

Vaccination is one of humanity's most effective and greatest discoveries. Infections like the plague, smallpox and other deadly diseases have affected and killed people for thousands of years, but the invention of vaccines forever changed our relationship with these diseases. Discover the history and science behind vaccines and the public health achievements they've made possible.



ABOUT THE AUTHOR

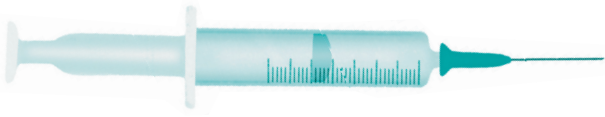
Rowena Rae worked as a biologist in Canada and New Zealand before becoming a freelance writer and editor. She is the award-winning author of several nonfiction books for children, including *Why We Need Vaccines*, *Salmon and Upstream*, *Downstream*. Rowena writes both fiction and nonfiction from her home in Victoria, British Columbia, which she shares with her two book-loving children.

DISCUSSION QUESTIONS

1. How do vaccines protect whole communities or populations of people?
2. What are some of the ethical considerations vaccine researchers need to think about?
3. What do you think researchers need to consider before they test a spreadable vaccine in wild animals?
4. What surprised you most from the information you read in this book? Explain why it surprised you.
5. What did you read in the book that you'd never thought about before? What else would you like to know about that story or piece of information?
6. Which story from the past did you find the most strange, most frightening or most troubling? Explain how you think you might have reacted if you had lived at that time and witnessed that event.
7. Which "On the Job" profile did you find most interesting? What part of the person's job or experience appeals to you? Could you picture yourself doing a similar job?
8. One Health is a way of thinking about the health of people, animals and the environment as interconnected. What does it mean for health to be interconnected?
9. Do you think vaccination should be mandatory or voluntary? Does your response apply to all situations? Are there certain situations for which you might think the opposite?
10. What's the difference between misinformation and disinformation? What's your opinion of people who put disinformation on social media?
11. How can you fact check online information? Why is it important to evaluate things you read online?
12. What are three things you learned from this book that you would share with a friend or someone in your family?



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ACTIVITIES

1. Choose an infectious disease (there are many diseases listed on page 23 or you can find another one that interests you). Use the internet and your school or local library to learn more about the disease you chose. What causes it? How does it spread? What symptoms do people have when they're ill with this disease? Is there a vaccine for this disease? If yes, when was it developed and how effective is it? If no, are researchers trying to make a vaccine for the disease?
2. Write a letter to Dr. Edward Jenner, the doctor who did the first experiments with vaccination about 250 years ago (see page 21 in the book). Tell him some things you know about infectious diseases and vaccines in the world today compared with the time he lived in.
3. You are a doctor in the year 2270. Write a pamphlet telling your patients about vaccination. What are the diseases and conditions they need to know about? Are there vaccines available? If so, what kinds of vaccines are they and how are they administered?
4. Find an article online about a topic that interests you and read it. Use the 5 Ws (see page 55) to evaluate the article.
5. Choose a topic or news story that interests you and read three different articles about it (all three from different sources). Did the articles have similar information? Did they have different information? Where will you go next to read more about the topic you chose?



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