

Alcohol Drinking, COVID-19 and NCDs Key Messages

- * The coronavirus disease 2019 (COVID-19) pandemic has many impacts on people's lives and health-related behaviours, one of which is the way they consume alcohol. A multi-country survey revealed that many drinkers increased alcohol consumption during the period of COVID-19 pandemic.
- * Alcohol is a toxic substance with direct and indirect effects on various body organs and systems. It can exacerbate mental health issues and health vulnerabilities. Alcohol consumption, especially in large amounts, weakens the immune system and makes the drinker more susceptible to infections. Studies have documented an increased risk of severe respiratory infections with drinking, including pneumonia.
- * Alcohol is a causal factor of many chronic non-communicable diseases (NCDs), including cancers, cardiovascular and circulatory diseases, liver diseases, type 2 diabetes and pancreatitis. Moreover, domestic violence and child abuse are often precipitated by excessive drinking.
- In the wake of the COVID-19 pandemic, drinking is unhelpful for coping with boredom, stress and other negative emotions. The Department of Health appeals to members of the public to live a healthy lifestyle and refrain from drinking for better health and a stronger immune system. Together, we continue to fight the virus!

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Alcohol Drinking, COVID-19 and NCDs

The coronavirus disease 2019 (COVID-19) pandemic has many impacts on people's lives and healthrelated behaviours, one of which is the way they consume alcohol.¹ As evidenced from prior public health crises, such as Severe Acute Respiratory Syndrome (SARS) in 2003,^{2, 3} negative outcomes included increase in alcohol consumption because of perceived stress or other negative moods.

Overview of Alcohol Consumption during COVID-19 Pandemic

In an attempt to control the spread of COVID-19, many governments across the world implemented social distancing measures, including stay-at-home orders and quarantine, that can have negative effects on people's physical and mental well-being. To better understand the impact of COVID-19 pandemic on people's use of alcohol (and other drugs, mental health and relationships), the Global Drug Survey, an independent research company based in London, developed a special investigation on COVID-19 and ran for 7 weeks between May and June 2020.⁴ Information collected from over 55 000 people from 11 countries (United Kingdom, Ireland, Switzerland, Germany, France, Netherlands, Austria, Australia, New Zealand, Brazil and United States) showed that 43% of drinkers reported an increase in frequency of drinking (i.e. number of days used in the past 30 days); 36% had an increase in drinking amount (i.e. number of standard drinks per drinking days); and 23% reported an increase in frequency of binge drinking (i.e. number of days consumed 5 or more drinks on a single occasion), compared to February 2020 before COVID-19 restrictions. By reasons for increases in alcohol consumption, over two-fifths of drinkers cited having more time to drink (42%) and feeling more bored (41%). Substantial proportions of drinkers drank more due to feeling stressed (27%),

depressed (21%) or lonely (20%). Some drinkers (14%) also reported that they had larger amounts than usual at home because they stocked up. On the other side, 25%, 22% and 29% of drinkers reported a decrease in frequency of drinking, drinking amount and binging frequency, respectively. The main reasons for decreases in alcohol consumption were having less access to the settings where they usually drink in (67%) and less contact with people whom they usually drink with (64%).⁴

In Hong Kong, a survey telephone-interviewed over 1 500 residents aged 18 or above between 9 and 23 April 2020 found that 5.5% of alcohol drinkers reported having increased their alcohol consumption since the COVID-19 outbreak. Exposure to wrong messages "alcohol drinking/smoking could protect against COVID-19" from social media or online forums, longer home isolation, mental distress with anxiety and depressive symptoms were significantly associated with an increase in alcohol consumption. On the other hand, 36.8% of alcohol drinkers reported having reduced their alcohol consumption. This could be attributed to the practice of social distancing, along with enforced closures of bars and pubs as well as clubhouses which were main venues for alcohol consumption through the data collection period.⁵

Perils of Alcohol Drinking

As a toxic substance with direct and indirect effects on various body organs and systems, alcohol can exacerbate mental health issues and health vulnerabilities. In the wake of the COVID-19 pandemic, drinking is unhelpful for coping with stress, boredom and other negative emotions. Instead, alcohol can increase the symptoms of panic and anxiety disorders, depression and other mental disorders.⁶ Alcohol consumption, especially in large amounts, weakens the immune system and makes the drinker more susceptible to infections. In the lungs, alcohol impairs mucociliary clearance in the upper airway, weakens the function of immune cells (such as alveolar macrophages), and disrupts the epithelial barrier in the lower airway.⁷ Studies have documented an increased risk of severe respiratory infections with drinking, including pneumonia.⁸

In addition, alcohol is a causal factor of many chronic non-communicable diseases (NCDs), including cancers (of the mouth, pharynx, larynx, oesophagus, liver, colorectum, and females breasts), cardiovascular and circulatory diseases (such as hypertension, stroke, conduction disorders of heart and other dysrhythmias), liver diseases (such as alcoholic fatty liver disease, liver cirrhosis and liver failure), type 2 diabetes and pancreatitis.⁹ There are enough evidence that NCDs significantly increase the risk of COVID-19 severity and death.¹⁰

With drinking, there is also an increased risk of immediate harms including acute alcoholic intoxication, injuries (such as due to falls) and risky sexual behaviours. It is also noteworthy that alcohol as a neurotoxin is particularly harmful to children and adolescents' developing brain. Among adolescents with alcohol use disorders, neuro-imaging studies found brain structural abnormalities, including hippocampal and prefrontal volume reductions.^{11, 12} Compared with adults, young people develop dependence on alcohol more easily and quickly.¹¹

Hidden Harms of Drinking at Home

At home, alcohol consumption can bring or exacerbate other harmful effects. For children and adolescents, witnessing parental drinking (whether for recreational purposes or coping with emotions) in the home or having easy access to alcoholic beverages at home would influence their believes, attitudes and behaviours towards alcohol, such as 'normalising' the use of alcohol as a way to cope with the stress or boredom, introducing in-home drinking and exposing them to underage drinking with short- and long-term consequences.^{13, 14} Moreover, domestic violence and child abuse are often precipitated by excessive drinking.¹⁵

Coping with COVID-19 without Drinking

Under no circumstances should people resort to drinking as a means of dealing with emotions. Instead of drinking to relief stress, overcome boredom or pass time while staying at home, members of the public can try to do home-based exercises. Moderate-intensity physical activity has been shown to promote mental health, boost immune system and defend the body from infections including respiratory infections, as well as prevent most NCDs that may exacerbate COVID-19 severity and death.^{16, 17} Doing household chores or playing active videogames while staying at home can also help to increase physical activity levels and promote health.

For alcohol drinkers, the Department of Health (DH) urges them to recognise the harms associated with drinking and appreciate the benefits of cutting down or stopping drinking. They can answer the locally validated Alcohol and Health Questionnaire. This simple, self-administered electronic questionnaire can help individuals to quickly assess their drinking habits and see whether drinking has affected their life and that of others. While the questionnaire serves as a useful and handy reference, it cannot replace a full evaluation by healthcare professional, nor can it provide a diagnosis of alcohol dependence or any medical condition. For professional help, please consult family doctor.



(# AUDIT refers to Alcohol Use Disorders Identification Test)

In the wake of COVID-19 pandemic with social distancing being put into effect, it is in fact a unique opportunity to quit drinking or at least to cut down. To know more about alcohol and health, tips on cutting down alcohol or stopping drinking, please visit the "Change for Health" website of DH at www.change4health.gov.hk.

In young people's life and health, there is NO place for alcohol. Parents (and adults) should know that they have a critical role in influencing children and adolescents' behavior with regard to drinking. Amid COVID-19 pandemic, members of the public are urged to stay at home as far as possible. While they are all at home, children and adolescents would be far more likely to witness parents drink alcohol. Hence, parents should serve as role model by not drinking. For those who are still drinking, they should avoid drinking in front of children, avoid stockpiling alcohol at home and keep their drinking to a minimum or quit drinking. It is also important to keep alcoholic drinks out of children and adolescents' reach at home.

Reducing the Harmful Use of Alcohol

Reducing harmful use of alcohol has been accorded primary importance in the prevention and control of NCDs. In May 2018, the Hong Kong Government launched "Towards 2025: Strategy and and Action Plan to Prevent Control Noncommunicable Diseases in Hong Kong" (SAP), announcing a list of committed actions and 9 local NCD targets to be achieved by 2025 that include a reduction in the prevalence of drinking among adults and youth.¹⁸ In the fight against COVID-19, DH appeals to members of the public to live a healthy lifestyle and refrain from drinking for better health and a stronger immune system. Together, we stay healthy and continue to fight the virus!

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The Leisure and Cultural Services Department (LCSD) will launch the "Online Interactive Sports Training Programmes" in January 2021 to provide eight types of sports programmes, namely Aerobic Dance, Fitness Exercise, Body-mind Stretch, Parent-child Fitness, Tai Chi, Fitness Exercise for Children, Fitness Yoga and Hip Hop Dance. People may stay at home amid the epidemic to learn and practise physical activities interactively via online platform as well as to establish a healthy lifestyle.

The programmes are part of the interactive activities held by the one-stop online resources centre "LCSD Edutainment Channel" to provide online interactive sports training given by coaches for members of the public to practise simultaneously. The aim is to promote sport for all through online platform and enhance the public's knowledge and interest in sports.

Enrolment can be made online on a first-come-first-served basis starting from 8:30am on 14 December through Leisure Link Internet Booking services (leisurelink.lcsd.gov.hk). The course fee is \$20. For details of the "Online Interactive Sports Training Programmes", please visit the designated website at www.lcsd.gov.hk/en/visavis.

Non-Communicable Diseases (NCD) WATCH is dedicated to promote public's awareness of and disseminate health information about non-communicable diseases and related issues, and the importance of their prevention and control. It is also an indication of our commitments in responsive risk communication and to address the growing non-communicable disease threats to the health of our community. The Editorial Board welcomes your views and comments. Please send all comments and/or questions to so_dp3@dh.gov.hk.

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