

## Answer Key for Handout H11-1: Questions on “Wildfire Smoke: A Guide for Public Health Officials”

1. What is the purpose of this publication? The guide is written to provide local public health officials with the information they need to prepare for smoke events and, when wildfire smoke is present, to communicate health risks and take measure to protect the public.
2. What groups are mentioned in the first paragraph and what questions do they have? Citizens, school officials and news media are mentioned. They need to know what they should do to protect themselves, whether outdoor events should be cancelled, and how dangerous the smoke really is.
3. Think of another group that isn't mentioned. What question do you think they might have? Here are some possible answers: the elderly, parents of young infants, health care providers, coaches, and outdoor educators. They need to know how smoke will impact them, how long it will last, how they can keep it out of their homes, and whether they should leave the area – and where they might go to get out of the smoke.
4. What is the composition of smoke from wildland fires? Smoke contains carbon dioxide, water vapor, carbon monoxide, particulate matter, hydrocarbons and other organic chemicals, nitrogen oxides, trace minerals, and thousands of other compounds.
5. Describe *particulate matter*. Particulate matter is a term for particles suspended in the air. They are typically a mixture of solid particles and liquid droplets. Particles from smoke tend to be very small - less than one micrometer in diameter.
6. What is PM<sub>2.5</sub>? PM<sub>2.5</sub> is the amount (by weight) of particulate matter less than 2.5 micrometers (microns) in diameter per cubic meter of air.
7. Describe 3 effects of smoke particulate matter on human health. Answers may include any of these:
  - Eye and respiratory tract irritation
  - Reduced lung function
  - Bronchitis
  - Exacerbation of asthma
  - Heart failure
  - Premature death
  - Persistent cough, phlegm, wheezing and difficulty breathing.
  - Other respiratory symptoms, transient reductions in lung function, and inflammation in the lungs.
  - Reduced ability to remove foreign materials, such as pollen and bacteria, from the lungs
8. Describe 2 long-term health effects of exposure to smoke. These could include:
  - slightly increased risks of cancer
  - increased risk of other chronic health problems.