



April 4, 2020

For Immediate Release

Thomas Locke, MD, MPH, Jefferson County Health Officer
Jefferson County Public Health
360-385-9400

COVID-19 Update for Jefferson County, April 4, 2020

To Mask or Not to Mask: That is the Question. Here are some answers.

Types of Medical Masks: Manufactured masks have long been used in health care settings to control the spread of communicable diseases. Surgical masks, usually using a 3-ply construction with a middle filter layer, are used to both trap droplets expelled from the lungs and mouth (when worn by sick people) and are used to protect against inhaling those droplets (when worn by health care workers). N-95 masks offer an even higher level of protection and are used to protect against airborne particles like TB and measles virus. Both types of masks – surgical and N-95, are in critically short supply. While there are still some U.S. manufacturers of these masks, over 80% were produced in China. When the coronavirus pandemic started, China stopped exporting masks and the U.S. found itself without an adequate stockpile of masks and other personal protective equipment (PPE). This has led to strict conservation of this limited resource and desperate (and delayed) efforts to increase U.S. production.

Types of Cloth Masks: Homemade masks made from various fabrics, natural and synthetic, woven and non-woven are becoming increasingly popular and available. Original designs contained two fabric layers, either cotton or a synthetic material, and were loose fitting. These designs are certainly sufficient to trap droplets and reduce the spread of coronavirus from people who are infected, whether they have symptoms or not. Simple 2 ply cotton masks are unlikely to provide any significant filtering capacity and should never be substituted for medical masks in situation where health care worker protection is needed. Community manufactured mask design is improving rapidly and masks are being produced that are snug fitting and have the capacity to add a middle filter layer. While these masks have not undergone any formal testing, the best designs (well fitted with a filter layer) likely do provide some level of protection to the person wearing the mask in addition to the well-established benefit of trapping droplet secretions.

Changing Understanding of Coronavirus Transmission: The coronavirus that causes COVID-19 can be spread by both droplet transmission (particles greater than 5 microns is size that are too heavy to float in the air) and aerosol transmission (particles smaller than 5 microns that can float in the air for short periods of time). Most coronavirus transmission is thought to be droplet transmitted although airborne transmission is a threat in medical and dental settings when machines like ventilators and high-speed drills have the effect of generating “mechanical aerosols”. Contact transmission, i.e. touching surfaces that have been contaminated with the virus, is also a significant source of exposure. For the virus to get into your body, it not only needs to get on your hands, you have to touch your eye, nose, or mouth or eat food with your hand. Wearing a glove does not protect you from this kind of transmission. Touching your face with a contaminated glove may be even more dangerous than a bare hand because people wash their gloved hands even less often than bare hands. **In addition to the well-established ways in which people who are sick with COVID-19 transmit infection, there is growing concern that a significant number of people who have the infection have no symptoms at all but are still infectious.** Since they are asymptomatic, they are not coughing or sneezing and it may be that they are spreading the infection by droplets ejected from the mouth during speaking, shouting, or singing. Contamination of the hands,

sharing food or utensils, or close personal contact can also be pathways of transmission. There is mounting evidence that “asymptomatic transmission” is a significant part of the rapid spread of COVID-19 in the world. Estimates vary widely and some experts think that up to 20-40% of infections may be caused by this silent form of spread. This growing concern about asymptomatic transmission is what has prompted the CDC to revise its recommendation against cloth masks and acknowledge that there may be some benefit to greater use of cloth masks in public, especially in settings where social distancing is hard to maintain (like a crowded grocery store). These arguments are sound but come with a caveat – while masks can reduce some risks, they may increase others. People who are infected with the virus without knowing it can effectively trap their droplet secretions by wearing a cloth mask. But if they touch that mask after using it, they are transferring those droplets to every other surface they touch, increasing the contact transmission risk for others. For people who are not infected with COVID-19 and who use the cloth mask to give themselves a false sense of security, they can put themselves at increased risk by getting closer than 6 feet to others or reducing their hand hygiene practices. **Masks should be used in addition to social distancing, not instead of it.**

The Need to Conserve Scarce Medical Masks: It is extremely important that people not use medical masks (surgical and N-95) in low risk community settings. This ends up keeping those manufactured masks out of the hands of the frontline health care workers and first responders who are putting their health on the line to protect others. Properly implemented, an abundant supply of cloth masks can ease the shortage of surgical masks since locally made cloth masks can be used by patients visiting medical facilities instead of using surgical masks that are in short supply. Medical providers who are substituting cloth masks for surgical masks have systems in place to collect, launder and decontaminate the masks after use. People who are using locally made cloth masks should have a similar plan. When cloth masks are removed it should be done in a way that minimizes touching the moist parts of the mask. The masks should be placed in a waterproof bag and the mask wearer should carefully wash their hands. Most cloth masks can be laundered in a washing machine and dried at a high heat setting. Hand laundering and drying in the sun is likely to be effective as well.

Now is not the time to relax social distancing, respiratory etiquette, or hand hygiene: April will be the crucial month for controlling the first wave of the coronavirus pandemic in Jefferson County and Washington State. The demand for hospital services, including ICU beds and mechanical ventilators, is expected to peak in Seattle in mid-April. The peak in Jefferson County will likely be several weeks later – late April or early May. What we do in the next two weeks will determine how high that peak is. Coronavirus causes a wide range of symptoms ranging from life threatening respiratory failure to symptoms so mild they are hard to even notice. The more people that become infected, the greater the risk that you will encounter a person carrying the virus or a high touch surface that is contaminated with virus laden droplets. Staying at home unless you are an essential worker is more important than ever. And for those over 60, pregnant women, and those with chronic medical conditions – staying home can be lifesaving. Now is a time to use home delivery services or have family or friends go to the grocery store or pharmacy for you. **If we do everything right, this transmission risk will start to drop in May. If we let down our guard, it will be at the worst possible time – when the risk of community exposure is at its greatest.** Early evidence says that Washington State and Jefferson County are succeeding at “flattening the curve”. We will still see our health care system and first responders stressed to the max in the coming months and we will still witness the death toll rise day by day. If we fail to radically slow transmission, the consequences will be far worse.

###

Jefferson County Public Health
Always Working for a Safer and Healthier
Community