#### Alaska Department of Environmental Conservation

# **Dust and Potential Health Problems**

#### Why is dust a concern?

EPA health research tells us that dust can cause health problems. People with heart and lung disease and those with breathing problems can be impacted when inhaling dust. Even healthy people can have short term irritation when breathing dust. Dust is a nuisance, it settles on your tables, your coffee cup, your subsistence foods, and salmon drying racks.

Dust has been around for generations. Winds have been blowing dust off glaciers and dry river banks forever. We have lived with dust for thousands of years, but that doesn't make dust healthy to breathe. Now, we help throw dust back into the air with our four wheelers, trucks and cars.

In the past three years the Alaska Department of Environmental Conservation (ADEC) received dust complaints from over 50 communities. Is dust a problem in your village?

If you believe you have a dust issue, ADEC would like to help you find a solution to this potential health threat.

## **Causes of Dust**

- Wind across dirt roads, runways riverbeds
- Human activities on lots without vegetation
- Quarry operations in gravel pits
- Vehicles and four wheelers on dirt roads
- Residents have told us that traffic is increasing in villages over the past 10 years, making the dust problem worse.

#### **Sources of Dust**

- Dirt roads, runways
- gravel pits, dry river beds, unvegetated land

#### **Health Impacts**

ADEC has heard there is an increase in respiratory problems in the villages. Health studies indicate breathing problems are either somewhat worse or higher than expected in rural Alaska



Health problems associated with dust:

- Aggravates existing heart and lung disease
- Damages lung tissue
- Mostly impacts children, seniors, people with asthma, people with heart conditions

Has been shown to increase hospital/clinic visits

## How does ADEC measure for dust?

ADEC has equipment that can measure for dust - particles less than 1/10 the diameter of your hair.



Dust is a very small particle that can reach the inner lung. ADEC compares their measurements to the following EPA standards for dust:

- 24 hours 150 micrograms per cubic meter
- Annual 50 micrograms per cubic meter

#### Contacts

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# DUST & POTENTIAL HEALTH RISKS.

Dust can cause health problems. People with heart and lung disease and those with chronic breathing problems can be impacted when inhaling dust. Dust

is a nuisance, it settles on your tables, your food, and salmon drying racks.

Wind has been blowing dust off glaciers and dry river beds for generations but now we throw dust back into the air with our fourwheelers, cars, and trucks. In recent years the Department of Environmental Conservation has received increased complaints regarding air quality.

The dust has caused an increase in respiratory and other health problems in the villages. Dust aggravates existing heart and lung disease and can damage lung tissue. Those at greatest risk

are children, seniors, and people with asthma and other respiratory or heart conditions.



ADEC has equipment designed to measure for dust particles less than 1/10 the diameter of your hair. Using these measurements if

can be determined if there is a significant health risk. If you believe your village or community has a dust problem and would like more information contact the DEC.

#### **Dust & Potential Health Risks**

Dust may cause health problems in the villages. Dust aggravates existing heart and lung disease and can damage lung tissue.

Children, seniors, and people with asthma and other respiratory or heart conditions are more susceptible to health problems from breathing in dust.

Dust is a nuisance as well. It can settle on the surfaces in your home affecting your food and sensitive belongings, like your computer. Outside it can settle on your fish drying racks.

Wind has been blowing dust off glaciers and dry river beds for generations. Now we throw dust back into the air with our four-wheelers, cars, and trucks. With increased use of these vehicles in recent years, the Department of Environmental Conservation is receiving more dust complaints.

ADEC has equipment designed to measure for dust particles less than one-tenth the diameter of your hair. Using these measurements it can be determined if dust levels exceed health standards. If you believe your village or community has a dust problem and would like more information, contact the DEC.

www.dec.state.ak.us/air/anpms