Blood test to determine smoking exposure in kids

By ACSH Staff — May 14, 2012

Want to know if your kids have been exposed to cigarette smoke? Well, there’s a test for that. In a study just published in the *Archives of Pediatrics & Adolescent Medicine*, researchers analyzed nearly 500 blood samples from children ages one to four for cotinine, a chemical present in the body after exposure to nicotine. Study author Dr. Neal Benowitz and his colleagues discovered that 55 percent of the samples tested positive for cotinine, indicating that those children were exposed to smoke or its chemical remnants within the previous three to four days. But only 13 percent of the kids parents admitted that their children had been exposed to secondhand smoke.

What the test does, says Dr. Jonathan Winickoff, an associate professor of pediatrics at Massachusetts General Hospital for Children in Boston, is allow the doctor, in consultation with the parent, to figure out the source of exposure and then to eliminate it.

And while ACSH’s Dr. Gilbert Ross agrees that parents who smoke should be careful to ensure that their kids are not exposed, since children who live in smoking homes are at higher risk of ear infections and asthma, he draws the line at so-called third-hand smoke. According to the study authors, children can still suffer the effects of secondhand smoke just by spending time in a room where someone recently smoked also known as third-hand smoke. But both ACSH’s Dr. Elizabeth Whelan and Dr. Ross maintain that, though the smell of stale smoke may be unpleasant, it doesn’t pose a danger to one’s health, as the researchers imply.

All of these concerns could be easily eliminated if people switched to modified risk tobacco products, says Dr. Ross. Doctors would never have to worry about whether kids or their parents were exposed to smoke in the home if parents were to use snus or electronic cigarettes.