

Science: Section 4 - Homework

Air Pollution and Health

Greg

So burning fuels can cause pollution, so what? That will never affect me, I eat healthy and exercise regularly

Jim

The air outside looks clean to me, I don't know why everyone is making such a big fuss!

Do you agree with Greg? Explain your answer.

Do you agree with Jim? Explain your answer.

3. Read the Following passage and answer the questions.

How Healthy is Our Air?

On a clear, bright day when the sun is out and there is not a cloud in the sky the air is crisp and fresh. Or is it? Many gases that pollution the air are colourless and odourless so we breathe them in without even knowing. Air pollution was originally thought to have damaging effects on the respiratory system (how we breathe) however research has shown that it can also effect the cardiovascular system (your heart!).

Your risk of air pollution-related health problems depends on several things such as your current health status, the pollutant type and concentration, and the length of your exposure to the polluted air. The people who are most at risk of health problems from air pollution are, pregnant women, outdoor workers, children under 14 whose lungs are still developing, athletes who exercise vigorously outdoors and individuals with heart or lung disease.

Generally if you are young and healthy, moderate air pollution levels are unlikely to have any serious short term effects. However, elevated levels and/or long term exposure to air pollution can lead to more serious symptoms and conditions affecting human health. Long-term exposure to polluted air can have permanent health effects such as decreased lung function, development of diseases such as asthma, bronchitis, emphysema and can lead to shortened life span.

This is why the world is taking air quality so seriously and the European Union has developed a number of successful policies to improve air quality. The National Emission Ceiling limits the overall amount of pollution emitted into our air and the Ambient Air Quality Standards were designed to reduce people's exposure to unhealthy levels of pollutants. Here in the UK, all local authorities (including NLC) must assess the air quality in their area and, where a problem is found, action plans are developed to address it.

Questions

a. Why is it not always obvious that the air around us is polluted?

(1)

b. What are the 2 main body systems that air pollution affects?

(2)

c. Name 3 types of people that are most at risk of air pollution-related health problems.

(3)

d. What effect can long-term exposure to polluted air have on the human body?

(2)

e. What 2 policies have the European Union developed to help tackle the air pollution problem?

(2)

Total (10)