Addressing NCD risk factors in the context of COVID-19
“Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity” (WHO Constitutions, 1946). Lifestyles play an important role and can impact health positively or negatively. Lifestyle related risk factors such as tobacco use, harmful use of alcohol, unhealthy diet, and insufficient physical activity are known modifiable contributors to non-communicable diseases (NCDs) and mental health issues.

COVID-19 affects all populations regardless of age, gender, ethnicity or nationality. However, the elderly and people living with NCDs are more severely affected by COVID-19. The global COVID-19 pandemic is contributing to social and economic disruptions that may drive people to engage in risk-taking behavior and unhealthy habits. Preventing these risk factors will have a dual beneficial effect of reducing the number of people at risk of severe disease as well as improving the recovery of those affected by COVID-19.

I. Tobacco use

Situation

- COVID-19 is an infectious disease that primarily attacks the lungs. Smoking affects lung function and weakens the immune system, impairing the body’s response to viruses such as the SARS-COV2 virus.
- Tobacco use causes more than 8 million deaths annually, 1.2 million of which are from exposure to second-hand tobacco smoke. It is a major risk factor for non-communicable diseases (NCDs) including cardiovascular disease, chronic respiratory disease, diabetes and cancer.
- There is no scientific evidence that nicotine is protective for COVID-19. Instead, current smokers have been found to develop more severe disease than non-smokers.
- Tobacco users (cigarettes, waterpipes, cigars, heated tobacco products, e-cigarettes, smokeless tobacco, etc.) may be more vulnerable to contracting COVID-19, as the act of using tobacco products involves hand to mouth contact which increases the possibility of transmission of viruses.

Key messages

1. Do not smoke or use any form of tobacco products.
2. If you currently use tobacco products, please quit. Proven interventions to help users quit exist such as toll-free quit lines.

1 WHO Constitution, Preamble accesses at https://www.who.int/governance/eb/who_constitution_en.pdf?ua=1
counseling, mobile text-messaging cessation programs and nicotine replacement therapies.

3. Consult a healthcare worker for guidance on how to quit.
4. Do not expose others to tobacco smoke.
5. Do not spit in public places.
6. Know the importance of hand hygiene, respiratory etiquette, physical distancing, and not sharing any tobacco products.

II. Harmful use of alcohol

Situation:
• Harmful use of alcohol causes 3 million deaths annually. Alcohol affects every single organ of the body including weakening the immune system, reduces one’s ability to fight infectious diseases and may further increase feeling of anxiety and depression. The harmful use of alcohol is associated with non-communicable and communicable disease, as well as social and economic losses to individuals and societies, which increases people’s vulnerability to COVID-19.
• Alcohol impairs thoughts, judgement, decision-making and behaviour and increases the risk, frequency and severity of interpersonal violence. Heavy use of alcohol increases the risk of acute respiratory distress syndrome (ARDS), one of the most severe complications of COVID-19.
• The notion that ingesting alcohol kills the virus is a myth and will only have a deleterious effect on health, including death.
• During the pandemic, people may have difficulty accessing alcohol as alcohol sales may be banned or alcohol selling outlets may limit opening hours. Such restrictions to access should be upheld and reinforced during the COVID-19 pandemic.

Key messages

1. Avoid alcohol consumption.
2. Stay sober so that you can remain vigilant, act quickly and make sound decisions, for yourself and others in your family and community.
3. Do not use alcohol as a way of dealing with your emotions and stress.
4. Do not consume alcohol if you take any medication as alcohol can interfere with your liver function and cause serious health problems.
5. Pregnant women should never take alcohol.
6. If you have an alcohol use disorder, consult your healthcare professional for assistance.


III. Unhealthy diets

Situation

- 1.7 million deaths worldwide are attributable to low fruit and vegetable consumption\(^7\). Poor nutrition is an important risk factor for NCDs and weakens the immune system and a person’s ability to prevent, fight and recover from infectious diseases\(^8\).
- Consumption of high levels of high-energy foods, such as processed foods that are high in fats and sugars, promotes obesity compared to low-energy foods such as fruits and vegetables.
- Food systems have been disrupted and access to safe and nutritious food limited, particularly in urban settings. Some evidence suggests the adoption of unhealthy eating patterns during home confinement\(^9\).
- Stress caused by the disruption of daily lives could also lead to excess consumption of high caloric foods, weight gain and ill health.

Key messages

1. Boost your immune system and maintain a healthy weight through a healthy diet rich in fresh fruits and vegetables, low in sugars, salt and fat.
2. Drink water (8-10 cups per day) instead of sugar-sweetened beverages as a simple way to limit sugar intake and excess calories.
3. Choose fresh fruits instead of sweet snacks and consume small portions of dessert. Be particularly careful to cultivate healthy food preferences in the choice of snacks for children.
4. Avoid highly-processed, baked and fried foods and opt for cooking methods such as steaming or boiling; and avoid continuous nibbling and snacking between meals.
5. Limit salt intake to 5 grams (under a teaspoon) a day.
6. Eat at least 400 g (i.e. five portions) of fruit and vegetables per day, excluding potatoes, sweet potatoes, cassava and other starchy roots.

IV. Insufficient physical activity and sedentary behavior

Situation

- 1.6 million deaths are attributed to the lack of physical activity\(^10\). Physical inactivity weakens the immune system and is an important risk factor for NCDs, predisposing those who live with these conditions to more severe illness from COVID-19.

---

\(^7\) WHO Global Strategy on Diet Physical Activity and Health. Promoting fruit and vegetable consumption around the world. https://www.who.int/dietphysicalactivity/fruit/en/index2.html


• Partial or full lockdowns affect people’s ability to be active: adults are teleworking, schools have closed and recreational activities including sports are restricted.

• For children who are out of school and deprived of their main source of physical activity (physical education), reaching the recommended amount of activity during the day is challenging.

• Both children and adults adopt sedentary lifestyles during this pandemic by engaging in more screen time, be it for work or play. These challenges due to the pandemic may cause the adoption of unhealthy habits that persist beyond the current crisis.

Key messages

1. Engage in moderate-intensity physical activity at least 30 minutes daily for adults and moderate to vigorous-intensity physical activity at least 60 minutes daily for children and adolescents.
2. Make it a habit to exercise from home during lockdown.
3. Limit time seated at a desk with frequent “standing” breaks.
4. Engage in non-group sports such as walking or running.
5. Monitor the screen time for children (including TV). It is important to be particularly mindful of media flooded with alcohol or other harmful products advertising and promotion.
6. Rediscover games not associated with screens and use this opportunity to bond as a family (board games etc.)