

**Bixby 9GC**  
**Honors Biology Summer Assignment 2023-24**

*Topic:* Bacteria and Viruses

*Assignment:* listen to a podcast episode and write a brief (1-page) summary

Bacteria and viruses are an inescapable part of the experiences of living things. While most bacteria are either perfectly harmless or even beneficial, those that are not can cause illnesses or death. Viruses are another potential cause of disease, although scientists do not agree on whether viruses should be categorized as living or nonliving. Learning about a particular disease can teach us about a lot about science as well as history and humanity: the science behind what happens in the body when exposed to the bacteria or virus, how society responds to pandemics, how science is not always free from bias and prejudice, and the history of how scientific discoveries have been made.

### **The Details**

**Listen:** You will select an episode of the podcast This Podcast Will Kill You about either a bacteria or virus. Attached is a list of all bacteria and virus episodes - pick the one that sounds most interesting to you and listen to it! Episodes range from 50-90 minutes in length.

\*Please note that you may find this podcast in any podcast app, but be aware that they feature a recipe for an alcoholic beverage. I have included a link to the “alcohol-free” episodes where those have been removed.\*

**Write:** Write a brief (1-page) summary about your disease. Include the following information:

- Description of the disease
- Cause of it
- How it was discovered
- Cure or treatment currently available
- If there is a vaccine for it - when was it invented and is it widely available today
- The status of the disease today - is it prevalent? What areas is it found in?
- Include the most interesting fact you learned from this episode

I suggest you write your paper as a Google doc, since that is how it will be turned in when school begins

**Due Date:** be prepared to submit your summer assignment on the first day of school. You will submit it through Canvas, and you will need it to be in a Google doc. Don't worry - I will teach you how to submit an assignment properly!

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**This Podcast Will Kill You - Virus and Bacteria Episode List**

**\*Choose an episode from this list, and then go to <https://thispodcastwillkillyou.com/beer-free-episodes/> to listen.**

<p><b>Season 1</b></p> <ul style="list-style-type: none"> <li>● Ep 1 Influenza Will Kill You (flu)</li> <li>● Ep 2 Skin in the Game, Horse in the Race (leprosy)</li> <li>● Ep 3 Gnarlypox (smallpox)</li> <li>● Ep 4 The Poop Show (cholera)</li> <li>● Ep 5 and 6 Plague Part 1: The GMOAT (bubonic plague) and Ep 6</li> <li>● Ep 7 Hit me with Your Best (Polio) Shot</li> <li>● Ep 9 Tuberculosis: A Slow Burn</li> <li>● Ep 10 Yellow Fever: Is There a Hamilton Song About This?</li> <li>● Ep 11 Ebola: The New Kid on the Block</li> <li>● Ep 12 HIV/AIDS: Apathy Will Kill You</li> </ul>	<p><b>Season 2</b></p> <ul style="list-style-type: none"> <li>● Ep 12 HIV/AIDS: Apathy Will Kill You</li> <li>● Ep 15 MRSA: Make Resistance Susceptible Again</li> <li>● Ep 16 Scratch and Sniff Diphtheria Membrane</li> <li>● Ep 18 Hantavirus: The Real Rat Race</li> <li>● Ep 21 Measles: The Worst Souvenir</li> <li>● Ep 24 Zika: Rumors and Rumours</li> <li>● Ep 28 H. pylori: Don't Try This at Home</li> <li>● Ep 31 Giardia: Gerardia</li> <li>● Ep 35 Lyme Disease: I'd Like to Check You for Ticks</li> </ul>
<p><b>Season 3</b></p> <ul style="list-style-type: none"> <li>● Ep 37 E. coli (Unless It's Beets)</li> <li>● Ep 42 Dandy Dengue Fever</li> <li>● Ep 43 M-m-m-my Coronaviruses</li> <li>● Ep 44 Pertussis: Whoop Here It Is</li> <li>● Ep 45 Hepatitis C: Hepatiti?</li> <li>● Ep 48 Botulism: Why Are You The Way That You Are?</li> <li>● Ep 49 Eastern Equine Encephalitis: Triple EEEEK!</li> <li>● Ep 52 Rinderpest: Moo Cows, Moo Problems</li> <li>● Ep 55 Rocky Mountain spotted fever: The tick must be destroyed!</li> </ul>	<p><b>Season 4</b></p> <ul style="list-style-type: none"> <li>● Ep 61 Typhoid: There's Something About Mary</li> <li>● Ep 64 Rubella: Timing is Everything</li> <li>● Ep 73 Puerperal Fever: Seriously, wash your hands</li> <li>● Ep 76 Chickenpox: There's always a 'but'</li> <li>● Ep 77: Legionnaires' Disease: A Killer Mist</li> <li>● Ep 78 Bartonella: Keep Calm and Carrión</li> <li>● Ep 80 Dysentery loves a disaster</li> <li>● Ep 84 West Nile Virus: The Crow in the Coal Mine</li> </ul>
<p><b>Season 5</b></p> <ul style="list-style-type: none"> <li>● Ep 86 Typhus: Another lousy episode</li> <li>● Ep 87 C. diff: Fighting poop with poop</li> <li>● Ep 91 Myxomatosis: Down the rabbit hole</li> <li>● Ep 95 Tetanus: An inhuman calamity!</li> <li>● Ep 99 Salmonella: A hard egg to crack</li> <li>● Ep 105 Down in the Mumps</li> <li>● Ep 109 Chikungunya: Not dengue (or is it?)</li> </ul>	<p><b>Season 6</b></p> <ul style="list-style-type: none"> <li>● Ep 111 RSV: What's syncytial anyway?</li> <li>● Ep 114 Listeria: It put dairy on the map</li> </ul>