

# Cotinine

## ***What is cotinine?***

Cotinine is a chemical that is formed in the human body after nicotine is inhaled. It is an excellent biomarker to evaluate the exposure to tobacco smoke.

## ***Where is it found?***

Cotinine is not normally found in the body, it is produced from nicotine. Nicotine comes from tobacco products such as cigarettes, and cigars.

Non-smokers who inhale environmental tobacco smoke (also known as second-hand smoke) take up nicotine as well.

## ***Human Biomonitoring of cotinine***

Exposure to environmental tobacco smoke (ETS) can be estimated by measuring levels of cotinine in blood or urine. Measuring cotinine is preferred to measuring nicotine because cotinine remains longer in the body and it can therefore be detected several days after exposure to cigarette smoke.

Finding a measurable amount of cotinine in blood or urine means you have been exposed to cigarette smoke.

## ***Health effects from smoking***

Cigarette smoke contains many toxic chemicals including nicotine. Smoking may cause lung cancer, heart disease and respiratory diseases such as bronchitis and emphysema. Non-smoking adults and children exposed to second-hand smoke face the same dangers as smokers themselves.

Children are sensitive to ETS. Children exposed to ETS have an increased risk of sudden infant death, chest infections and asthma.

Exposure to ETS during pregnancy can result in low birth weights in newborns and pre-term deliveries.



## ***Ways to reduce exposure***

- Refrain from smoking
- Limit, as much as possible, contact with second-hand tobacco smoke.
- Avoid places where smoking is allowed.

