**An Internet WebQuest**

<http://www.glencoe.com/sec/science/webquest/content/asthma.shtml>

**WHAT EFFECT DOES AIR POLLUTION HAVE ON ASTHMA?**

**Introduction**

Do you or someone you know have asthma? What is it? What causes this disease? Some think that increased levels of air pollution are responsible for increasing numbers of asthma sufferers. In this WebQuest you’ll find out the answers to these questions and also do some research into the debate about what may be causing increased incidents of asthma.

**Task**

Your job in this WebQuest is to develop an educated opinion as to whether or not air pollution causes higher rates of asthma. You’ll need to learn what asthma really is – and what it isn’t. You’ll also need to find out the difference between an asthma cause and a trigger, and the factors that are involved in the development of asthma, such as smoking and genetic predisposition. And you’ll look at evidence that may link increased levels of air pollution with increased numbers of asthma cases in a population.

Once you’ve done your research and formed your opinion, you’ll create a project that will reflect your opinion. It will be developed and presented from the perspective of a specific member of society, such as doctor, parent, researcher, member of industry, etc.

Your project may be an informational multimedia presentation or Prezi presentation. It should present your opinion and be delivered from the perspective you’ve chosen, keeping your specific audience in mind. Your goal is to convince them that your conclusion is correct, and to encourage them to take appropriate action.

Uploading of material:

* Prezi or PowerPoint: email complete projects to me at **astephensscience@gmail.com**

**Resources**

* **Centers for Disease Control – Asthma**
[http://www.cdc.gov/asthma/default.htm](http://www.glencoe.com/sec/science/cgi-bin/splitwindow.cgi?top=http://www.glencoe.com/sec/science/top2.html&link=http://www.cdc.gov/asthma/default.htm)
* **Airborne Environmental Pollutants and Asthma**
[http://www.agius.com/hew/resource/asthma.htm](http://www.glencoe.com/sec/science/cgi-bin/splitwindow.cgi?top=http://www.glencoe.com/sec/science/top2.html&link=http://www.agius.com/hew/resource/asthma.htm)
* **American Lung Association**
[http://www.lungusa.org/lung-disease/asthma/](http://www.glencoe.com/sec/science/cgi-bin/splitwindow.cgi?top=http://www.glencoe.com/sec/science/top2.html&link=http://www.lungusa.org/lung-disease/asthma/)
* **Asthma and Allergy Foundation of America**
[http://www.aafa.org/](http://www.glencoe.com/sec/science/cgi-bin/splitwindow.cgi?top=http://www.glencoe.com/sec/science/top2.html&link=http://www.aafa.org/)
* **Asthma and Air Pollution**
[http://www.nationalasthma.org.au/content/view/285/583/](http://www.glencoe.com/sec/science/cgi-bin/splitwindow.cgi?top=http://www.glencoe.com/sec/science/top2.html&link=http://www.nationalasthma.org.au/content/view/285/583/)
* **Ozone, Air Quality, and Asthma**
[http://kidshealth.org/parent/medical/allergies/ozone\_asthma.html](http://www.glencoe.com/sec/science/cgi-bin/splitwindow.cgi?top=http://www.glencoe.com/sec/science/top2.html&link=http://kidshealth.org/parent/medical/allergies/ozone_asthma.html)

**Process**

* Where does this Internet research lead you? Once you’ve done your research, decide what you think about this issue. Do you think that increased levels of air pollution cause higher rates of asthma?
* Choose a perspective from which to develop your presentation. This perspective may be that of a doctor, parent, student, and member of industry, researcher, or another that you decide upon. Remember that there is a specific audience for each of these perspectives, and your job is to inform this audience. For example, a parent may be concerned either that their child may develop asthma from air pollution in the school and surrounding areas, or that there is unnecessary money being spent on reducing indoor air pollutants that are not a health hazard. The parent’s audience might be parents of their students’ classmates or members of the local school board. An industry representative’s audience may be members of the community or local government officials.

**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 how to examine these different aspects. 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. These skills will serve you well as you form opinions on other issues in the future. Congratulations on a highly productive endeavor!