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HEALTH RISKS OF SECONDHAND SMOKE

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Secondhand smoke (SHS) is also called environmental tobacco smoke (ETS). It's a mixture of 2 forms of smoke that come from burning tobacco: 1. mainstream smoke: the smoke exhaled by a smoker; 2. sidestream smoke: smoke from the lighted end of a cigarette, pipe, or cigar, or tobacco burning in a hookah. This type of smoke has higher concentrations of cancer-causing agents (carcinogens) and is more toxic than mainstream smoke. It also has smaller particles than mainstream smoke. These smaller particles make their way into the lungs and the body's cells more easily [1]. When non-smokers are exposed to SHS it's called involuntary smoking or passive smoking. Non-smokers who breathe in SHS take in nicotine and toxic chemicals the same way smokers do. The more SHS you breathe, the higher the levels of these harmful chemicals in your body.

Secondhand smoke (SHS) has the same harmful chemicals that smokers inhale. There's no safe level of exposure for secondhand smoke (SHS). Secondhand smoke is known to cause cancer. It has more than 7,000 chemicals, including at least 70 that can cause cancer. Secondhand smoke can be harmful in many ways. For instance, it affects the heart and blood vessels, increasing the risk of heart attack and stroke in non-smokers. Some studies have linked SHS to mental and emotional changes, too. For instance, some studies have shown that exposure to SHS is linked to symptoms of depression. More research is needed to better understand the link between SHS and mental health [2].

Young children are most affected by SHS and least able to avoid it. Most of their exposure to SHS comes from adults (parents or others) smoking at home. Studies show that children whose parents smoke: get sick more often; have more lung infections (like bronchitis and pneumonia); are more likely to cough, wheeze, and have shortness of breath; get more ear infections. Secondhand smoke can also trigger asthma attacks, make asthma symptoms worse, and even cause new cases of asthma in kids who didn't have symptoms before.

Some of these problems might seem small, but they can add up quickly. Think of the expenses, doctor visits, and medicines, lost school time, and often lost work time for the parent who must stay home with a sick child. And this doesn't include the discomforts that the child goes through.

In very young children, SHS also increases the risk for more serious problems, including sudden infant death syndrome (SIDS).

References:

1. Thirdhand smoke causes DNA damage in human cells / B. Hang B, A.H. Sarker, C. Havel et al. // *Mutagenesis*. – 2013. – Vol. 28(4). – P.381-391.
2. Centers for Disease Control and Prevention. Secondhand Smoke (SHS) Facts. 2015. Accessed at www.cdc.gov/tobacco/data_statistics/fact_sheets.