaways**

Facilitator Notes

- Review key takeaways.
- You may choose to revisit discussion points or questions that arose during the session.

Sample Script

"I hope this training gave you some good information about respirators and N95s, and why they are so important for infection control. I've captured some key takeaways here, which you can review at your leisure after the session today."

PPT **Slide 18: Resources and Future Training Sessions**

Facilitator Notes

- Share additional resources from Project Firstline and CDC.
- Explain how participants can reach you, by the means of your choosing, and how they can reach Project Firstline.
- If this session is part of a series, you may choose to describe the themes of upcoming sessions.

Sample Script

"Even though we covered a lot today, there is still much more to learn. You can keep exploring these topics on your own using the resources on this slide. You can also follow us on social media. I will stay on the line for a few minutes after our session ends and will be happy to discuss any other questions!"

(If this session is part of a series) "Next time, we will cover [insert next training topic]."

Slide 19: Feedback Form

Facilitator Notes

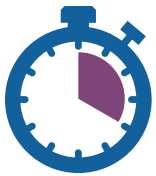Explain how to access the feedback form.

Sample Script

"And, finally, please let us know how you enjoyed today's session by completing the following feedback form. Thanks again for joining us today."

After the Session

Send list of participant questions compiled during this session to ProjectFirstline@cdc.gov.

20-Minute Session Plan

Facilitator Notes and Sample Scripts

1. Session Start

PPT **Slide 1: Opening Slide**
Participants log in and get settled.

2. Agenda, Learning Objectives, and Introductions

5 minutes

PPT **Slide 2: Agenda**

Facilitator Notes

- Welcome the group and add a greeting to the chat box.
- If this session is part of an ongoing series, you may choose to say "welcome back," "thank you for joining us again," etc.
- Announce housekeeping notes, either orally or via chat.
  - ▶ If needed, provide additional notes specific to the platform you're using (e.g., how to "raise your hand," how to post questions).
- Provide an overview of the agenda.
- Adapt this section of the session as needed: for instance, you may choose to spend additional time on introductions if there are new faces, or if participants do not know each other.

Sample Script

"Welcome to Project Firstline. Over the next 20 minutes, we'll explore respirators, especially one type that's commonly used in healthcare, the N95. Please keep your videos on, to the extent possible, and keep your microphone muted when you are not contributing to the discussion. It's great to see you all here today!

"Today we'll talk about the job of a respirator and about topics that are specific to N95s, including their special role in infection control in healthcare, and how to perform a user seal check."

PPT　**Slide 3: Learning Objectives**

Facilitator Notes

Provide an overview of the session's learning objectives.

Sample Script

"Here is what we expect to learn today. By the end of today's training, you will be able to describe the job of a respirator and important aspects of the N95 respirator – including one way to make sure you have a good seal when you wear one."

PPT　**Slide 4: Introductions**

Facilitator Notes

- These questions will give you a better understanding of your participants' backgrounds, experience, and level of knowledge.
- Tailor your slide delivery for the virtual format and platform, and the number of participants:
  - ▶ You may wish to call on participants individually.
  - ▶ You may wish to add role- or facility-specific questions to the introductions.
  - ▶ If you have a large group, you may decide to skip oral introductions and use the chat.
  - ▶ If your group meets regularly, you may wish to skip or shorten the introductions, or use a different "icebreaker" approach.
- Be sure to introduce yourself, and anyone who is assisting you.

Sample Script

"Let's take a minute to get to know each other. Please share in 30 seconds or less your name, your role, and the answer to this question: **Do you regularly wear respirators on the job?**"

PPT **Slide 5: Recommended PPE for COVID-19**

Facilitator Notes

- Transition to discussion about respirators and other PPE recommended for COVID-19.
- If this session is part of a series, you may choose to indicate that future sessions will focus on other pieces of PPE.

Sample Script

"Respirators are part of the recommended PPE for COVID-19. In other sessions, we'll examine other types of PPE."

3. Video and Discussion

10 minutes (video 6:40)

PPT **Slide 6: Respirators**

Facilitator Notes

- Introduce the video and explain that we will watch it to make sure everyone is on the same page.
- Invite participants to make notes as they watch:
  ▶ A simple definition of a respirator
  ▶ Three types of respirators commonly used in healthcare

Sample Script

"Let's start with the basics. We'll check in with the CDC's Dr. Abby Carlson to make sure we're all on the same page as we answer the question, *what is a respirator anyway?* As you watch, please make note of a simple definition of a respirator and three types of respirators commonly used in healthcare. Please jot down your thoughts in your Participant Booklet."

PPT   **Slide 7: Video: What is a Respirator?**

Facilitator Notes

- Access the video here:
  CDC Website: https://www.cdc.gov/infectioncontrol/projectfirstline/videos/EP13-Respirator-LowRes.mp4
- OR
  Project Firstline YouTube Playlist: https://www.youtube.com/watch?v=Cwf9tM8Tguk&list=PLvrp9iOILTQZQGtDnSDGViKDdRtIc13VX&index=14

PPT   **Slide 8: What did you learn about respirators?**

Facilitator Notes

- Invite participants to review the notes they wrote down during the video and share, either orally or in the chat, a simple definition of a respirator and three types of respirators commonly used in healthcare.

- Acknowledge responses. Answers may include:

  ▶ *A respirator's job is to keep you from breathing in things in the air that might hurt you, like germs, dust, chemicals, and other dangerous things.*

  ▶ *In healthcare, we use respirators when we think we're going to be in a situation when we could breathe in air that's carrying infectious material – like particles containing viruses.*

  ▶ *Types of respirators used in healthcare:*
  - *Filtering facepiece respirator (FFR), the type most commonly used in healthcare*
  - *Powered air-purifying respirator (PAPR)*
  - *Elastomeric respirator*

- You may wish to refer to the Content Outline for Episode 13 of *Inside Infection Control* for additional discussion points.

Sample Script

"Take a moment to review the notes you took during the video. **How would you define a respirator? What are some respirators that are used in healthcare?**"

(*Pause for responses.*)

"That's great, thank you!"

PPT   **Slide 9: What is an N95 respirator?**

Facilitator Notes

- Invite group discussion of what an N95 respirator is.

- The bullet points on slide 9 summarize content from Episode 14 of *Inside Infection Control*: What is an N95 Respirator? For time reasons, the video is not shown during the 20-minute session. You may wish to refer to the Content Outline for Episode 14 for additional discussion points.

- This slide has animations for the second column. When you advance to the slide, only the first column will appear.

- After you introduce the points, ask participants to share answers to the questions **"Why?"** or **"How?"** either orally or in the chat.

- After they provide responses, use the animation to reveal the answers.

Sample Script

"**Does anyone know what an N95 is?**"

(*Pause for responses.*)

"That's right. It's a type of respirator that's been tested and approved by NIOSH for use in healthcare. Let's talk about why N95s are important for infection control in healthcare. First, N95s are designed to filter out certain sizes of very small particles in the air. They also block your respiratory droplets from spreading to the environment. **How do they do that?**"

(*Pause for responses.*)

"Yes! N95s are made of a special filtering material that filters out at least 95% of very small particles in the air. N95s work not only because of the filtering material but also because of how they fit. They're put together in a way that makes sure all the air you're breathing in goes through the filter first and doesn't leak in around the edges. In order to work correctly, your N95 must fit your face well. So, when it comes to N95s, there are two big things to remember about how they protect you: filter and fit."

PPT **Slide 10: N95 User Seal Check**

Facilitator Notes

- Invite group discussion of user seal checks for N95 respirators. You may wish to demonstrate a user seal check with a prop, or as depicted in Episode 15 of *Inside Infection Control*: How Do I Test the Seal on my N95?

- The bullet points on slide 10 summarize content from Episode 15 of *Inside Infection Control*. For time reasons, the video is not shown during the 20-minute session. You may wish to refer to the Content Outline for Episode 15 for additional discussion points.

- This slide has animations for the second bullet. When you advance to the slide, only the first bullet will appear.

- After you introduce the points, ask participants to share answers to the questions **"Why?"** or **"How?"** either orally or in the chat.

- After they provide responses, use the animation to reveal the answers.

Sample Script

"**Does anyone know why it's important to do something called a 'user seal check' every time you put on your N95?**"

(*Pause for responses.*)

"That's right. You want to make sure you have a good seal around all the edges when you put on your N95, because it's possible to put it on using the correct technique and still not have that good seal around all the edges. If there's a leak or bad seal, then it's likely you'll breathe in unfiltered air, which could have germs in it. **So, how do you do a user seal check?**"

(*Pause for responses.*)

"It's important to follow the instructions on how to do a user seal check that came from the manufacturer of your specific type of N95. Most of the time, the best way to check the seal is with a 'positive pressure' check: gently breathe out while blocking the paths where air might escape to make sure there aren't any leaks around your face or in the filter itself.

"If the pressure doesn't build up, or there is a leak, use both hands to mold the metal nose strip to the bridge of your nose, starting from the top. You can also move the straps to different areas at the top and base of your head to get the best possible fit.

"If there's still a leak, you may need to be fit-tested with a different model of N95 or a different size. It's also possible the N95 may be worn out and you need a new one, or you may need a different type of respirator."

4. Reflection and Wrap-Up

5 minutes

Slide 11: Reflection

Facilitator Notes

- Thank participants for the discussion.
  - ▶ If this session is part of a series, you may wish to remind the group of key points from other sessions.
- Invite participants to reflect on what they learned during the session.

Sample Script

"You all did a great job! Remember, if you're ever unsure about what to do, such as how to do a user seal check, you can always talk with your supervisor or your colleagues.

"Let's use our last few minutes together to reflect on what we've learned and think about how we can put what we've learned into practice."

Slide 12: Questions?

Facilitator Notes

- Invite additional, remaining questions.
  - ▶ You may choose to ask participants to respond orally, in the chat, or both.
- If the answers are information that is already included in this session, please respond.
- If the questions address content that is not covered in this session, please do not attempt to answer. Instead, take note of the questions and consult with CDC resources to follow up with answers after the session.

Sample Script

"Before we move on, I just want to open it up in case there are any unanswered questions or items I can clarify about respirators and N95s."

(Address questions as appropriate.)

"Thank you for sharing those questions. I've written them down, and I will get back to you with responses."

PPT **Slide 13: Key Takeaways**

Facilitator Notes

- Review key takeaways.
- You may choose to revisit discussion points or questions that arose during the session.

Sample Script

"I hope this training gave you some good information about respirators and N95s, and why they are so important for infection control. I've captured some key takeaways here, which you can review at your leisure after the session today."

PPT **Slide 14: Resources and Future Training Sessions**

Facilitator Notes

- Share additional resources from Project Firstline and CDC.
- Explain how participants can reach you, by the means of your choosing, and how they can reach Project Firstline.
- If this session is part of a series, you may choose to describe the themes of upcoming sessions.

Sample Script

"Even though we covered a lot today, there is still much more to learn. You can keep exploring these topics on your own using the resources on this slide. You can also follow us on social media. I will stay on the line for a few minutes after our session ends and will be happy to discuss any other questions!"

(If this session is part of a series) "Next time, we will cover [insert next training topic]."

PPT **Slide 15: Feedback Form**

Facilitator Notes

Explain how to access the feedback form.

Sample Script

"And, finally, please let us know how you enjoyed today's session by completing the following feedback form. Thanks again for joining us today."

After the Session

Send list of participant questions compiled during this session to ProjectFirstline@cdc.gov.

10-Minute Session Plan (Respirators and N95s)

Facilitator Notes and Sample Scripts

1. Session Start

PPT

Slide 1: Opening Slide
Participants log in and get settled.

2. Agenda and Learning Objectives

PPT

Slide 2: Agenda

Facilitator Notes

- Welcome the group and add a greeting to the chat box.
- If this session is part of an ongoing series, you may choose to say "welcome back," "thank you for joining us again," etc.
- Announce housekeeping notes, either orally or via chat.
  - ▶ If needed, provide additional notes specific to the platform you're using (e.g., how to "raise your hand," how to post questions).
- Provide an overview of the agenda.
- Adapt this section of the session as needed: for instance, you may choose to spend additional time on introductions if there are new faces, or if participants do not know each other.

Sample Script

"Welcome to Project Firstline. Over the next 10 minutes, we'll explore respirators, especially one type that's commonly used in healthcare, the N95. Please keep your videos on, to the extent possible, and keep your microphone muted when you are not contributing to the discussion. It's great to see you all here today!"

PPT **Slide 3: Learning Objectives**

Facilitator Notes

Provide an overview of the session's learning objectives.

Sample Script

"Here is what we expect to learn today. By the end of today's training, you will be able to describe the job of a respirator and important aspects of the N95 respirator."

PPT **Slide 4: What is a Respirator?**

Facilitator Notes

■ Invite group discussion about the job of a respirator, and how they use respirators on the job.

■ The bullet points on slide 4 summarize content from Episode 13 of *Inside Infection Control*: What is a Respirator? For time reasons, the video is not shown during the 10-minute session. You may wish to refer to the Content Outline for Episode 13 for additional discussion points.

■ This slide has animations for the bullets. When you advance to the slide, only the blue text will appear.

■ After you introduce the points, ask participants to share answers to the questions "Why?" or "How?" either orally or in the chat.

■ After they provide responses, use the animation to reveal the answers.

■ Invite participants to share, either orally or in the chat, a simple definition of a respirator and three types of respirators commonly used in healthcare.

Sample Script

"Can someone share how they would define a respirator? What are some respirators that are used in healthcare?"

(*Pause for responses.*)

"Thanks for sharing. A respirator's job is to keep you from breathing in things in the air that might hurt you, like germs, dust, chemicals, and other dangerous things. In healthcare, we use respirators when we think we're going to be in a situation when we could breathe in air that's carrying infectious material – like particles containing viruses. There are different types of respirators available, but the type that we use most commonly in healthcare is the filtering facepiece respirator, or FFR. You may also see the powered air-purifying respirator, or PAPR [pronounced 'papp-per]; and the elastomeric respirator."

PPT   **Slide 5: What is an N95 respirator?**

Facilitator Notes

- The bullet points on slide 5 summarize content from Episode 14 of *Inside Infection Control*: What is an N95 Respirator? For time reasons, the video is not shown during the 10-minute session. You may wish to refer to the Content Outline for Episode 14 for additional discussion points.
- This slide has animations for the second column. When you advance to the slide, only the first column will appear.
- After you introduce the points, ask participants to share answers to the questions "**Why?**" or "**How?**" either orally or in the chat.
- After they provide responses, use the animation to reveal the answers.

Sample Script

"**Does anyone know what an N95 is?**"

(*Pause for responses.*)

"That's right. It's a type of respirator that's been tested and approved by NIOSH for use in healthcare. Let's talk about why N95s are important for infection control in healthcare. First, N95s are designed to filter out certain sizes of very small particles in the air. They also block your respiratory droplets from spreading to the environment. **How do they do that?**"

(*Pause for responses.*)

"Yes! N95s are made of a special filtering material that filters out at least 95% of very small particles in the air. N95s work not only because of the filtering material but also because of how they fit. They're put together in a way that makes sure all the air you're breathing in goes through the filter first and doesn't leak in around the edges. In order to work correctly, your N95 must fit your face well. So, when it comes to N95s, there are two big things to remember about how they protect you: filter and fit."

PPT   **Slide 6: Reflection**

Facilitator Notes

- Thank participants for the discussion.
  - ▶ If this session is part of a series, you may wish to remind the group of key points from other sessions.
- Invite participants to reflect on what they learned during the session.

Sample Script

"You all did a great job of sharing your observations! Let's use our last few minutes together to reflect on what we've learned and think about how we can put what we've learned into practice."

PPT   **Slide 7: Questions?**

Facilitator Notes

- Invite additional, remaining questions.
  - ▶ You may choose to ask participants to respond orally, in the chat, or both.
- If the answers are information that is already included in this session, please respond.
- If the questions address content that is not covered in this session, please do not attempt to answer. Instead, take note of the questions and consult with CDC resources to follow up with answers after the session.

Sample Script

"**Are there any unanswered questions or items I can clarify about respirators and N95s?**"

(Pause for responses.)

"Thank you for sharing those questions. I've written them down, and I will get back to you with responses."

PPT Slide 8: Key Takeaways

Facilitator Notes

- Review key takeaways.
- You may choose to revisit discussion points or questions that arose during the session.

Sample Script

"I hope this training gave you some good information about respirators and N95s, and why they are so important for infection control. I've captured some key takeaways here, which you can review at your leisure after the session today."

PPT Slide 9: Resources and Future Training Sessions

Facilitator Notes

- Share additional resources from Project Firstline and CDC.
- Explain how participants can reach you, by the means of your choosing, and how they can reach Project Firstline.
- If this session is part of a series, you may choose to describe the themes of upcoming sessions.

Sample Script

"Even though we covered a lot today, there is still much more to learn. You can keep exploring these topics on your own using the resources on this slide. You can also follow us on social media. I will stay on the line for a few minutes after our session ends and will be happy to discuss any other questions!"

(If this session is part of a series) "Next time, we will cover [insert next training topic]."

Slide 10: Feedback Form

Facilitator Notes

Explain how to access the feedback form.

Sample Script

"And, finally, please let us know how you enjoyed today's session by completing the following feedback form. Thanks again for joining us today."

After the Session

Send list of participant questions compiled during this session to ProjectFirstline@cdc.gov.

10-Minute Session Plan (N95 User Seal Check)

Facilitator Notes and Sample Scripts

1. Session Start

PPT

Slide 1: Opening Slide
Participants log in and get settled.

2. Agenda and Learning Objectives

PPT

Slide 2: Agenda

Facilitator Notes

- Welcome the group and add a greeting to the chat box.
- If this session is part of an ongoing series, you may choose to say "welcome back," "thank you for joining us again," etc.
- Announce housekeeping notes, either orally or via chat.
  - ▶ If needed, provide additional notes specific to the platform you're using (e.g., how to "raise your hand," how to post questions).
- Provide an overview of the agenda.
- Adapt this section of the session as needed: for instance, you may choose to spend additional time on introductions if there are new faces, or if participants do not know each other.

Sample Script

"Welcome to Project Firstline. Over the next 10 minutes, we'll explore user seal checks for N95 respirators. Please keep your videos on, to the extent possible, and keep your microphone muted when you are not contributing to the discussion. It's great to see you all here today!"

PPT **Slide 3: Learning Objectives**

Facilitator Notes

Provide an overview of the session's learning objectives.

Sample Script

"Here is what we expect to learn today. By the end of today's training, you will be able to describe how to make sure you have a good seal when you wear an N95 and why a user seal check is important."

PPT **Slide 4: N95 User Seal Check**

Facilitator Notes

- Invite group discussion of what a user seal check is, and why it's important.
- The bullet points on slides 4 and 5 summarize content from Episode 15 of *Inside Infection Control:* How Do I Test the Seal on my N95? For time reasons, the video is not shown during the 10-minute session. You may wish to refer to the Content Outline for Episode 15 for additional discussion points.

Sample Script

"**Does anyone know why it's important to do something called a 'user seal check' every time you put on your N95?**"

(*Pause for responses.*)

"That's right. You want to make sure you have a good seal around all the edges when you put on your N95, because it's possible to put it on using the correct technique and still not have that good seal. This makes sure that all the air you're breathing in goes through the filter first and doesn't leak in around the edges. If there's a leak or bad seal, then it's likely you'll breathe in unfiltered air, which could have germs in it. **How do we perform a user seal check?**"

(*Pause for responses.*)

"It's important to follow the instructions on how to do a user seal check that came from the manufacturer of your specific type of N95. Most of the time, the best way to check the seal is with a 'positive pressure' check: gently breathe out while blocking the paths where air might escape to make sure there aren't any leaks around your face or in the filter itself."

PPT

Slide 5: Checking for Leaks

Facilitator Notes

- Invite group discussion of strategies they can use if they find a leak in their N95.
- The bullet points on slides 4 and 5 summarize content from Episode 15 of *Inside Infection Control:* How Do I Test the Seal on my N95? For time reasons, the video is not shown during the 10-minute session. You may wish to refer to the Content Outline for Episode 15 for additional discussion points.
- This slide has animations for the bullets. When you advance to the slide, only the blue text will appear.
- After you introduce the points, ask participants to share answers to the questions "**Why?**" or "**How?**" either orally or in the chat.
- After they provide responses, use the animation to reveal the answers.

Sample Script

"**What are some actions you can take if you detect a leak in your N95?**"

(Pause for responses.)

"Great, thanks for your responses. If the pressure doesn't build up, or there is a leak, you can use both of your hands to mold the metal nose strip to the bridge of your nose, starting from the top. You can also move the straps to different areas at the top and base of your head to get the best possible fit.

"If there's still a leak, you may need to be fit-tested with a different model of N95 or a different size. It's also possible the N95 may be worn out and you need a new one, or you may need a different type of respirator."

PPT **Slide 6: Reflection**

Facilitator Notes

- Thank participants for the discussion.
  - ▶ If this session is part of a series, you may wish to remind the group of key points from other sessions.
- Invite participants to reflect on what they learned during the session.

Sample Script

"You all did a great job of sharing your observations. Remember, if you're ever unsure about what to do, such as how to do a user seal check, you can always talk with your supervisor or your colleagues.

"Let's use our last few minutes together to reflect on what we've learned and think about how we can put what we've learned into practice."

PPT **Slide 7: Questions?**

Facilitator Notes

- Invite additional, remaining questions.
  - ▶ You may choose to ask participants to respond orally, in the chat, or both.
- If the answers are information that is already included in this session, please respond.
- If the questions address content that is not covered in this session, please do not attempt to answer. Instead, take note of the questions and consult with CDC resources to follow up with answers after the session.

Sample Script

"**Are there any unanswered questions or items I can clarify about how to check the seal on your N95?**"

(Pause for responses.)

"Thank you for sharing those questions. I've written them down, and I will get back to you with responses."

PPT **Slide 8: Key Takeaways**

Facilitator Notes

- Review key takeaways.
- You may choose to revisit discussion points or questions that arose during the session.

Sample Script

"I hope this training gave you some good information about user seal checks for your N95s and why those checks are so important. I've captured some key takeaways here, which you can review at your leisure after the session today."

PPT **Slide 9: Resources and Future Training Sessions**

Facilitator Notes

- Share additional resources from Project Firstline and CDC.
- Explain how participants can reach you, by the means of your choosing, and how they can reach Project Firstline.
- If this session is part of a series, you may choose to describe the themes of upcoming sessions.

Sample Script

"Even though we covered a lot today, there is still much more to learn. You can keep exploring these topics on your own using the resources on this slide. You can also follow us on social media. I will stay on the line for a few minutes after our session ends and will be happy to discuss any other questions!"

(If this session is part of a series) "Next time, we will cover [insert next training topic]."

Slide 10: Feedback Form

Facilitator Notes

Explain how to access the feedback form.

Sample Script

"And, finally, please let us know how you enjoyed today's session by completing the following feedback form. Thanks again for joining us today."

After the Session

Send list of participant questions compiled during this session to ProjectFirstline@cdc.gov.

Appendix: Content Outlines

Episode 13 Title: *What is a Respirator?*

Content Summary: Respirators keep the wearer from inhaling infectious particles in the air.

Topic: PPE

Learning Objectives

After viewing this video, learners will be able to:

- Describe one (1) job of a respirator.
  - ▶ To keep the wearer from breathing in potentially harmful particles or droplets
- Name three (3) types of respirators commonly used in healthcare.
  - ▶ Filtering facepiece respirator, or FFR
  - ▶ Powered air-purifying respirator, or PAPR
  - ▶ Elastomeric half-mask and full-mask respirator

Key Educational Takeaways

- The job of a respirator is to keep you, the wearer, from breathing in things in the air that might hurt you, such as germs, dust, chemicals, and other dangerous things. They are used in many job types. In healthcare, they are mostly used in situations when you could breathe in air that's carrying infectious material – like particles containing viruses.

- There are different types of respirators available. Air-purifying respirators work by using filters, canisters, or cartridges to remove dangerous things from the air before you breathe in.

- Filtering facepiece respirators, or FFRs, are one type of air-purifying respirator and are the type of respirator most commonly used in healthcare.

- The powered air-purifying respirator, or PAPR, uses a battery-operated air filter and a blower. There are many different styles of PAPRs, and they all have their pros and cons.

- Elastomeric half-mask and full-mask respirators can be cleaned, disinfected, stored, and reused. Half-mask respirators cover your nose and mouth. Full-mask respirators cover your eyes, nose, and mouth. They have a snug seal to your face and have to be fit-tested to work correctly.

- Any type of respirator used in healthcare should be approved by NIOSH, the National Institute for Occupational Safety and Health, and authorized for use in healthcare by the FDA, the Food and Drug Administration. During the COVID-19 pandemic, FDA has put out an Emergency Use Authorization, or EUA, that allows all NIOSH-approved air-purifying respirators to be used in healthcare facilities.

- Your employer is responsible for providing you with a NIOSH-approved respirator, fit-testing, and training to make sure you use it correctly.

Content Outline

- The job of a respirator is to keep you, the wearer, from breathing in things in the air that might hurt you, such as germs, dust, chemicals, and other dangerous things.

  ▶ Respirators are used in many jobs.

  ▶ In healthcare, we use respirators when we think we're going to be in a situation when we could breathe in air that's carrying infectious material – like particles containing viruses.

- There are different types of respirators available. This video focuses on air-purifying respirators, which work by using filters, canisters, or cartridges to remove dangerous things from the air before you breathe the air in.

  ▶ There are multiple types of air-purifying respirators.

  ▶ They do not supply you with new air, as some respirators do.

  ▶ Whatever respirator you use, be sure it fits correctly so that you are only breathing in filtered air.

- Filtering facepiece respirators, or FFRs, are the type most commonly used in healthcare.

  ▶ They are designed to be used once and then thrown away.

  ▶ They fit snugly against your face, cover your mouth and nose, and fit just under your chin.

  ▶ The most common type of FFR used in healthcare is an N95.

- The powered air-purifying respirator, or PAPR, uses a battery-operated air filter and a blower.

  ▶ Air is pulled in and through filtering cartridges or canisters, then blown into a mask that covers your entire face, or a hood that covers your head.

  ▶ It is usually used for specific situations when there is increased risk of inhaling infectious particles, or if you have facial hair that prevents an FFR from achieving a good seal to your face.

  ▶ There are many different styles of PAPRs, and they all have their pros and cons.

    ● Certain PAPRs with loose-fitting headgear don't require fit-testing, but you still need to be medically cleared and trained to use them.

    ● Loose-fitting PAPRs can be worn by someone with facial hair.

    ● The types with hoods, full-face coverings, and helmets also can serve as eye protection, as they protect your face and eyes from splashes and sprays.

    ● Loose-fitting PAPRs commonly used in healthcare don't filter the air you breathe out.

      ○ If you are infected with a virus that spreads by respiratory droplets, like SARS-CoV-2, there is a risk of infecting others even when you use this type of PAPR.

- You might also see elastomeric half-mask and full-mask respirators.

  ▶ They can be cleaned, disinfected, stored, and reused.

  ▶ Half-mask respirators only cover your nose and mouth.

  ▶ Full-mask respirators cover your eyes, nose, and mouth.

  ▶ They have cartridges or filters on the sides that can be replaced when they get dirty or exchanged to change the level of filtration

  ▶ Because they have a snug seal to your face, and because that seal is important, elastomeric respirators have to be fit-tested to work correctly.

- Any type of respirator you use in healthcare should be approved by NIOSH, the National Institute for Occupational Safety and Health, and authorized for use in healthcare by the FDA, the Food and Drug Administration.

  ▶ However, during the COVID-19 pandemic, FDA has put out an Emergency Use Authorization, or EUA, that allows all NIOSH-approved air-purifying respirators to be used in healthcare facilities.

- Your employer is responsible for providing you with a NIOSH-approved respirator, fit-testing, and training to make sure you use it correctly.

Episode 14 Title: *What is an N95 Respirator?*

Content Summary: An N95 is a type of respirator that keeps the person wearing it from inhaling very small particles, including droplets that can carry virus. N95s work because of the filtering material they're made of and because of their snug fit.

Topic: PPE

Learning Objectives

After viewing this video, learners will be able to:

- Describe two (2) aspects of N95s that protect the wearer from inhaling very small particles.
  - ▶ N95s are made of a special filtering material that NIOSH has tested to prove that it filters out at least 95% of very small particles in the air.
  - ▶ N95s fit snugly around the face, which ensures that all of the air that is inhaled goes through the filter and doesn't leak in around the edges.
- Discuss one (1) reason why a snug fit all around the edges of the N95 is important.
  - ▶ If the N95 does not fit correctly, it is possible to breathe in air through gaps around its edges instead of through the filtering material, and that air could carry germs.

Key Educational Takeaways

- "N95" is a term used for certain respirators tested and approved by the National Institute for Occupational Safety and Health (NIOSH). Any N95 used in healthcare should be NIOSH-approved.
- N95s keep the wearer from inhaling very small particles, including droplets that can carry virus.
- N95s achieve this protection because of the filtering material they're made of and because of their snug fit against the wearer's face.
  - ▶ N95s are made of a special filtering material that NIOSH has tested to prove that it filters out at least 95% of very small particles in the air.
  - ▶ N95s work not only because of the filtering material but also because of how they fit snugly around your face, which ensures that the air you're breathing in goes through the filter and doesn't leak in around the edges.
- Your employer will provide you with a medical evaluation to make sure it is safe for you to use an N95, and a fit test for each model of N95 you plan to wear at work.
- It's important to put on, or don, your N95 correctly, and to perform a "user seal check" to check the fit of your N95 each time you use it.
- Most N95s are also good at blocking your respiratory droplets so that any germs that you exhale do not reach the environment

Content Outline

- "N95" is a term used for certain respirators tested and approved by the National Institute for Occupational Safety and Health (NIOSH).

  ▶ NIOSH is the part of CDC that studies worker safety and health, giving employers and workers the tools to create safe and healthy workplaces.

  ▶ Some N95s for healthcare may also be regulated by the Food & Drug Administration (FDA).

- N95s are designed to filter out certain sizes of very small particles in the air, including droplets, before the air reaches your mouth, nose, and lungs.

  ▶ This protection is important in healthcare, where you are at higher risk of being exposed to droplets that are carrying virus

- Two important things to remember about N95s are: filter and fit.

- **Filter:** N95s are made of a special filtering material.

  ▶ NIOSH has tested the material and proven that it filters out at least 95% of very small particles in the air.

  ▶ A surgical N95 has features that are needed in certain situations in healthcare, such as surgery, when you may need protection against fluids, splashes, and sprays.

  ▶ All N95s are made of similar filtering material, but not every N95 is the same.

  ▶ Any N95 used in healthcare should be NIOSH-approved.

    ● NIOSH-approved N95s have two straps that go around your head, not loops that go around your ears, because loops typically aren't able to give you the good fit and seal you need.

- **Fit:** N95s work not only because of the filtering material but also because of how they fit.

  ▶ They're put together in a way so that they fit snugly and ensure the air you're breathing in goes through the filter first and doesn't leak in around the edges.

- Before you use an N95, your employer will perform a fit test to make sure the model fits you right.

  ▶ If the N95 does not fit correctly, it is possible to breathe in air through gaps around its edges instead of through the filtering material.

  ▶ This is why a snug fit all the way around the N95 is so important.

  ▶ Your employer will also provide you with a medical evaluation to make sure that you don't have any medical conditions that could get worse from using an N95.

- It is also important to put on, or don, an N95 correctly and perform a "user seal check" to check the fit of your N95 each time you use it.

- Most N95s are also good at blocking your own respiratory droplets from spreading to others, including any germs that you are breathing out – like SARS-CoV-2, if you're infected.

  ▶ Using an N95 often does two jobs at once: protecting you from viruses in others' respiratory droplets, and protecting others from any virus that you might be breathing out.

Episode 15 Title: *How Do I Test the Seal on my N95?*

Content Summary: Performing a user seal check each time you use your N95 is important to make sure it's doing its job.

Topic: PPE

Learning Objectives

After viewing this video, learners will be able to:

- Describe three (3) reasons why it's important to do a user seal check each time an N95 is used.
  - It's possible to put an N95 on using the correct technique and still not have a good seal around all the edges.
  - A good seal is important to make sure all the air you're breathing in passes through the filtering material of the N95 and doesn't leak in around the edges.
  - If there's a leak or bad seal, then it's likely you'll breathe in unfiltered air, which could have germs in it, from around the sides of the N95.
- Describe three (3) steps to a user seal check.
  - Put on, or don, the N95 using the correct technique.
  - Put your hands lightly over the surface of the N95 and try to cover as much of the area with your hands as possible.
  - Breathe out gently. While breathing out, make sure there's a little buildup of air inside the N95 and that air doesn't leak around the sides.
- Discuss two (2) possible actions you can take if a leak in the N95 is detected.
  - Use both hands to mold the metal nose strip to the bridge of your nose, starting from the top.
  - Move the straps to different areas at the top and base of your head to get the best possible fit.

Key Educational Takeaways

- Every time you use your N95, you need to do what's called a "user seal check," because it is possible to put on an N95 using the correct technique and still not have a good seal around all the edges.
  - A good seal is important to make sure all the air you're breathing in passes through the filtering material of the N95.
  - If there's a leak or bad seal, then it's likely you'll breathe in unfiltered air, which could have germs in it, from around the edges of the N95.
- The manufacturer of your N95 will have instructions on how to do a user seal check for your specific type of N95, and it's important always to follow these instructions.

- Most of the time, the best way to check your seal is with a "positive pressure" check: gently breathe out while blocking the paths where air might escape to make sure there aren't any leaks around your face, or in the filter itself.
- If the pressure doesn't build up or there is a leak:
  - ▶ Use both hands to mold the metal nose strip to the bridge of your nose, starting from the top.
  - ▶ You can also move the straps to different areas at the top and base of your head to get the best possible fit.
- If there's still a leak, you may need to be fit-tested with a different model of N95 or a different size, the N95 may be worn out and you may need a new one, or you may need a different type of respirator.

Content Outline

- Every time you use an N95, you need to do what's called a "user seal check."
  - ▶ A good seal is important to make sure all the air you're breathing in passes through the filtering material of the N95 and doesn't leak in around the edges.
- It is possible to put on, or don, an N95 using the correct technique and still not have a good seal around all the edges.
  - ▶ If there's a leak or bad seal, then it's likely you'll breathe in unfiltered air, which could have germs in it, from around the edges of the N95.
  - ▶ This is why some facial hair can be a problem: having facial hair that sits where your respirator needs to seal to your face can cause small leaks where unfiltered air can get in.
- It is important to perform a user seal check every time you put on an N95.
  - ▶ Even when you have been fit-tested, the respirator can get dirty or damaged, the straps can loosen, and other things can make the seal not as tight over time.
  - ▶ When supply is limited, N95s may be used more than once or for longer periods, and they can wear out.
  - ▶ Your face shape might change, or the fit may not work anymore.
  - ▶ These reasons are also why a fit test is performed every year.
- The manufacturer of your N95 will have instructions on how to do a user seal check for your specific type of N95, and it's important always to follow these instructions.
- Most of the time, the best way to check your seal is with a "positive pressure" check.
  - ▶ Gently breathe out while blocking the paths where air might escape to make sure there aren't any leaks around your face, or in the filter itself.

- To do a positive pressure check:
  - ▶ Put on, or don, the N95 correctly.
  - ▶ Put your hands lightly over the surface of the N95 and try to cover as much of the area with your hands as possible.
  - ▶ Breathe out gently.
    - While breathing out, make sure there's a little buildup of air inside the N95 and that air doesn't leak around the sides.
    - If there is a leak, you could feel it – or you may hear air coming out of the sides, or you may see that there is a leak if you're wearing glasses and they fog up.
- If the pressure doesn't build up or you find a leak:
  - ▶ If air is leaking around the nose, use both hands to mold the metal nose strip to the bridge of your nose.
    - It's important to use both hands and to start from the top – if you use just one hand, or push the sides in and "tent" or pinch the nose clip, you won't get a complete seal and air will escape out the top.
    - Think of it like clay: you want it to mold to the way your nose is formed.
  - ▶ Readjust the straps to get a better seal.
    - You can't make the straps longer or shorter, but you can move them slightly, to different areas on the top and at the base of your head, to get the best possible fit.
    - See where the straps work best for you, but be careful not to cross the straps or place them directly behind your ears.
- If there's still a leak after trying these steps, you may need to be fit-tested with a different model of N95 or a different size, the N95 may be worn out and you may need a new one, or you may need a different type of respirator.

PROJECT FIRSTLINE

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