**#1 in the Series**

**CORONAVIRUS: Washing hands is crucial**

There is currently no vaccine to prevent coronavirus disease. The best way to prevent illness is to avoid being exposed to this virus. The virus is thought to spread mainly from person-to-person--between people who are in close contact with one another (within about 6 feet), through respiratory droplets produced when an infected person coughs or sneezes. These droplets can land in the mouths or noses of people who are nearby or possibly be inhaled into the lungs.

To protect yourself, wash your hands often. Here’s how:

1. Wet your hand and put soap on them.
2. Rub your hands together, then rub your thumbs, then rub the backs of your hands, then fold your hands together and rub up and down, then rub your fingernails. Do this for at least 20 seconds, about the length of time it takes to sing Yankee Doodle or Happy Birthday.
3. Rinse your hands well. Note that washing hands does not kill germs but rather it removes most of them if done properly and washes them down the sink. Soap is a surfactant, a slippery substance that, when combined with lots of running water, causes germs (bacteria and viruses ) to slide off of your hands.
4. Dry your hands.

Actually, soap and water reduce germ count better than alcohol based hand cleaners that don’t wash away the germs.

If soap and water are not readily available, use a hand sanitizer that contains at least 60% alcohol. Cover all surfaces of your hands and rub them together until they feel dry.

For more information on covid-19 (the coronavirus) go to [www.health.nd.gov](http://www.health.nd.gov) and click on coronavirus/more information.

*This article comes to you from the City County Health District using information from the CDC.*

**#2 in the Series**

**CORONAVIRUS: Drive Up Testing at Sanford Health in Valley City**

Increase in testing has become available in Valley City. Sanford Health in Valley City is offering coronavirus testing for those who think they may be sick with the coronavirus. The procedure is to phone ahead (845-6140) and discuss your symptoms and exposure or travel history. Sanford staff will help you decide if you should be tested. If so they will ask you to drive to the east side of Sanford Health and direct you on where to park, and then conduct the test while you sit in your car.

Staff will swab your nasal cavity and take your temperature. The person tested will be contacted with the results. Currently results are returning in 3-5 days.

It is important that if you are ill you stay home and away from other people.

(I’ll try to reach Tanya to find out what Essentia has available.)

For more information on covid-19 go to [www.health.nd.gov](http://www.health.nd.gov) and click on coronavirus (more information).

*This article comes to you from City County Health District.*

**#3 in the Series**

**CORONAVIRUS: We have abundant food supplies!**

The new coronavirus has affected all of our lives in recent days. Some people are concerned that we may not have enough food and paper supplies such as toilet paper. CCHD visited with our local grocery store to discuss this topic. He assured us that there is absolutely ne need to stock up on food items here in Valley City. He stated that our supply chain is full and trucks have been delivering on their regular schedule. That confirms what the CDC Director Robert R. Redfield recently reported to a U.S. congressional hearing—that there is no need for Americans to stock up on any supplies.

He said that our supply chain is full except for toilet paper and disinfectant wipes which will continue to be unavailable through the end of March. Once Leevers can receive these items again, there will be limits put in place as to how much can be purchased at a time.

Bottled water is another item consumers are concerned about. Again, our local Leevers assured us that there is absolutely no need to stock up on water. The grocery store noted that some people were buying larger amounts of bottled water which produced a minor shortage for a day or so.

Consumers should recognize that the water in Valley City is perfectly safe to drink and Valley City Public Works recently won the ND Rural Water Association’s award for the best tasting water in ND! It was chosen by a panel of judges as the most appealing.

If you are worried about having enough water over the next few weeks, fill some containers that you have in your home, and store the water for future use. We need 6-8 cups of water per day for our health and this includes coffee, tea and any beverages that you would drink.

For more information on covid-19 go to [www.health.nd.gov](http://www.health.nd.gov) and click on coronavirus (more information).

*This article comes to you from City County Health District.*

**#4 in the Series**

**CORONAVIRUS: Helping your kids understand the virus**

News about the coronavirus (COVID-19) is everywhere.  Kids absorb far more than we know. The question arises….how can we talk with our children, to be honest and yet not scare them.

This depends on the age/cognitive level of the child. For very young children or those with impaired cognitive abilities, just say that this is a germ that can make some people, mostly those who are old or have other illnesses very sick. Other people may have a cold-like illness, if infected. For older children, the message is essentially the same, but can be expanded a bit to include an explanation of how underlying illnesses can make the virus more serious.

The website ([www.parentslead.org](http://www.parentslead.org)) provides excellent resources to help you talk with your child about coronavirus (cartoon stories, etc). It also has things to do with your children at home.

Sanford Health also has a good website. Google: “Explaining COVID-19 to kids”. It suggests that you start with what the child knows, then validate their feelings and offer support. Next give them a sense of control and encourage them to communicate.

For more information on COVID-19 go to [www.health.nd.gov](http://www.health.nd.gov) and click on coronavirus (more information).

*This article comes to you from City County Health District.*

**#5 in the Series**

**CORONAVIRUS: Update**

This is an unprecedented time in the U.S.A. and across the world—a time where we must take seriously the guidelines that our state and federal government is giving us. If you have a fever, cough, and/or shortness of breath stay home and call your provider. These symptoms may appear 2-14 days after exposure.

The seriousness of the coronavirus is why Governor Burgum has issued a number of executive orders, including one that will close bars, restaurants, gyms and movie theaters to on-site business. Restaurants can be open for take-out.

We urge everyone to take everyday preventive actions:

* Wash your hands frequently (take at least 20 seconds to wash hands)
* Avoid touching your eyes, nose, and mouth.
* Stay home when you are sick.
* Cover your cough or sneeze with a tissue, then throw the tissue in the trash.
* [Clean and disinfect](https://www.cdc.gov/coronavirus/2019-ncov/prepare/cleaning-disinfection.html) frequently touched objects and surfaces.

The virus is thought to spread mainly from person-to-person; remember social distancing.

* Between people who are in close contact with one another (within about 6 feet) so stay at least 6 feet away from the person you are speaking with.
* Through respiratory droplets produced when an infected person coughs or sneezes.

These droplets can land in the mouths or noses of people who are nearby or possibly be inhaled into the lungs.

We are constantly learning more about the virus. People are thought to be most contagious when they are most symptomatic (the sickest), but some spread might be possible before people show symptoms. In Iceland that have found that about half of those who tested positive are non-symptomatic, so it is important that we stay at home and wash our hands.

Do not travel. Work from home if possible. Do set a regular schedule for yourself and your family. And do include exercise (outdoors is OK if you desire) because it will help keep you healthy and reduce stress.

For more information on COVID-19 go to [www.health.nd.gov](http://www.health.nd.gov) and click on coronavirus (more information) or contact City County Health District about any concerns or needs that you may have (845-8518).

*This article comes to you from City County Health District.*

**#6 in the Series**

**CORONAVIRUS: Overcoming Isolation**

All Americans are now being asked to practice social distancing -- to work from home and for students to not go to school. This means less person-to-person contact which can negatively impact mental wellness.

This is very challenging and you may feel a wave of up and down emotions. Below are a few tips from Scott Kelly a retired NASA astronaut who spent nearly a year on the International Space Station—isolated.

1. **Follow a schedule.** Your body as well as your mind likes a schedule. By having a schedule (a plan) you and your family will better adjust to this new life. Set a consistent time to get up and to go to bed, as well as eating three organized meals a day.
2. **Pace yourself.** We may be in this coronavirus situation for some time.
3. **Go outside.** Research has shown that spending time in nature is beneficial for our mental as well as our physical health. It’s perfectly safe to go out of doors.
4. **Develop a hobby or work on a project you’ve wanted to accomplish.** It could be reading, doing art or a craft, learning a musical instrument, working on cars, bird watching, etc.
5. **Keep a journal.** Choose your own focus—maybe write on past happy memories.
6. **Take time to connect.** Set up specific times to videochat with your family and friends. Connect with someone every day.
7. **Listen to the experts.** Seek out reputable sources of coronavirus facts like the World Health Organization and the Johns Hopkins Coronavirus Resource Center.
8. **Keep thinking positive thoughts and share those thoughts with others.**

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**#7 in the Series**

**CORONAVIRUS: Take time to exercise**

If you are not sick with coronavirus it is recommended that you would exercise. Every part of your body, including your immune system, functions better when you have a healthy lifestyle and exercise is a key factor. So start today and exercise.

**Can I run or walk outside?** Yes, people may leave their homes to engage in outdoor activity, provided the individuals comply with social distancing requirements to keep at least 6 feet from another person. Walking, hiking or jogging is fine.

**Can I go to the park?** Yes, the park is a great place to take a walk.

**Can my kids play on the playground equipment at the park?** Science has not yet been able to determine this answer. So, the safest response is to assume that playground equipment might be contaminated. Ultraviolet light does kill organisms, but the coronavirus lives on metal and plastic for up to 72 hours. Kids can wear gloves, but gloves, too, can become contaminated. Defintely avoid using the equipment if other children are there. No matter what, wash hands for at least 20 seconds upon arriving home if your kids play on the playground equipment.

The guidelines for exercise for adults is to do at least 150 minutes or aerobic activity per week.

Children need to get 60 minutes of physical activity per day.

Exercise can contribute to general good health and therefore, a healthy immune system. Exercise will also help you and your family reduce stress during this pandemic. For practical information on exercise—google Staying Active During the Coronavirus Pandemic: <https://www.exerciseismedicine.org/support_page.php/stories/?b=892>

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**#8 in the Series**

**CORONAVIRUS: Mental Health during the crisis**

The coronavirus can significantly affect mental health for everyone, but especially for those with mental illness. Both the anxiety of contracting the disease as well as the increase in loneliness and isolation can worsen and trigger symptoms. Acknowledging, recognizing and acting on mental distress in these uncertain times is key to lessening the impact. Here are the symptoms to watch for.

ANXIETY: Anxiety related to the coronavirus is to be expected.

OBSESSIONS: In a situation like this one, it is easy to become obsessive about disease prevention, especially for those with OCD who already experience contamination obsessions.

LONELINESS: Social distancing is considered critical to slowing the spread of the coronavirus. However it can understandably lead to loneliness which is a potential trigger to depression.

TRAUMATIC STRESS: Individuals who have been quarantined may also experience traumatic stress. A survey during the SARS outbreak in 2003 found that nearly 29% experienced traumatic stress.

If you have a behavioral health condition: continue contact with your provider, which will probably be via telehealth or phone.

PHONE NUMBERS:

Recovery Talk: 1-844-44TALK2 (you will visit with a trained peer support addiction specialist)

National Suicide Prevention Lifeline: 1-800-273-8255

FirstLink: 2-1-1 (offers listening and support, referrals to resources or help and crisis intervention). 2-1-1 also works as a text line (text your zipcode to 898-211 from anywhere in our service area for confidential help and support).

SAMHSA Disaster Distress Helpline (Substance Abuse and Mental Health Services Administration) : 1-800-985-5990 (or text TalkWithUs to 66746) to connect with a trained crisis counselor.

Mental Health First Aid: text 741741 to talk with a crisis counselor.

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*This article comes to you from City County Health District. Information for this article was taken from the National Alliance on Mental Illness, the CDC, and Mental Health First Aid.*

**#9 in the Series**

**CORONAVIRUS:** COVID 19 and Acute Respiratory Distress Syndrome (ARDS)

The media is full of talk of COVID 19, need for respirators and unfortunately deaths from COVID 19. The reason people die from COVID 19 infection is severe lung damage. The virus attacks the lungs directly but in people, also causes a hyperactive defense (immune defense) that actually leads to more lung damage.

Normal lungs efficiently exchange oxygen for carbon dioxide at millions of very thin wall sacs called alveoli surrounded by very thin blood vessels called capillaries. These extremely delicate tissues are only one cell layer thick so they cannot do the work of gas exchange when damaged or filled with debris and fluid. COVID 19 damages both the alveoli and capillaries.

Most people get by with a cough or mild shortness of breath if the damage is mild. In modest disease, extra oxygen helps the discomfort of feeling breathless and may be enough to support the body’s oxygen requirements.

In severe disease, the pus from killed virus, fluid from damaged capillary and excess inflammatory disease make the alveoli stiff- think of a balloon that does not want to inflate. The lungs are soggy from leaky capillaries. All this makes oxygen exchange increasingly difficult and the work of breathing becomes so severe the person eventually tires out and dies if not supported artificially.

Because of differences in testing availability, age of population, availability of health care and also the newness of this pandemic, the rates of COVID 19 disease causing mild, moderate and severe disease are still unclear. The death rate in China ranged from 0.7-5.8%; in Italy was 7.2%; in South Korea was 0.9%.

If we all get coronavirus at once there will not be enough ventilator machines  to breathe for the patients artificially.  Hence the need to slow down the infection rate (flatten the curve) in order to save lives.  For us, now, this translates into staying at home, keeping at least 6 feet from others, and washing your hands often (at least for 20 seconds).

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*This article was written by Dr. Madeline Luke, internist and comes to you from City County Health District.*

**#10 in the Series**

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**#11 in the Series**

**CORONAVIRUS: What is a ventilator?**

In WUHAN China, of 44,500 patients diagnosed with COVID 19 infection, 80% had mild disease (no shortness of breath or cough), 14% had moderate disease (cough, shortness of breath, lower than normal oxygen level, over 50% of lung involved) and 5% had critical disease requiring ICU care and artificial ventilation. Of the last group, about 50% died.

If the person is able to maintain an oxygen level in his blood at 92-96% breathing on his own with supplemental oxygen, no ventilation support is needed. However, when the infection or inflammation is particularly severe and the lungs become soggy and stiff, the exchange of oxygen for carbon dioxide may be impossible and survival depends on help from the ventilator machine.

An endotracheal tube is inserted into the nose or mouth and then into the trachea, the main trunk into the lungs. The tube is connected to a ventilator which pushes each breath in and lets it out. There are controls for the volume of each breath rate, pressure at the peak and end of breath, which breaths are delivered and the amount of oxygen. The settings have to be adjusted for each patient’s size and the degree of dysfunction in the lungs. Repeated samples of blood from an artery are the best measure of how well the ventilator is working. The endotracheal tube also allows secretions from the lungs to be suctioned out.

The complications from ventilators include injury to the lungs from the pressure of each breath and bacterial pneumonia since the tube allows bacteria into the normally sterile lungs. The person cannot talk or eat so nutrition must be addressed by tube feedings. Being on a respirator is uncomfortable so sedation is often necessary.

Ventilators can be life- saving; but they require a team of respiratory therapists, nurses, aides and physicians. Hospitals in China reported average stays of 5-14 days on the ventilator – a long time. We should be able to offer a chance for anyone unlucky enough to have a critical infection, but the equipment and staff are in short supply presently. Everyone has a choice of whether they would want this aggressive treatment or not, and should notify their family or write down their wishes ahead of the time when you might need it.

What we each can do to help--if you are sick please stay at home; and always wash your hands and stay 6 feet apart!

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