Guidelines for persons at risk of severe infection from the new coronavirus (COVID-19)

Who are at the greatest risk of severe symptoms?

1. The likelihood of serious illnesses increases with increasing age, particularly after the age of 50.
2. Persons with certain underlying problems are also at increased risk of severe infection if they are infected by the COVID-19 disease. It is not known for certain how great this increase in risk is if these problems are present, but when comparing mild and severe cases it is clear that certain problems were in evidence in a greater number of persons with severe illness than persons with a milder version.
   a. These problems are: High blood pressure/cardiovascular diseases, diabetes, chronic lung disease (including chronic obstructive pulmonary disease), chronic kidney failure and cancer.
3. Persons who smoke appear to be more at risk of serious illness although it is not possible to exclude that this involves chronic obstructive pulmonary disease and may in fact be the underlying problem which increases the seriousness of the disease.
4. At present, it is uncertain that immunosuppression treatment (such as steroids, methotrexate or biopharmaceuticals) increase the likelihood of severe coronavirus infection.

Are children with long-term illnesses particularly at risk?

Children of all ages have been infected with the virus although many infected children were found during searches linked to other incidents and not due to their own illness. There do not appear to be many severe infections among children although information on disease progression in children is limited as yet.

Review of cases from China showed 1% of cases were 0-9 years old and 1% were 10-19% years old. Most patients (81%) had mild disease, 14% had severe disease, and 5% had critical disease (Wu Z, et al. JAMA Feb 24, 2020). Another review of pediatric patients (less than 18 years old), both laboratory-confirmed cases and suspected cases, found over 90% of all patients were asymptomatic, mild, or moderate cases. Young children, particularly infants, were possibly more vulnerable for severe infection but as most cases were not confirmed COVID-19 it is possible those infants had other infections such as RSV or influenza (Yuanyuan D, et al. Pediatrics March 16 2020).

Are pregnant women particularly at risk?

Due to changes in their bodies and immune systems, we know that pregnant women can be badly affected by some infections. It is therefore important that they take precautions to protect themselves against COVID-19, and report possible symptoms (including fever, cough or difficulty breathing) to their healthcare provider. No information has been found to indicate that COVID-19 causes any special risks for pregnant women or risk of side effects during pregnancy in addition to the general risk associated with pregnancy. No specific advice, therefore, is in effect for pregnant women that are generally healthy, only general infection prevention and hygiene measures in accordance to advice to the public. Cases relating to pregnant women in China and in Europe have been described but these are fairly few. The most important information that has been stated in such articles from China is that the virus does not appear to infect the foetus during the third trimester.

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The guidelines below are intended for:

- **The elderly** (the older the person is, the greater the reason to keep the following in mind).
- **Persons with cardiovascular diseases/high blood pressure, diabetes, chronic lung disease (including obstructive pulmonary disease), chronic kidney failure and cancer irrespective of age** (including pregnant women and children for which this applies)
- **Those that are at risk according to physician’s evaluation**

Persons with impaired immune systems (not caused by diabetes, kidney disease or cancer) should also seek the advice of their doctor but can take account of the following measures if the doctor in question so recommends.

**What can I do to avoid infection?**

The mode of infection is by touch or droplet borne. This means that the virus can be transmitted when an ill person coughs, sneezes or wipes their nose and the face of a healthy individual is exposed to droplets/spray from the ill person or when hands are contaminated by drops which are then transferred to the face. **Keep in mind that persons at risk of severe infection are not considered more sensitive to infection than others and, as a result, the main advice to avoid infection through interactions with others and outside the home is the same for sensitive persons as for the general public. Limits to interactions with others is the most important addition for persons at risk of severe infection.**

Other household members of sensitive persons must pay attention to their own hygiene and conduct, both within and outside the home. It is very important to limit the likelihood of exposing those who are sensitive to infection. There may even be reason for household members who continue to work and participate in activities outside the home to significantly limit their interactions with sensitive persons and leave the home if they have become infected. If there are many members of the household who are not considered sensitive it may be safest for the sensitive person to go elsewhere while the pandemic persists. If this is not realistic, it may prove necessary to limit the risk of infection to the sensitive person by removing young children from nursery school even if such schools are not closed. Such measures is extremely difficult for children and perhaps even the entire household and should be avoided if there are any other solutions.

- **Thorough handwashing** is the most important advice for everyone to avoid infection. Hand washing with water and soap if hands are dirty, while hands that appear clean but have come into contact with shared contact surfaces such as door handles and stair rails may be cleaned with an alcohol-based hand rub.
- Disinfectant wipes can be used to wipe surfaces that many people touch, such as stair railings, handlebars on shopping carts, etc.
- It is a good idea to avoid contact with persons that have the general symptoms of the common cold, i.e. sneezing or coughing. If an epidemic is widespread there is a risk that infected individuals can be found nearby and this can be a reason to stay as much as possible at home, even if there is no ban on public gatherings.
- **Masks** are most useful when used by those who are ill but can be advantageous for sensitive persons when contact with ill people is unavoidable, such as when it is necessary to seek medical services and to wait in waiting rooms where there may be infected persons.
- Persons who are at risk should avoid cleaning up after others, particularly outside the home. If this is unavoidable, however, disposable gloves should be used although it is important to remember to remove the gloves when such work has been completed and to wash hands thoroughly.

**When infection is becoming widespread in society** persons at risk of severe COVID-19 infection should keep the following in mind:

- The best advice is to remain at home and have direct contact with as few people as possible.
If health services are required, it is best to arrive when the appointment is to begin and not wait in the waiting room for longer than necessary. Care must also be taken to clean hands thoroughly and possibly even wear a mask if waiting in a waiting room is required. Clinics and health centres are instructed to try to book sensitive persons during periods when there are fewer people waiting in the waiting room or to use other measures to reduce the interaction of sensitive people with ill people in waiting rooms.

Regular health checks carried out by doctors or dentists, physiotherapy or visits to other specialists are generally not considered essential health services during an epidemic and consideration should be given to cancelling such services and booking a new appointment when the epidemic has passed.

The use of public transport is not recommended. It is better to use a private car or a taxi. If using a taxi, hands should be cleaned after entering the car, care taken not to touch anything inside the car unnecessarily and to clean hands again once the journey has been completed and the car door closed.

Going to work or school where there are large numbers of people is not recommended. Individuals who work alone or with few other people who also take proper care as regards cleanliness may possibly be able to continue to go to work. Each individual must evaluate this risk, possibly in consultation with their doctor. In consultation with an employer and school authorities, individuals that are not ill but are at risk of severe COVID-19 illness may continue to work or study from home if possible.

Attending gatherings is not recommended even if they have not been banned, whether work-related, family-related or social. This includes work meetings, gatherings involving colleagues, gatherings held by unions, confirmations, funerals, sewing clubs, choir practices, concerts, etc.

Attending physical training centres, swimming pools, the theatre, cinemas, shopping malls or other places where large numbers of people congregate is not recommended.

Places where many people come during the day are not recommended even though there are few people there at any given time. These include barber shops, beauty salons and the like as employees in such establishments are in close contact with numerous people each day.

Sensitive persons should not personally fetch resources from places that many people use, including from pharmacies, supermarkets, post offices, banks or other. Items that can be picked up from a drive-thru, home delivered or resolved by telephone or Internet can be done by the person in question but it may prove necessary to have next of kin undertake certain tasks and a letter of proxy may have to be issued, particularly for tasks involving pharmacies, banks or post offices.

If it is not possible to avoid fetching resources, care must be taken to ensure hygiene: use own grocery bags to collect goods or use gloves and/or wipe handlebars of shopping carts with a disinfectant cloth. If self-checkout kiosks are used it is important to thoroughly clean hands after using such kiosks and it might be a good idea to use a disinfectant cloth to wipe touch screens and POS buttons and not necessarily preferable that shop workers touch each item purchased, unless the utmost hygiene is observed.

Dwelling in shared spaces in multi-apartment buildings, such as stairwells, laundry rooms or shared gardens/outdoor recreational areas is not recommended.

Guests should not be welcomed into the homes of sensitive persons for the duration of the epidemic. As a rule, sensitive persons should not attend home gatherings in other homes. There is particular reason for the elderly and others who are sensitive to significantly limit contact with young children who may be infected and infectious while they themselves have very few symptoms.

It is a good idea to attend properly to mental and physical health. For example, it is a good idea to go out onto balconies or into gardens by the home or for walks where there are few people. The distance to other pedestrians should preferably be 1-2 m. In addition, it is possible to exercise within the home, under the guidance of a physiotherapist, if appropriate. Guidance on training routines can also be obtained from the radio, television or the Internet. For instance, indoor stairs can be used for a variety of exercises.

Everyone can contact the Red Cross help line through the number 1717 or by online chat at www.1717.is. This can be used to seek support, obtain information and discuss matters privately. The help line is open 24 hours a day and calls are free of charge.

General hygiene measures are to be employed when taking out the trash or collecting mail from the mailbox.
Healthcare centres should be contacted if symptoms are noticed (preferably through www.heilsuvera.is where it is possible to both send text messages or use the online chat if getting through by telephone proves difficult) or with the doctor most familiar with the health of the person in question by the means suggested by the doctor.

Call 112 in emergencies. The on-call service, 1700 (+354 544-4113 for foreign numbers) should be called if needed.