"Wanted Poster" Diseases

Part One - Choosing a Disease

Listed below are several bacteria and the disease they cause. Pick any one bacteria/disease to research. It is highly recommended that you pick a few, learn a little about each one, and then pick one to study.

<table>
<thead>
<tr>
<th>This Bacteria</th>
<th>Causes this disease...</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acillus anthracis</td>
<td>Anthrax</td>
</tr>
<tr>
<td>Bordetella pertussis</td>
<td>Whooping Cough</td>
</tr>
<tr>
<td>Chlamydia trachomatis</td>
<td>Chlamydia</td>
</tr>
<tr>
<td>Clostridium botulinum</td>
<td>Botulism</td>
</tr>
<tr>
<td>Clostridium perfringensgas</td>
<td>Gangrene</td>
</tr>
<tr>
<td>Clostridium tetani</td>
<td>Tetanus</td>
</tr>
<tr>
<td>Corynebacterium diphtheria</td>
<td>Diphtheria</td>
</tr>
<tr>
<td>Escherichia coli</td>
<td>Acute Pyelonephritis</td>
</tr>
<tr>
<td>Francisella tularensis</td>
<td>Tularemia or Rabbit Fever</td>
</tr>
<tr>
<td>Mycobacterium leprae</td>
<td>Leprosy (Hansen’s Disease)</td>
</tr>
<tr>
<td>Mycobacterium tuberculosis</td>
<td>Tuberculosis</td>
</tr>
<tr>
<td>Neisseria gonorrhoeae</td>
<td>Gonorrhoeae</td>
</tr>
<tr>
<td>Neisseria meningitides</td>
<td>Spinal Meningitis</td>
</tr>
<tr>
<td>Rickettsia rickettsii</td>
<td>Rocky Mountain Spotted Fever</td>
</tr>
<tr>
<td>Rickettsia prowazekii</td>
<td>Typhus</td>
</tr>
<tr>
<td>Salmonella typhi</td>
<td>Typhoid Fever</td>
</tr>
<tr>
<td>Salmonella typhimurium</td>
<td>Food Poisoning</td>
</tr>
<tr>
<td>Shigella dysenteria</td>
<td>Dysentery</td>
</tr>
<tr>
<td>Staphylococcus aureus</td>
<td>Toxic Shock Syndrome</td>
</tr>
<tr>
<td>Treponema pallidum</td>
<td>Syphilis</td>
</tr>
<tr>
<td>Methicillin resistant Staphylococcus aureus...</td>
<td>MRSA</td>
</tr>
<tr>
<td>Streptococcus pneumoniae</td>
<td>Pneumonia</td>
</tr>
<tr>
<td>Streptococcus salivarius</td>
<td>Tooth decay</td>
</tr>
<tr>
<td>Vibrio cholerae</td>
<td>Cholera</td>
</tr>
<tr>
<td>Streptococcus pyogenes</td>
<td>Strep Throat</td>
</tr>
<tr>
<td>Borrelia burgdorferi</td>
<td>Lyme Disease</td>
</tr>
<tr>
<td>Aeromonas hydrophilia</td>
<td>&quot;Flesh eating bacteria&quot;</td>
</tr>
<tr>
<td>Yersinia pestis</td>
<td>Bubonic Plague</td>
</tr>
<tr>
<td>Lactobacillus acidophilus</td>
<td>Cavities</td>
</tr>
</tbody>
</table>
**Part Two - Research**

You will use online resources to help you learn about your bacteria/disease.

**How to find credible resources**

It is very, very important that you gather your information from credible sources. A credible source is one that can be trusted with the information posted. Since nearly anyone can publish a web site, information found online can be incorrect. How do you find credible information?

1. Look for site published by universities (often end in .edu), government agencies (often end in .gov), or well known institutions (ex: Mayo Clinic). You can also use online encyclopedias (ex: Britannica), but you often have to pay for access.
2. Look for articles that are sourced. This means they list where they got their information. Are their sources credible? Then it's a safe bet that the information in the article is valid.
3. Look for articles that have actual names attached to them. For example, if there is no author or if the author's name is a username (ex: ilikescience1995), you should reconsider the source.
4. Avoid Wikipedia as a source. I know: you love Wikipedia. So do I! But, anyone can edit the information. You are welcome to use Wikipedia as a starting point. But, don't rely on it as an academic source. If the site makes a claim ex: "20% of Americans are infected each year by this bacteria" and it has a source, go to the source and verify the information. Get the information from the sources. Just make sure the source is valid.

Do these steps guarantee you'll find only credible sources? No. But, students have found these guidelines helpful in identifying sites with valid information. *If you're unsure, ask your teacher and they'll be able to help you.*

**Keep track of your sources!** You will attach them to the back of your poster

Write down your sources. You must include:

1. Author
2. Name of site or page
3. Web address (URL) of page
4. Date the page was published or reviewed (if you can't find a publish date, write down the date you accessed it)

**How to find an image of your bacteria**

While you read sites about your bacteria, you're likely to find a picture of your bacteria. If you don't, cautiously use Google Images. Not all the image results will be of your bacteria. Also, search for the bacteria, not the disease. If you search for the disease, you'll most likely get pictures of what the disease does to humans, not how the bacteria looks.

**What you must research:**

1. A picture of the bacteria
2. Description of bacteria (shape, characteristics, etc.)
3. How the bacteria/disease spreads
4. Where the bacteria is often found (ex: body fluids, spoiled foods, etc.)
5. What symptoms an infected person has
6. The best cure to the infection
7. Who the bacteria targets or who is most likely to be infected (kids, adults, elderly, those who eat raw food, etc.)

Part Three - Making the Poster

Once you finished your research you can make you poster. It's up to you to design the layout outside the requirements below. You can see an example at the right.

Requirements:

1. Large "WANTED" text at the top
2. Below the WANTED text write the name of the bacteria and the disease it causes.
3. Below that include the picture along with the description of the bacteria.
4. Areas of the poster that list:
   a. "Culprit's MO" (How the bacteria/disease spreads)
   b. "Victims" (Who the bacteria targets...)
   c. "You're in Danger If..." (Symptoms)
   d. "How to get Help" (Best cure)
   e. "Hide Outs" (Where the bacteria is often found)
5. On the back of the poster list your sources in this format:
   - Title of Page, URL, Date Publish/Reviewed/Accessed
Complete this on a standard sheet of printer paper (8.5 x 11 inches). You may complete it on a larger sheet of paper. You are welcome to make the paper look more western by dying it a shade of tan, crumpling it, adding small burn marks, etc. Be creative!

Due on Monday, March 19th

Examples
**Bacterial Choices – Wanted Posters**

1. *Acillus anthracis*.......................... Anthrax
2. *Bordetella pertussis*....................... Whooping Cough
3. *Chlamydia trachomatis*..................... Chlamydia
4. *Clostridium botulinum*..................... Botulism
5. *Clostridium perfringens*................... Gangrene
6. *Clostridium tetani*......................... Tetanus
7. *Corynebacterium diptheria*.............. Diptheria
8. *Escherichia coli*.......................... Acute Pyelonephritis
9. *Francisella tularensis*.................... Tularemia or Rabbit Fever
10. *Mycobacterium leprae*.................... Leprosy (Hansen’s Disease)
11. *Mycobacterium tuberculosis*............. Tuberculosis
12. *Neisseria gonorrhoeae*.................... Gonorrhoeae
13. *Neisseria meningitides*................... Spinal Meningitis
14. *Rickettsia rickettsii*.................... Rocky Mountain Spotted
15. *Salmonella typhi*......................... Typhus
16. *Salmonella typhimurium*.................. Typhoid Fever
17. *Shigella dysenteriae*..................... Dysentery
18. *Staphylococcus aureus*................... Toxic Shock Syndrome
19. *Streptococcus pneumoniae*.............. Pneumonia
20. *Streptococcus pyogenes*.................. Strep Throat
21. *Methicillin resistant Staphylococcus aureus....MRSA*
22. *Aeromonas hydrophilia*................. "Flesh eating bacteria"
23. *Epstein-Barr Virus*...................... Bubonic Plague
24. *Lactobacillus acidophilus*.............. Cavities

**Viruses Choices – Wanted Posters**

1. HIV
2. Ebola
3. Smallpox
4. Herpes Zoster
5. Rabies
6. Influenza A, B, C
7. Hepatitis A, B, C
8. Herpes Simplex 1, 2
9. Varicella
10. Rubella
11. Measles
12. Mumps
13. Yellow Fever
14. Dengue Fever
15. Arboviral Encephalitis
16. Polio
17. Mononucleosis
18. West Nile
19. Human Papilloma Virus (HPV)
20. Zika
21. Rhinovirus
22. Rotavirus
23. Norovirus
24. Epstein-Barr Virus