

Third Hand Smoke

What is third hand smoke?

Defined as: *“Residual tobacco smoke contamination that remains after the cigarette is extinguished”*

In other words, even after visible ‘second-hand smoke’ has dissipated the area, toxins still remain and build up on surfaces. This residue contains highly toxic particles that cling to clothing, hair, furniture, and carpeting.

Many smokers believe they are keeping their children safe by simply turning on a fan, opening a window, or smoking when the kids are not at home. Studies on third hand smoke prove this is NOT true.

Who is at Risk?

Carcinogens in third hand smoke are a health and cancer risk for **anyone** who comes into contact with them. Third hand smoke exposure poses the same health risks as first or second hand smoking.

Infants and children are at a greater risk because they are closer to the carpet and surfaces that residue clings to. Babies touch and put their mouths to these surfaces, receiving as much as 20X the exposure adults do.

Residue contains 250 poisonous gases, chemicals, heavy metals, carcinogens, and even radioactive materials:

- **HYDROGEN CYANIDE** (used in chemical weapons)
- **BUTANE** (used in lighter fluid)
- **TOLUENE** (found in paint thinner)
- **Arsenic** (rat poison)
- **POLONIUM- 210** (found in nuclear weapons)
- **CADMIUM** (used to make batteries)
- **LEAD**
- **CARBON MONOXIDE**



Further Concerns:

- A child’s developing brain is highly susceptible to toxins
- Toxin exposure is a major cause of Sudden Infant Death Syndrome
- Toxins can be transferred to babies in breast milk

Educating your patients...

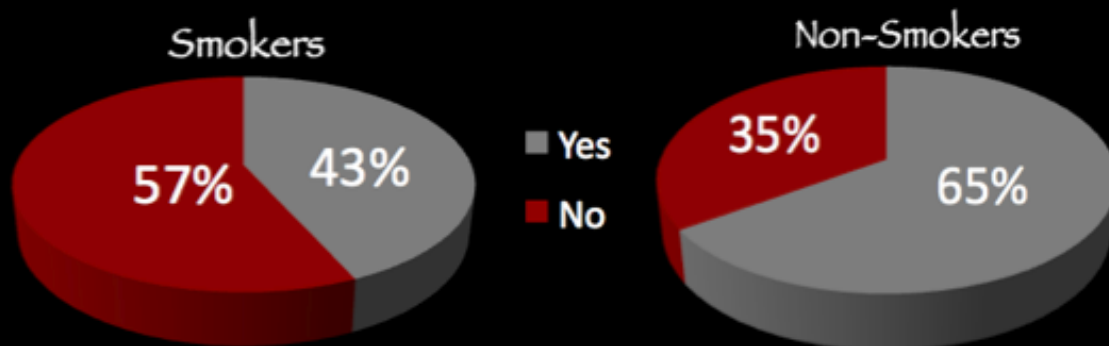
Polls have shown that a majority of smokers and many non-smokers do not understand the dangers of third hand smoke. As a hygienist, you have the responsibility to:

- Educate your patients about third hand smoke
- Warn smoking patients of the disease risks for their children from exposure
- Encourage all smoking patients to quit in order to fully protect their children and the public
- Give help, guidance, and support for smoking cessation

Beliefs About Harm

Participants of a recent survey were asked whether or not they agree with the following statement:

"Breathing air in a room today where people smoked yesterday can harm the health of infants and children"



Results show that only 43.3% of Smokers, and 65% of non-smokers are aware of the dangers of third-hand smoke.

For More Information:

- **Do your patients know about third-hand smoke?**
Jamesetta Newland, *The Nurse Practitioner*, Feb 2009
- **A New Cigarette Hazard: 'Third Hand Smoke'**
Roni Caryn Rabin, *New York Times*, Jan 2009
- **What is third-hand smoke? Is it hazardous?**
Coco Ballantyne, *Scientific American*, Jan 2009
- **Third Hand Smoke: Another Reason to Quit Smoking**
Science Daily, Dec 2008