

# QUIT Smoking the Waterpipe: Improve your Health and that of your Loved Ones



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Two of the most serious consequences of waterpipe tobacco smoking is the addiction that it causes and the dangers of indoor air pollution that it produces exposing the smokers as well as the vulnerable elderly and young. Despite the fact that many waterpipe tobacco smokers don't see themselves as addicted, studies have shown that waterpipe tobacco smoking can be addictive. If you are a waterpipe tobacco smoker, ask yourself the following questions: What is the number of waterpipes you usually smoke per week? How much time after you wake up do you smoke waterpipe? Do you smoke waterpipe more often in the morning? What is the number of times you could stop waterpipe for more than 7 days? What is the number of days you could spend without waterpipe? Do you feel annoyed in place where smoking is forbidden? Do you prefer smoking waterpipe instead of doing other activities? Do you smoke waterpipe when you are seriously ill? Do you smoke waterpipe alone? Are you ready not to eat in exchange for a waterpipe? How much time would you spend searching for a waterpipe? What percentage of income would you spend for waterpipe smoking? Do you smoke waterpipe to improve your morale? Are you ready to leave your family on a holiday and search for tobacco? Do you smoke waterpipe for pleasure? Do you smoke waterpipe to decrease your appetite? Do you smoke waterpipe to relax your nerves? Do you smoke waterpipe because it is a social habit? Do you smoke waterpipe to please others? Do you smoke waterpipe to concentrate when working on something? Those questions come from the

Lebanese waterpipe dependence scale published in 2008. What is also continuously given the least attention is smoking of the waterpipe in open public spaces for example in café's and restaurants and the exposure of the hospitality sector employees to the deadly toxicants as well as customers. The information provided in this article should highlight the damages of waterpipe tobacco smoking on the smoker and members of society around them.

## Is waterpipe tobacco smoking safer than cigarette smoking? No

Both cigarette and waterpipe tobacco contain nicotine, harmful carcinogens and are addictive. Waterpipe tobacco smokers face many of the same health risks as cigarette smokers. In fact, waterpipe smokers take many puffs and sit for longer duration than smoking cigarettes which exposes them to higher amounts of nicotine and other toxicants. Studies showed nicotine dependence from waterpipe tobacco smoking, leading to smoking waterpipe on a daily basis, regardless if smoking is done alone at home, or in a social gathering. Water in the waterpipe bowl does not filter out toxins, Carbon monoxide and nicotine. Some studies have documented that smoke emitted from 1 Hour of a waterpipe tobacco smoking session is equivalent to smoke from 100-200 cigarettes.

## What are the toxicants found in the waterpipe ?

Waterpipe smoke contains significant quantities of several toxicant classes, including nicotine and 27 known or suspected carcinogens. Waterpipe Tobacco smoke has been found to contain alarmingly high quantities of carcinogenic polyhydrocarbons (PAH), carbon monoxide (CO), volatile aldehydes, ultrafine particles, formaldehyde, nitrogen, nitric acid, nicotine, phenols and phenol derivatives. One of the most serious emissions also comes from the burning of charcoal which produces toxic elements such as Carbon Monoxide (CO) and polyaromatic hydrocarbons (PAH).

## What are some waterpipe specific harms?

Sharing the waterpipe hose can lead to the spread of

serious infectious diseases. While some waterpipe serving establishments provide new pipe mouth pieces for each person, the hose is still shared and can transmit infection. Many waterpipe tobacco smokers are willing to share with others and many do so very often. The most concerning development now is the harm that might result from sharing related to COVID-19. Now, studies about the risk factors associated with COVID-19 virus started to emerge including its relation with smoking in all its forms including cigarette smoking, waterpipe smoking and vaping. Although there has been limited studies exploring the association between smoking and COVID-19 virus, experts are asserting that smoking is a risk factor for COVID-19 virus. Knowing that this virus attacks the lungs, and given that smoking suppresses the functioning of the immune system, it seems prudent that patients will encounter more serious adverse effects if they are ever smokers. The World Health Organization included waterpipe as a tobacco product to the list of risk factors associated with the novel virus. The waterpipe apparatus provides a promoting environment for the survival and transmission of microorganisms among smokers.

In response to this pandemic, several precautions have been publicized to ensure everyone's safety including practicing the correct hand hygiene and maintaining social distancing. However, quitting all types of tobacco smoking and avoiding second hand smoking should be highlighted and enforced as an additional preventive measure. This could be the best time for the smokers to quit and for the community to strengthen smoke free laws as a shield against COVID-19 virus.

Waterpipesmokers should consider that:

- Changing the mouthpiece and the hose or use of disposable parts does not eliminate potential risk from infection because the virus can stick to the other various parts of the waterpipe made of a mix of different material, or in the water bowl. Risk of transmission will persist.
- Sharing the waterpipe at home also does not eliminate risk since the persons you might share with at home can be asymptomatic but still transmit the virus.
- As noted above, use of any tobacco product makes impact of COVID-19 worse.

## What are the most notable health effects of waterpipe tobacco smoking?

Both acute and long-term health effects of waterpipe tobacco smoking have been documented. Acute cardiovascular health effects are increased heart rates and increased blood pressure. Long term cardiovascular effect

include coronary artery disease (CAD). WP smokers are 2.2 times more likely to develop long term cardiovascular effects than non WP smokers.

In terms of respiratory health effects those include short term effects such as decrease in oxygen saturation, and increase in respiratory rate, and carbon monoxide (CO) toxicity. Long term effects include increase in exhaled carbon monoxide, by increase in COHb (compromising transfer of oxygen to the brain and other organs) and decreased respiratory function.

In terms of cancers, the risk of having lung cancer are 6 times higher in former waterpipe tobacco smokers compared with nonsmokers. Waterpipe tobacco smoking was also associated with 3.4 times the risk of developing gastric cancer compared with nonsmokers. Other cancers are also concerning but to date have shown generally weaker associations such as bladder cancer, prostate cancer, pancreatic cancer, oral cancer.

## What kind of harm to others can waterpipe tobacco smoking cause?

Waterpipe tobacco smoking is not only limited to harming one's self, but a pregnant mother can harm her unborn child resulting in low birthweight.

WPS causes 2 to 3 times lower birth weight for infants and pulmonary complications. Children born to WPS mothers are around 4 times more likely to develop pulmonary complications. Exposure to second hand tobacco smoke from the waterpipe increases the risk of heart disease, lung cancer and other lung diseases in adults and worsens the effects of illnesses such as asthma and bronchitis. Children of waterpipe smokers suffer from increased pneumonia, bronchitis, middle ear problem, cough and wheeze.

## References

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