

## ENGLISH LANGUAGE AND COMPOSITION

### SECTION II

Total time — 2 hours

#### Question 1

Parents make decisions about their children every day. But one particular kind of decision warrants notice because questions of ethics arise. Many parents make sure to immunize their children against potentially devastating diseases. But there are those who don't, who have a fear that these immunizations actually may be potentially harmful to their children, that these vaccinations can cause things such as autism in their children, as well as other harmful side effects. But in the last couple of years, immunizations have become mandatory in California in order for a child to attend school.

According to the CDC, "Vaccines contain ingredients, called antigens, which cause the body to develop immunity. Vaccines also contain very small amounts of other ingredients--all of which play necessary roles either in making the vaccine, or in ensuring that the vaccine is safe and effective." These other ingredients include such things as chemicals that will "inactivate a virus or bacteria and stabilize the vaccine, helping to preserve the vaccine and prevent it from losing its potency over time." The CDC claims that the amount of these chemicals is very small. An antigen is defined as a toxin or other foreign substance that induces an immune response in the body, especially the production of antibodies.

Read the following sources (including the introductory information) carefully. Then, in an essay that synthesizes at least three of the sources, develops a position about whether parents should immunize their children.

Make sure that your argument is central; use the sources to illustrate and support your reasoning. Avoid merely summarizing the sources. Indicate clearly which sources you are drawing from, whether through direct quotation, paraphrase, or summary. You may refer to the sources by their titles (Source A, Source B, etc.) or by the descriptions in parentheses.

Source A (CDC)

Source B (Feldscher)

Source C (Chen)

Source D (Vaccines)

Source E (Map)

Source F (HealthyChildren.org)

Source G (Daley and Glanz)

### Source A

United States. National Center for Immunization and Respiratory Diseases. Office of the Director. “*What Are the Reasons to Vaccinate My Baby?*” Center for Disease Control and Prevention, 8 July 2013. Web. 26 June 2014.

*The following excerpt comes from a CDC webpage.*

#### **Serious Diseases Are Still Out There**

Reducing and eliminating the diseases that vaccines prevent is one of the top achievements in the history of public health. But, because of this success, most young parents have never seen the devastating effects that diseases like polio, measles or whooping cough (pertussis) can have on a family or community. Children in the United States can—and do—still get some of these diseases. In fact, when vaccination rates drop in a community, it's not uncommon to have an outbreak.

For example, preliminary data for 2012 show that more than 41,000 cases of whooping cough were reported in the United States. During this time, 18 deaths have been reported—the majority of these deaths were in children younger than 3 months of age.

#### **Vaccines are the Safe, Proven Choice**

The United States current has the safest, most effective vaccine supply in its history. Before a vaccine is approved and given to children, it is tested extensively. Scientists and medical professionals carefully evaluate all the available information about the vaccine to determine its safety and effectiveness. As new information and science becomes available, vaccine recommendations are updated.

Nearly all children can be safely vaccinated. There are some exceptions including children with allergies to something in a vaccine. Children with weakened immune systems due to an illness or a medical treatment, such as chemotherapy, also may not be able to safely receive some vaccines.

#### **Children Need Protection Early**

The Centers for Disease Control and Prevention (CDC) sets the U.S. childhood immunization schedule based on recommendations from the Advisory Committee on Immunization Practices (ACIP)—a group of medical and public health experts. This schedule also is approved by the American Academy of Pediatrics (AAP) and the American Academy of Family Physicians (AAFP).

#### **Vaccination Protects Your Family, Friends, and Community**

Getting your child vaccinated helps protect others in your community—like your neighbor who has cancer and cannot get certain vaccines, or your best friend's newborn baby who is too young to be fully vaccinated. When everyone in a community who *can* get vaccinated *does* get vaccinated, it helps to prevent the spread of disease and can slow or stop an outbreak. Choosing to protect your child with vaccines is also a choice to help protect your family, friends, and neighbors, too.

### Source B

Feldscher, Karen. "Talking the Talk on Vaccines." *Harvard School of Public Health*. The President and Fellows of Harvard College, 23 June 2014. Web. 26 June 2014.

*The following excerpt comes from an article found on the Harvard School of Public Health website.*

#### **Why is it so important that research be done on how best to communicate with vaccine-hesitant parents? Can't health care providers figure out good strategies on their own?**

Some interesting recent research looked at four different ways of presenting vaccine information to parents. The one that I would have thought made the most sense, *a priori*—asking parents if they have concerns about vaccines, asking what the concerns are, acknowledging those concerns, and providing advice but not telling them what to do—did not do best in the study. A second strategy was for the health care provider to say, "I think it's really important to have your children vaccinated, and here are the reasons. Do you have any questions or concerns?" The third was to point out how dreadful the diseases were that vaccines have eliminated, but that did poorly. And the fourth was to mention the major source of misinformation about vaccines: a dreadful paper from 15 years ago with made-up data that was later retracted, that said that vaccines cause autism. Not only did that not motivate people to have their children vaccinated, but 5.6% of the parents—who had never heard of the supposed connection between vaccines and autism—decided not to vaccinate their kids *after* they were told there was no relationship. So this tells us that we don't know enough about how parents make decisions on vaccination, or how to present information in a way that parents can trust.

#### **Why do you think parents who may be nervous about vaccinations aren't more worried about their children getting diseases like measles, mumps, or whooping cough?**

In the last year, the U.S. has seen more outbreaks of vaccine-preventable diseases than any year in the past 20 years. The numbers of children affected is now in the hundreds. That could change dramatically. France had about 40 cases of measles in 2007. By 2011, it had shot up to 15,000 cases, with six deaths. Isn't that astonishing? Measles is among the most communicable infectious diseases. Once you let it get a hold, it takes off.

#### **What about people's rights to refuse vaccination if they so choose?**

Twenty-seven states have exemptions from vaccinations for either religious or personal reasons. The issue of respecting people's rights is a fundamental issue. But it's also a major ethical issue, pitting the wishes of individuals against the needs of the community. Do you have a right to create an epidemic in your community? Or to threaten the life of a child who has leukemia that you may not know is in your kid's class? What do you do if you're the mother of a child who got AIDS from a blood transfusion, has immunodeficiencies, and is mainstreamed and goes to class? Is it okay for her to worry every day whether her child is going to die? These are serious questions that should be debated, and they're currently not. Scientists are doing wonderful basic research on developing new vaccines but we urgently need research to learn how to have the current ones used more effectively.

**Source C**

Chen, Pauline M. "Putting Us All at Risk for Measles." Editorial. *New York Times*. New York Times Co., 26 June 2014. Web. 26 June 2014.

*The following is excerpted from an editorial, written by a doctor.*

Up until the late 1960s, measles was an unavoidable scourge, infecting millions of children each year. Highly contagious, it could lurk in the air for hours after an infected individual had passed by, resulting in more than 400 deaths and nearly 50,000 hospitalizations annually, as well as innumerable chronic disabilities when it spread to the lungs and brain.

Happily, in 1966 scientists developed a safe and effective vaccine. With this vaccine in hand, public health officials, pediatricians and infectious disease experts began a series of campaigns to eradicate the disease. Their principal strategy was to create "herd immunity," or "community immunity."

In any given population, there would always be individuals who would not develop immunity to measles, even after receiving the vaccine, or who could not receive the vaccine because they were too young (less than a year old) or had immune systems already weakened from diseases like cancer or AIDS. But health care experts discovered that if at least 95 percent of a community were immunized against measles, all the members of that group would be safe. Even if someone with the disease entered the community, the immunized majority would serve as a "buffer zone" preventing further spread to unimmunized individuals.

If, however, the rates of vaccination fell below 95 percent and community immunity dropped, that safety net would disappear.

In 2000, after three decades of intensive efforts, public health officials declared that endemic measles had been eradicated in the United States.

Pediatricians and infectious disease experts warned that these parents were putting their unvaccinated children at increased risk. Measles remains the eighth leading cause of mortality worldwide and the greatest vaccine-preventable cause of death among children. Studies have shown that unvaccinated children are 35 times more likely to contract the disease than immunized children.

Furthermore, the health care experts cautioned, it wouldn't be just their own family members that these parents were putting at risk.

This year the proverbial poop has hit the propeller. Over the last five months, there have been 16 outbreaks and almost 500 reported cases of measles. It's the highest number of cases since 2000, and the number continues to rise. Almost all the outbreaks can be traced to an unvaccinated individual who contracted the disease while traveling abroad, and the majority of people who subsequently caught the disease were unvaccinated by choice.

While there have been no deaths yet associated with the recent outbreaks, the lesson for patients and doctors is clear.

When it comes to public health, bad personal choices can have potentially devastating effects on others.

**Source D**

“Should Any Vaccines Be Required for Children?” *Vaccines ProCon.org*.  
ProCon.org, 18 Nov. 2013. Web. 26 June 2014.

*The following is excerpted from a website that explains one side of the argument.*

1. Governments should not have the right to intervene in the health decisions parents make for their children. 31% of parents believe they should have the right to refuse mandated school entry vaccinations for their children, according to a 2010 survey by the University of Michigan.
2. Many parents hold religious beliefs against vaccination. Forcing such parents to vaccinate their children would violate the 1st Amendment which guarantees citizens the right to the free exercise of their religion.
3. Vaccines are often unnecessary in many cases where the threat of death from disease is small. During the early nineteenth century, mortality for the childhood diseases whooping cough, measles, and scarlet fever fell drastically before immunization became available. This decreased mortality has been attributed to improved personal hygiene, water purification, effective sewage disposal, and better food hygiene and nutrition.
4. Vaccines interfere with natural law and God's plan for humanity. Disease is a natural occurrence, and humans should not interfere with its trajectory.
5. Common childhood vaccinations may cause rare yet serious reactions including anaphylactic shock, paralysis, and sudden death. This risk is not worth taking, especially considering most diseases vaccinated against are not necessarily life threatening.
6. Vaccines can trigger auto-immune disorders such as arthritis, multiple sclerosis, lupus, Guillain-Barré Syndrome (GBS), and other disorders.
7. Vaccines can cause brain inflammation (encephalopathy) which can lead to death or permanent brain damage and disorders such as autism, ADD/ADHD, and other developmental problems. In addition, the vaccine additive thimerosal (found in most pre-1999 vaccines) has been associated specifically with the development of autism and is still found in certain meningococcal, tetanus, and flu vaccines such as the H1N1 vaccine.
8. All vaccines cause immune system suppression, and can permanently damage the natural immune system. Unvaccinated children build and strengthen their immune systems through fighting off infection and developing natural immunity to diseases like measles and chickenpox. Artificial immunity, generated through vaccination, weakens the immune system and leaves children more vulnerable to all other diseases and infections.

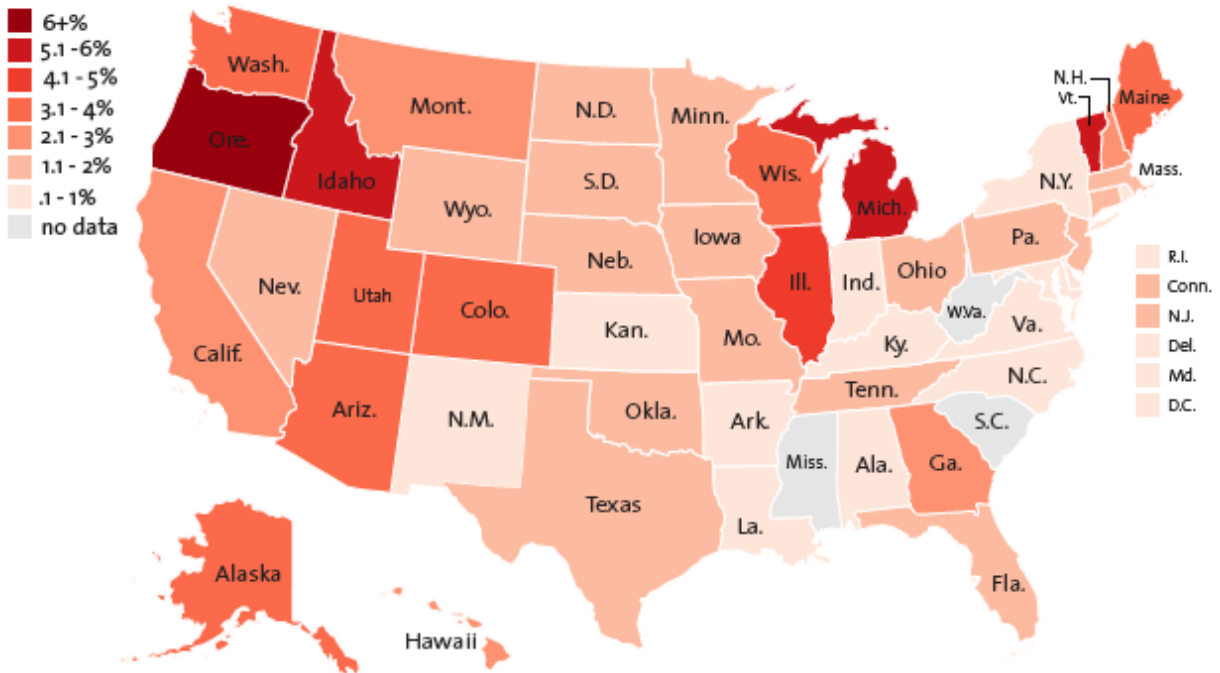
Source E

“Rate of Nonmedical Vaccine Exemptions by State.” *Mother Jones*. N.p., n.d.  
Web. 26 June 2014.

The following presents information from a “nonprofit news organization that specializes in investigative, political, and social justice reporting” for the United States.

## Rate of Nonmedical Vaccine Exemptions by State

Percentage of kindergartners with nonmedical exemptions, 2012-13 school year



Note: Children with exemptions may still be vaccinated.  
Source: Centers for Disease Control

Mother Jones

Source F

“How Safe Are Vaccines?” *HealthyChildren.org*. American Academy of Pediatrics, 7 Aug. 2013. Web. 26 June 2014.

*The following is excerpted from a website supported by the American Academy of Pediatrics.*

If you believed everything you heard on TV talk shows or read on antivaccine Internet sites, you might never allow your child to become vaccinated. In one warning after another, vaccine opponents often exaggerate or even make up immunization risks, with no scientific evidence to support their claims. They may imply that vaccines aren't effective. At the same time, they downplay or don't discuss the serious diseases that vaccines can eliminate or reduce in frequency. No wonder some parents are left feeling anxious and, in some cases, keep their youngster unvaccinated at the risk of their child's health.

You've probably heard some of the arguments made by immunization skeptics. One vaccine or another is said to cause autism, or brain damage, or multiple sclerosis, or seizures. Sometimes the alarmists warn that the vaccines are so unreliable that they leave children just as vulnerable to diseases as they were before they were vaccinated. These claims would be upsetting if they were based on fact. But they're not, and they create plenty of fear among concerned parents.

Panels of experts have confirmed again and again that today's vaccines are safer than ever. In fact, the greatest risks come when children are *not* immunized. As a responsible parent, it's important for you to be fully informed. You can talk to your pediatrician if you have any concerns.

Source G

Daley, Matthew F., and Jason M. Glanz. "Straight Talk about Vaccination." *Scientific American Global RSS*. Scientific American, a Division of Nature America, Inc. 16, 16 Aug. 2011. Web. 23 June 2014.

*The following is excerpted from a magazine article.*

Last year 10 children died in California in the worst whooping cough outbreak to sweep the state since 1947. In the first six months of 2011, the Centers for Disease Control and Prevention recorded 10 measles outbreaks—the largest of which (21 cases) occurred in a Minnesota county, where many children were unvaccinated because of parental concerns about the safety of the standard MMR vaccine against measles, mumps and rubella. At least seven infants in the county who were too young to receive the MMR vaccine were infected.

These troubling statistics show that the failure to vaccinate children endangers both the health of children themselves as well as others who would not be exposed to preventable illness if the community as a whole were better protected. Equally troubling, the number of deliberately unvaccinated children has grown large enough that it may be fueling more severe outbreaks. In a recent survey of more than 1,500 parents, one quarter held the mistaken belief that vaccines can cause autism in healthy children, and more than one in 10 had refused at least one recommended vaccine.

Although parents give many reasons for not wanting to vaccinate their children, we have noticed at least three recurring themes. Some do not believe their children are at risk for diseases such as polio, measles and tetanus, which are now rarely seen in the U.S. Others do not believe that certain vaccine-preventable diseases, such as chicken pox and measles, are particularly serious. And many worry about the safety of vaccines. The concerns may be about immediate, well-defined side effects such as fever or may take the form of anxiety that vaccines might harm the immune system or cause chronic diseases years later. Each of these concerns can be met with a careful review of the evidence.

Together we have conducted a series of studies to better quantify the risks of not vaccinating—information that speaks to the mistaken belief that today's children are unlikely to come down with whooping cough, measles or the like if they skip their inoculations. Our investigations looked at hundreds of thousands of children in Colorado and compared the risk of various vaccine-preventable diseases in children whose parents had refused or delayed vaccines, compared with children whose parents had had them vaccinated. We found that unvaccinated children were roughly 23 times more likely to develop whooping cough, nine times more likely to be infected with chicken pox, and 6.5 times more likely to be hospitalized with pneumonia or pneumococcal disease than vaccinated children from the same communities. Clearly, the parental decision to withhold vaccination places youngsters at greatly increased risk for potentially serious infectious diseases. These results also show the flaws in the "free rider" argument, which erroneously suggests that an unvaccinated child can avoid any real or perceived risks of inoculation because enough other children will have been vaccinated to protect the untreated child.