

B R E A T H E
the lung association

WANT TO ENJOY THE
FIRE AND AVOID THE
SMOKE?

CHOOSE A CLEANER
BURN OPTION!

*Let's
Clear the Air
for all Saskatoon
residents!*



*Burning wood
pollutes our air.
Together, let's get
educated about
the cleaner burn
alternatives.*

People want to enjoy the fire, and not the smoke.

Most people do not even realize the effects that the smoke from their wood burning fire pit and fire place have on their health and the community around them.

Municipal councils have the authority to make a public health impact with a stronger wood burning bylaw. The City of Saskatoon is showing homeowners that they acknowledge the health of all citizens.

Let's make a bylaw change to allow for people to still bond around a fire in their backyards, but let's all work together to make the switch to a cleaner option as there are many cleaner burn alternatives available!

The use of fire pits in Saskatoon is regulated by Fire and Protective Services Bylaw No. 7990. Every year, The Lung Association, Saskatchewan receives scores of concerns to our lung health line related to outdoor backyard burning. Most calls are from parents with kids that have asthma, people with heart and lung diseases, and/or frustrated neighbours who are too worried to upset their neighbours. Truth of the matter is, smoke is smoke, it is harmful to everyone and distressing to those with lung disease already struggling to breathe.

The Lung Association of Saskatchewan is concerned about the lung health of all Saskatoon residents. We urge Saskatoon City Council to implement a bylaw prohibiting the activity of backyard wood burning fire pits and new construction indoor wood burning fire places.

Homeowners should have the option to choose anything that is cleaner in terms of air quality. There are some alternatives to wood-burning fire pits including natural gas, propane and ethanol/gel fire pits. These options are better because they do not require the use of wood, thereby eliminating the harmful effects of wood smoke on health.

We don't believe that an extra-curricular backyard wood burn should trump the health and comfort of all Saskatoon citizens, especially when there are cleaner alternatives available. We aren't telling people they can't sit by the fire in their back yard, we are asking people to consider the health effects for them and their neighbours, and choose a cleaner burn option by exchanging their wood fire pit!

BACKGROUND INFORMATION

The majority of developed countries, and many other municipalities in Canada, have already implemented by-laws and regulations regarding no burn zones. Municipalities like Ottawa, Vancouver, Kelowna, Victoria and Montreal have banned backyard wood burning.

Backyard wood burning is a common activity in Saskatchewan, especially in the spring and summer months. Backyard burning is harmful to the health of everyone. Without a complete ban on backyard wood burning, neighbors are forced indoors to escape the smoke, restricting the use of one's backyard and the ability to enjoy time outdoors. Furthermore, the smoke from backyard wood fire pits can seep through closed doors and windows, invading one's home, making relief impossible. Studies have shown that up to 70% of particulate matter (a major component of wood smoke) can drift into neighbouring non-burning homes.

ALTERNATIVE OPTIONS TO WOOD BURNING

Fire pits come in four basic types: wood-burning, natural gas, liquid propane, and ethanol (alcohol). Wood-burning, is of course, the original and is often quite simply, either an open pit or vessel that you can light a fire in it. Though beautiful, raw and authentic, wood-burning brings with it smoke, floating embers, and ash, which in some settings, translates into nuisance, pollution, health impact, mess and even danger.

A more sensible and sensitive option for fueling a fire pit in the city is natural gas or propane. From an ecological standpoint, both fuels are clean-burning which means that the harmful emissions and toxins emitted during combustion are minimal. Both give off significantly less CO and CO₂ and certainly less exposure to fine particulate matter (PM_{2.5}) which is an air pollutant that is a concern for people's health when levels in the air are high.

HEALTH IMPACTS OF WOOD BURNING

Smoke has a negative impact on everyone's breathing and lung health. The Lung Association recommends taking measures to avoid smoke and burning of all materials. The health effects from smoke can range from mild to severe, and can even be life threatening. Smoke from burning wood is unhealthy for everyone, but some are especially vulnerable, including young children, the elderly, pregnant women and people suffering from heart or lung problems, including kids with asthma.

Some common symptoms from smoke exposure may include:

- irritated eyes
- runny nose
- headaches
- worsening of allergies



Air pollution associated with backyard fire pits is especially harmful to those with respiratory issues and diseases. People with pre-existing health conditions such as asthma and chronic obstructive pulmonary disease (COPD), a new name for emphysema and chronic bronchitis, report a worsening of symptoms on days when neighbors are burning wood in their backyards.

Young children are also at an elevated risk of suffering the adverse health effects of wood smoke due to their still developing lungs and small airways. This is an issue about the infringement on the rights of others, especially of our most vulnerable, and is also a health and social concern affecting the entire population of Saskatoon.

People want to enjoy the fire, and not the smoke.

Most people don't even realize the effects that the smoke from their wood burning fire pit and fire place have on their health and the community around them.

Municipal councils have the authority to make a public health impact with a stronger wood burn bylaw. The City of Saskatoon is showing homeowners that they acknowledge the health of all citizens.

Let's make a bylaw change to allow for people to still bond around a fire in their backyards, but let's push the public to make the switch to a cleaner option, there are now many alternatives available!

REFERENCES

1. <https://www.saskatoon.ca/news-releases/residential-fire-pit-regulations-0>
2. American Lung Association. (July 2, 2008). Forest Fires and Respiratory Health Fact Sheet. <http://www.lung.org/healthy-air/outdoor/protecting-your-health/what-makes-air-unhealthy/forest-fires-respiratory-health-fact-sheet.html>
3. United States Environmental Protection Agency. (July 2, 2008). How smoke from fires can affect your health. <https://www3.epa.gov/airnow/smoke/Smoke2003final.pdf>
4. American Lung Association. (September 18, 2014). Protect yourself from lethal wildfire smoke. <http://www.lung.org/about-us/our-impact/top-stories/protect-yourself-wildfire-smoke.html>
5. Wang, Y., Hopke, P. K., Rattigan, O. R., Xia, X., Chalupa, D. C., & Utell, M. J. (2011). Characterization of Residential Wood Combustion Particles Using the Two-Wavelength Aethalometer. *Environmental Science and Technology*, 45, 7387–7393. doi:dx.doi.org/10.1021/es2013984
6. <https://paloform.com/fire-pits/adding-fuel-to-the-fire-pit/>

B R E A T H E
the lung association

1231 8th Street East
Saskatoon SK
S7H 0S5
(306) 343-9511