



Kessler Foundation Podcast Transcript: COVID-19 and Spinal Cord Injury: Minimizing Risks for Complications

Recorded April 2020. [Listen to it here.](#)

- TREVOR DYSON-
HUDSON: 00:05 [music] Symptoms of COVID-19 include fever, cough, and shortness of breath. But unfortunately due to paralysis of chest and abdominal muscles, many people with spinal cord injury have an impaired ability to take a deep breath and generate a strong cough.
- ANNOUNCER: 00:26 Welcome to this COVID-19 special edition podcast brought to you by Kessler Foundation. In this episode, CarolAnn Murphy, senior staff writer interviewed spinal cord injury expert, Dr. Trevor Dyson-Hudson, both from Kessler Foundation, on COVID-19 and spinal cord injury minimizing risks for complications. For more information about our experts and resources mentioned in the podcast, please check out the program notes. Listen in as CarolAnn Murphy and Dr. Trevor Dyson-Hudson discuss practical techniques and devices that people with spinal cord injury can use to improve their cough. [music]
- CAROLANN MURPHY:
01:07 COVID-19, special considerations for people with spinal cord injury. My name is CarolAnn Murphy. I'm senior writer at Kessler Foundation and assistant editor of the journal of spinal cord medicine. I'm here today to discuss an important topic with a leading expert in spinal cord injury, Dr. Trevor Dyson-Hudson, about the implications of COVID-19 for people with spinal cord injury. Dr. Trevor Dyson-Hudson is director of the center for spinal cord injury research at Kessler Foundation and co-director of the Northern New Jersey Spinal Cord Injury Model System. Dr. Dyson-Hudson, thank you for joining me today to discuss the critically important topic, COVID-19 presents special issues for people with spinal cord injury who may be at greater risk for COVID-19 infection and related complications.
- DYSON-HUDSON: 01:59 Yeah. So thanks for inviting me, CarolAnn. Yes. As we're seeing a high proportion of the United States population could become infected with the coronavirus, COVID-19, now people with disabilities like spinal cord injury may be at higher risk for developing more serious complications from COVID-19 illness. Now as we see symptoms of COVID-19 include fever, cough, and shortness of breath. But unfortunately due to paralysis of chest and abdominal muscles, many people with spinal cord injury have an impaired ability to take a deep breath and generate a strong cough. And having a weak cough makes it difficult to clear the airways if you have secretions that develop. This can increase the risk for other respiratory complications, especially if one becomes infected with COVID-19.
- MURPHY 03:00 Are there ways to improve the cough in the population with spinal cord injury?
- DYSON-HUDSON 03:07 When you think about somebody with a spinal cord injury, imagine yourself having somebody sitting on your chest and that's kind of what it's like to breathe and cough when you have a spinal cord injury. But fortunately, there are techniques and devices that people with spinal cord injury can use to try to improve their cough. For example, one of the things that-- so if you think about a cough, a cough involves taking a deep breath followed by the cough itself. So one way to kind of increase the amount of air that you take in is to do something called air stacking in which you take a series of deep breaths and you keep holding them in and then you follow it by a forceful



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cough. Now as I said, it can be challenging for people with spinal cord injury who lack kind of a rib and abdominal muscles to generate that strong cough. So often what we can do is provide a manually assisted cough in which a force is applied to a person's abdomen or belly while they try coughing. Think about it kind of like a Heimlich Maneuver but from the front. So as the person's starting to cough, you're pushing on the abdomen. Now if a person really has difficulty, then there is a machine, a cough assist machine, that can be used and what this machine does is it uses a face mask and the face mask provides a deep breath in with a pause followed by a suctioning as the person is coughing. So think of it as really kind of a fancy vacuum blowing air into the lungs and then sucking it out.

DYSON-HUDSON 04:57

And the idea is to clear the thick secretions, the mucus that can get in your lungs that normally an able-body-person might be able to clear easily but a person with spinal cord injury will have a more difficult time. You can see examples of these techniques on our website, actually me performing these techniques with a licensed respiratory therapist, either on the Kessler Foundation Youtube page or on the Kessler Foundation website.

MURPHY 05:31

Thank you Dr. Dyson-Hudson. These are very useful tips for individuals as well as healthcare providers and caregivers. People with spinal cord injury also often rely on assistance with their personal care, home care attendance. These are challenging times for people relying on that type of personnel. Can you address those issues?

ANNOUNCER: 05:59

Sure. So yeah, as you pointed out, many people with spinal cord injury, some rely on home care. And so this poses challenges in a couple different ways. So for one, we are all trying to stay at home and isolate ourselves from others outside. And so when you have a home care assistant, you may have somebody who's coming from the outside into your house on a repeated basis. And that person, they themselves have been exposed to the outside. So it's important that you have this person wash their hands when they come and use hand-- or hand sanitizer prior to touching or feeding you. And that throughout the day, that they regularly clean and wash their hands using either soap or hand sanitizer. The other thing is to just regularly clean, sanitize, and disinfect any surfaces that that person or you were touching in the home. And then you may even want to consider having your attendant take extra steps such as wearing a mask or you yourself wearing a mask. The guideline still are uncertain about wearing masks, although it seems to be leaning towards the fact that it is just safer all around to wear a mask to either prevent other-- or to protect others or protect yourself. So that's one issue. The other issue is that as a person with a spinal cord injury, if you're relying on somebody for assistance and that individual can't come to assist you, then you're stuck, you're alone.

DYSON-HUDSON 07:48

So if possible what you want to try to do is make sure that you have adequate backup. If you're lucky enough, there are backup caregivers through the agency but the agencies themselves may be taxed at this time, whether they're providing more assistance to people or their own staff are becoming sick or don't want to work or have to take care of their children. These are difficult times. So it's important to ensure that you have backup. So at least maybe an emergency backup like a friend or a family member that can at least come and provide assistance if, for some reason,



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your attendant doesn't or can't show up for work that day. Other things that are important are to stock up on medical supplies, medications. I hear that it's getting more and more difficult for people to get gloves, latex gloves which is making it challenging for people with spinal cord injury and those who care for them when they do some bowel and bladder management. So these are certainly some problems that come up that are unique to people with spinal cord injury.

MURPHY 09:03

Thank you. Very interesting. As you say, very challenging times for people with disabilities. What are some other considerations for people with spinal cord injury? Is there anything else you'd like to mention that would be helpful?

DYSON-HUDSON 09:19

Yeah. So finally, one of the most challenging things is we will see that one of the steps people can take is to-- it's important to, one, clean your hands, wash your hands with soap and, or hand sanitizer, and to do that for 20 seconds. For somebody with impaired hand function due to spinal cord injury, it could be challenging to wash your own hands. So you need assistance. And then the other thing that we're suppose to do is regularly clean surfaces that we may have come in contact with. And so for a wheelchair-using person with spinal cord injury, that can be very challenging because there's your wheels, there's your push rims, there's the arm rest if you have them, and trying to clean a surface like that that's rolling over the ground, that's coming into contact with all kinds of things is very challenging. You can try to wipe down your push rims, try to avoid pushing off of your tires when you propel your wheelchair. But at the end of the day, all you can do is the best you can, so.

MURPHY 10:37

Well, thank you. These are issues that we don't ordinarily think about under normal circumstances. Certainly challenging times for all of us but specially for those with spinal cord injury. How can people with spinal cord injury prevent infection? Do you have any particular tips for people with spinal cord injury?

DYSON-HUDSON 11:03

Only just to follow the guidelines that people are putting out. Certainly we now know that it spreads by contact from person to person and through respiratory droplets produced when an infected person coughs or sneezes. So it's important if you can to try to maintain your distance. Avoid people within kind of a six foot radio and to just take those precautions. As I said, try to clean your hands often if you can with soap or hand sanitizer, try to minimize the amount of contact you have with outside people and, again, within reason. Certainly if you have home attendants, you need those individuals to come into your home. Obviously, if you're sick, then you should stay home and that in itself creates challenges because you now have people who have to come into your home to provide care to you. So I think one of the most important things is if you have any questions, reach out to your healthcare provider for assistance. Please, log in to our web page for more information. And hopefully these things are assistance to people with spinal cord injury.

MURPHY 12:39

Well, clearly, COVID-19 presents special challenges for people with spinal cord injury. Dr. Dyson-Hudson, we thank you for this most valuable perspective on these challenges and how people with spinal cord injury and their caregivers can maintain their health through these difficult times.



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DYSON-HUDSON 13:01

Thank you so much for asking me, Carol.

ANNOUNCER: 13:05

[music] Tuned in to our podcast series lately? Join our listeners in 90 countries who enjoy learning about the work of Kessler Foundation. The new episodes are experts weight-in on the impact of COVID-19 on people leaving with disabilities. They may talk about how research that changes lives continues at Kessler Foundation. Check back soon to listen to more COVID-19 podcasts on our playlists. Look for the link in our program notes. Listen in on iTunes, SoundCloud, Spotify, or wherever you get your podcasts. This podcast was recorded on Wednesday, April 3rd, 2020 remotely and was edited and produced by John Bank Smith, creative producer for Kessler Foundation. [music]