



2018 Ambient Air Surveillance Report Risk Assessment Factsheet

This short factsheet provides a summary to the *2018 Ambient Air Surveillance Report Risk Assessment* in a question and answer format. For more details, please read the *2018 Ambient Air Surveillance Report Risk Assessment*.

What is the purpose of this risk assessment?

The purpose of this risk assessment is to understand whether specific chemicals found to be present in ambient (outdoor) air at 5 locations throughout the State of Georgia are at levels that could potentially be harmful to human health.

Why these locations?

The locations represent the area around an *air monitoring site*. *Air monitoring sites* are places where there are devices that can sample ambient air to estimate the amount of various chemicals present at each location.

Appropriate *air monitoring sites* are selected following technical standards to ensure that samples collected at these sites properly represent their respective locations. This restricts the places where an *air monitoring site* can be built.

How does a risk assessment determine whether chemicals are at levels that could be harmful to human health?

- First, the risk assessment determines what the risk assessment will cover. For example, the 2018 Ambient Air Surveillance Report Risk Assessment only covers 5 locations.
- Second, data collected at each air monitoring site is used to estimate an *exposure concentration*, a value that represents “how much” of a specific chemical in air that an individual at each location could be exposed to.
- Third, the risk assessment obtains *toxicity values* from reliable, scientific sources. *Toxicity values* indicate how harmful a chemical is.
- Fourth, the *exposure concentration* and *toxicity value* for each chemical are entered into an equation to produce an estimate of risk to human health. Calculations are also made to determine whether all the specific chemicals found to be present in ambient air cumulatively pose an unacceptable risk to human health.
- Fifth, the results are explained. Any technical issues that could affect the reliability of the results are also explained.

What are the results of the 2018 risk assessment?

The major findings of the risk assessment are:

- At each location, chemicals found to be present in ambient air are at levels that, for most people, are not expected to result in cancer.
- The risk assessment suggests that exposure to higher levels of these chemicals could, in the long-term, result in harmful health effects other than cancer.
- A model accepted by the United States Environmental Protection Agency suggests that the levels of lead in ambient air is not of concern for most people.

Does this risk assessment explain whether harmful health effects are due to ambient air in Georgia?

No. This risk assessment cannot determine if an individual diagnosed with cancer or suffering from other adverse health effects developed illness due to the levels of chemicals in ambient air at each location. It is recommended that people consult with a medical professional about personal health concerns.

Does this risk assessment explain whether a factory near my house is responsible for air pollution?

No. This risk assessment cannot determine the source of the chemicals in ambient air.

How is this risk assessment useful?

The risk assessment follows a rigorous methodology based on the best available science to provide members of the public with an evaluation of the ambient air quality in our State. This allows for a more informed public.

The risk assessment provides information that technical experts can use, along with other pieces of information, in determining best practices for reducing air pollution.

Why does the risk assessment only cover 2018?

The data from *air monitoring sites* has to be processed and quality checked before it is released for use in the risk assessment. Thus, there is a lag between when data is collected and when the risk assessment is published. Please note that a risk assessment is prepared on a yearly basis as the data becomes available.