

Environmental Tobacco Smoke Exposure & Children

Environmental tobacco smoke is a combination of exhaled smoke from a smoker and the smoke produced from a burning cigarette. It contains over 4000 chemicals including nicotine, carbon monoxide and arsenic.

Children are especially vulnerable to the effects of second hand smoke. They breathe faster than adults do and therefore inhale more chemicals. Young children whose parents smoke are nearly twice more likely to be admitted to hospital with serious lower respiratory tract infections than children who are not exposed ^{2,3}.

What are the risks of environmental tobacco smoke to children?

Asthma – a major cause of chronic illness in children. Second hand smoke exacerbates symptoms of asthma and there is strong evidence that it causes the development of asthma ¹.

Middle Ear Disease – exposure to tobacco smoke in childhood causes acute and chronic middle ear disease. Ear infections can cause temporary hearing impairment and in chronic cases of ear infections, hearing may be permanently damaged ¹.

Poor Lung Development – the lungs complete their development during childhood. Second hand smoke inhibits this development by raising inhaled carbon monoxide to unsafe levels. This aggravates allergies and increases the risk of respiratory illness ³.

Respiratory Illness – including bronchitis, croup, bronchiolitis and pneumonia, the most common causes of childhood morbidity worldwide, affecting 1/3 of all infants in their first year of life ¹.

Sudden Infant Death Syndrome – the risk of SIDS is doubled in children exposed to environmental tobacco smoke.

More Likely to Become Smokers - children who live with smokers are more likely to start to smoking than those who live with non-smokers, putting them at high risk of immediate and long term health problems.

Significant Behavioural Problems – including Attention Deficit Hyperactivity Disorder, deficits in intellectual disability and anti-social behaviour ².

What are the risks of environmental tobacco smoke and pregnant women?

The exposure of environmental tobacco smoke to pregnant women carries the same increased risk for pregnancy related complications as if the woman was smoking herself.

An environment free from tobacco smoke means;

Less likely to suffer a miscarriage
Less likely to bleed during the pregnancy
Less likely to deliver your baby prematurely

What can you do to reduce the exposure of tobacco smoke?

To protect growing babies, children and non-smokers from the effects of passive smoking;

Think about quitting smoking
Car and Home – Smoke-Free Zones
Don't smoke around children or pregnant women and encourage your friends and family not to either



References

1. British Medical Association, 2007. *Breaking the cycle of children's exposure to tobacco smoke*. Science and Education Department, British Medical Association, BMA House, London. 23
2. NSW Department of Health (Ed.) 2006. *Background papers to the National clinical guidelines for the management of drug use during pregnancy, birth and the early development years of the newborn*. [NSW Department of Health](#), Sydney.
3. 28. Samet JM. Background Paper, Synthesis: 1999; *The Health Effects of Tobacco Smoke Exposure on Children*. [Department of Epidemiology School of Hygiene and Public Health, John Hopkins University](#), Baltimore USA. For WHO International Consultation on Environmental Tobacco Smoke (ETS) and Child Health, Geneva, Switzerland.