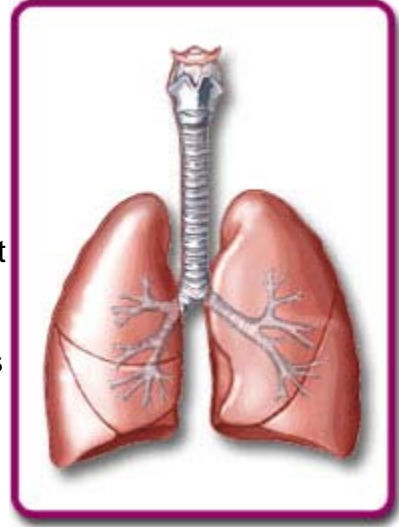


What effect does air pollution have on asthma?

Introduction

Do you or someone you know have asthma? What is it? What causes this disorder? Some evidence indicates that increased levels of air pollution are responsible for the increased number of people who suffer from asthma. In this WebQuest, you'll find the answers to these questions and also research to learn about the debate as to what may be causing increased cases of asthma.



Task

Your job in this WebQuest is to develop an informed opinion as to whether or not air pollution causes higher rates of asthma. You'll need to learn:

- what asthma is and what it is not;
- the difference between an asthma cause and a trigger; and
- factors that contribute to the development of asthma, such as smoking and genetic predisposition.

You'll also examine evidence that may link increased levels of air pollution with increased numbers of asthma cases in a population.

Process

Once you've completed your research, decide what you think about this issue. Do you think that increased levels of air pollution cause higher rates of asthma?

You will create a project that will reflect your opinion. Your project may be an informational brochure or multimedia presentation. You should develop and present it from the perspective of a member of society, such as doctor, parent, researcher, member of industry, etc. Your goal is to convince your audience that your conclusion is correct, and to encourage them to take appropriate action. For example, a parent may be concerned that their child may develop asthma from air pollution in school or from surrounding areas. The parent's audience might be parents of their students' classmates or members of the local school board.

Resources

Centers for Disease Control – Asthma
<http://www.cdc.gov/asthma/default.htm>

Airborne Environmental Pollutants and Asthma
<http://www.agius.com/hew/resource/asthma.htm>

Asthma and Allergy Foundation of America
<http://www.aafa.org/>

Asthma and Air Pollution
<http://www.nationalasthma.org.au/content/view/285/583/>

Ozone, Air Quality, and Asthma
http://kidshealth.org/parent/medical/allergies/ozone_asthma.html

Evaluation

Read this rubric to determine how you will be scored in this WebQuest.

| Criteria | | | | | Points |
|---------------------|--|--|--|--|--------|
| | 1 | 2 | 3 | 4 | |
| Task | The task was not completed. | It appears that some effort was made to complete the task, but major ideas are missing. | The task was completed as assigned, but some of the rationale for the design was faulty. | The task was completed with great attention to detail and thorough documentation. | |
| Process | The process was not followed. | The research was complete, but the design and presentation could have been better organized. | All the steps of the process were followed and the design was good. | It is clear that much effort went into the project. The ideas show a high degree of originality and imagination. | |
| Presentation | Presentation was sloppy and not well prepared. | The presentation included key ideas but lacked general cohesiveness. | The presentation was well organized with only minor errors. | Presentation is well organized, ideas are clearly stated, and visual aids are well utilized. | |

Conclusion

In the process of completing this WebQuest, you've not only become informed about asthma, you have developed important critical thinking skills. You have learned that there are often many factors involved in an issue and that it is important to examine each factor. You have read information to answer key questions about a topic, and you have formed your own educated opinion. You've also learned about writing persuasively in order to convince your audience, and put that to work by creating your own presentation.