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The Harmful Effects of Second-hand Smoke

What is second-hand smoke?

Second-hand smoke is a mix of smoke from a lit cigarette, pipe or cigar, plus smoke blown into the air by the person smoking.

How harmful is second-hand smoke?

Second-hand smoke is poisonous. It has over 4000 chemicals, including 50 that can cause cancer. Some of the chemicals in second-hand smoke are:

- Benzo[a]pyrene – found in coal tar, one of the most potent cancer-causing chemicals.
- Formaldehyde – used to preserve dead animals.
- Hydrogen cyanide – used in rat poison.
- Ammonia – used to clean floors and toilets.

Two thirds of the smoke from a burning cigarette that enters into the air can be inhaled by anyone in that area.

Second-hand smoke causes over 100 deaths each year in British Columbia. It keeps many more people from leading healthy lives.

How does second-hand smoke harm your health?

People who do not smoke and who are exposed regularly to the toxic chemicals in second-hand smoke can suffer serious and life-threatening health concerns. In the long term, people exposed to second-hand smoke have a greater risk of suffering from:

- lung cancer;
- nasal sinus cancer;
- heart disease;
- stroke; and
- breathing problems, such as increased coughing, wheezing, pneumonia, bronchitis, and asthma.

People who do not smoke will suffer from the effects of breathing second-hand smoke right away. In as little as 8 to 20 minutes physical reactions can occur that are linked to heart disease and stroke. These reactions include increased heart rate, less oxygen to the heart, and constricted blood vessels that increase blood pressure and make the heart work harder.

Pregnant women exposed to second-hand smoke can have a greater risk of miscarriages, premature birth, and babies with low birth weight.

How does second-hand smoke harm babies and children?

Children are at higher risk of getting sick from second-hand smoke because their lungs are still developing and easily damaged. Babies also inhale more smoke because they breathe faster than adults.

Second-hand smoke is harmful to babies and children in the following ways:

- Babies who breathe second-hand smoke have a greater chance of dying from Sudden Infant Death Syndrome (SIDS). For more information, see HealthLinkBC File #46 Sudden Infant Death Syndrome (SIDS).
- Children exposed to second-hand smoke have a greater risk of getting lung infections, such as bronchitis and pneumonia. They also suffer more from chronic coughing, wheezing, and breathing problems.

- Second-hand smoke can cause fluid to build up in the inner ear, which can cause an ear infection.
- Children are more likely to get asthma when exposed to second-hand smoke. Second-hand smoke is harmful to children with existing chronic lung conditions and asthma because the second-hand smoke makes the health conditions worse.

How can I prevent exposure to second-hand smoke?

To protect your family from second-hand smoke, make your home and car smoke-free. Do not let anyone smoke near your child.

Encourage family and friends to create a smoke-free environment. For tips on creating a smoke-free home, visit Smoke-Free Housing BC www.smokefreehousingbc.ca.

Smoke from 1 cigarette can stay in a room for hours, even with an open window. Many of the toxic chemicals remain in the air and the carpets, curtains, furniture, and clothes. Air purifiers and ventilation systems may remove some of the smoke, but these may not remove all the toxic chemicals.

Are there any laws to protect against second-hand smoke exposure?

It is against the law to smoke in a motor vehicle with anyone under the age of 16 years. Most cars are airtight and the cigarette smoke has no place to escape. Opening a window can change the airflow and cause the smoke to be blown directly back at the people in the car.

It is against the law to smoke or use tobacco in schools or on school property.

It is against the law to smoke inside or within 3 meters of a doorway, window or air intake of a public building or workplace (including work vehicles)

For More Information

For more information, visit the following websites:

- The Lung Association of British Columbia https://bc.lung.ca/
- Health Canada - Tobacco www.hc-sc.gc.ca/hc-ps/tobac-tabac/index-eng.php
- Physicians for a Smoke-Free Canada www.smoke-free.ca
- The Clean Air Coalition of B.C. (CAC) www.cleanaircoalitionbc.com

If you want to quit smoking, help is available from:

- QuitNow Services – Free help to quit smoking, any time of the day or night. Visit www.quitnow.ca or call 1-877-455-2233.
- BC Smoking Cessation Program - Helps eligible B.C. residents who wish to stop smoking or using other tobacco products by helping with the cost of smoking cessation prescription drugs or NRT products. www2.gov.bc.ca/gov/content/health/health-drug-coverage/pharmacare-for-bc-residents/what-we-cover/drug-coverage/bc-smoking-cessation-program

For more HealthLinkBC File topics, visit www.HealthLinkBC.ca/healthfiles or your local public health unit.

Click on www.HealthLinkBC.ca or call **8-1-1** for non-emergency health information and services in B.C.

For deaf and hearing-impaired assistance, call 7-1-1 in B.C.

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