

The Infectious Disease Project

Purpose: An independent project where students can explore how diseases are spread and how vaccine-preventable diseases have lowered the incidence or even eliminated these diseases in this country.

Design of Project: Based on the disease, you will choose the appropriate form of format below.

- A children's book (book/story-telling format)
- An adult travel guide book (brochure/pamphlet)

| Topics for Children's Book | Topics for Traveler's Guide |
|------------------------------------|------------------------------------|
| Diphtheria | Anthrax |
| Hepatitis B | Cholera |
| Haemophilus influenza type b (Hib) | Hepatitis A |
| H1N1 Flu (Swine Flu) | Rabies |
| Influenza (Seasonal Flu) | Tuberculosis |
| Measles | Typhoid Fever (S. Typhi) |
| Meningococcal | West Nile Virus |
| Mumps | Yellow Fever |
| Pertussis (Whooping Cough) | |
| Pneumococcal | |
| Poliomyelitis (Polio) | |
| Rotavirus | |
| Rubella (German Measles) | |
| Tetanus (Lockjaw) | |
| Varicella (Chickenpox) | |
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Your book should teach the following information:

- Information about the background of the disease (history of disease).
- The incidence of the disease (where it predominantly occurs, the number of cases, number of deaths).
- Describe how the disease spreads (mode of disease transmission).
- Identify the pathogen that causes the disease.
- A description of how the disease affects the body (symptoms).

- Explain what a vaccine is.

- Determine the specific vaccination used for the disease. Briefly, include the other diseases the vaccination would help protect the child from.
- The age the child or adult is administered the vaccine.
- How the vaccination is administered to the child or traveler.
- How do vaccines work with our immune system (a biological explanation).
- Determine if the child or traveler has active or passive immunity.
- Discuss the potential side effects of the vaccination for parents or travelers to monitor for.
- A minimum of three benefits and three risks for having children or travelers vaccinated. You may provide more if you like.

If a vaccine is not available for the disease, you will not be able to answer bullets 6-13. Therefore the following should be added to bullets 1-5:

- Discuss the risk for travelers.
- How is the disease diagnosed.
- Discuss the treatment(s). (Any medications? How long is the treatment for?)
- List the preventative measures that travelers should follow to reduce their chance of exposure.
- Discuss any complications if precautions or treatments are not taken.

Diagram Required:

- Diagram 1 should show how the body is affected. Identify the area that is affected by using an arrow. The source used for the illustration must be cited under the picture. *required for all to do
- Diagram 2 should be a diagram that provides statistical data about the disease. The diagram could be a bar graph, a linear graph, or a pie graph. Statistical data could be the incidence of the disease (# of cases, # of deaths) or the risk for travelers in certain regions, ect. The source used for the statistical data **must** be cited under the graph. *optional- extra credit

Bibliography: At the end of your project, your sources should be alphabetically listed. Some students will only have one reference. If you decide to do the second diagram, another resource might need to be used.

For electronic sources, you should include the author (if available), title information (if available), the date the text was posted, the company or organization, the date you retrieved the information from the site, and the company URL.

Example: The Gap. 2 January 2004. Gap.com, Inc. 10 March 2004. <<http://www.gap.com>>.

Grading Criteria

| Criteria | Points (20) | Points Earned |
|---------------------|--------------------|----------------------|
| Neatness | 2 | |
| Creativity | 3 | |
| Content | 12 | |
| Diagram | 1 | |
| Bibliography | 2 | |
| Extra credit | 1-2 | |
| Total Score: | | |