

# Safety

- 1 Well-controlled, reproducible scientific studies did not find a link between autism and what?
- A. MMR vaccine, thimerosal and receiving too many vaccines
  - B. Genetics
  - C. Thalidomide
  - D. Rubella

- 2 What is the difference in immunity from breastfeeding and immunity from vaccination?
- A. Vaccines provide long-term immunologic memory whereas breastfeeding provides short-term immunologic memory.
  - B. There is no difference – breastfeeding and vaccination both provide long-term immunologic memory.
  - C. Vaccines provide short-term immunologic memory whereas breastfeeding provides long-term immunologic memory.
  - D. There is no difference – breastfeeding and vaccination both provide short-term immunologic memory.

- 3 Which religious groups prohibit the use of vaccines made using fetal tissue?
- A. Jewish
  - B. Catholics
  - C. Muslims
  - D. None of the these

- 4 What is the total number of immunological components received in the 14 childhood vaccines that are given today?
- A. About 10
  - B. About 150
  - C. About 500
  - D. About 1,000

- 5 Why is separating, spacing out or withholding some vaccines detrimental?
- A. Infants will be susceptible to disease for longer periods of time
  - B. It can increase the amount of stress a child may experience if they must return to the doctor more frequently than they would if the recommended vaccine schedule was followed
  - C. There is an increased potential for administration errors
  - D. All of these

- 6 How many different antibodies can a person make?
- A. Thousands
  - B. Hundreds of thousands
  - C. Millions
  - D. Billions

- 7 Why are some vaccines made using fetal cells?
- A. Fetal cells were the only cells available at the time some vaccines were made.
  - B. Human cells are often better at supporting the growth of human viruses than animal cells are.
  - C. Fetal cells are mortal, like humans.
  - D. No vaccine is made using fetal cells.

- 8 Infants are exposed to the greatest amount of aluminum from what?
- A. Vaccines
  - B. Breast milk
  - C. Soy-based formulas
  - D. Regular formula

- 9 What animal does the gelatin used in vaccines come from?
- A. Horses
  - B. Cows
  - C. Pigs
  - D. Ducks

- 10 Vaccines were shown to cause what disease?
- A. Asthma
  - B. Diabetes
  - C. Multiple sclerosis
  - D. None of these

# Safety ANSWERS

1

The correct answer is **A**

Well-controlled, scientific studies completed in multiple countries have found no link between autism and factors such as the MMR vaccine, thimerosal or receiving too many vaccines.

2

The correct answer is **A**

When a baby is breastfed, he gets antibodies from his mother's milk; however, these antibodies only last a few weeks or months. Conversely, when a baby is vaccinated, his own immune system responds; therefore, immunologic memory is created, which is much longer lasting.

3

The correct answer is **D**

Jewish, Catholic and Muslim religions do not prohibit the use of vaccines made using fetal tissue because they can save lives. Some people question whether Catholics are able to use these vaccines, but the Vatican Council declared parents who give their children vaccines are not committing an immoral act.

4

The correct answer is **B**

Children born in 1942 received four vaccines that contained more than 3,000 immunologic components. Improvements in lab techniques have allowed scientists to use only the parts of viruses and bacteria that are needed to generate immunity. Today, routinely recommended childhood vaccines contain only about 150 immunological components.

5

The correct answer is **D**

Separating, spacing out or withholding some vaccines can be detrimental because infants will be susceptible to diseases for longer. The recommended vaccine schedule is designed to make sure that vaccines are given at times that will allow infants and children to be protected when they are most likely to get the diseases. Administration errors, such as giving the wrong vaccine or not allowing enough time between doses, are also a concern when the recommended schedule is not followed.

6

The correct answer is **D**

Susumu Tonegawa, a Nobel Prize-winning immunologist, determined that antibodies are made by rearranging and recombining many different genes. From his work, he discovered that one person is capable of making about 10 billion different antibodies.

7

The correct answer is **B**

Some vaccines are made using fetal cells because viruses require cells to grow and human cells are often better at supporting the growth of human viruses than animal cells are. Fetal cells are also immortal, meaning they can reproduce forever so the same source of cells can be used indefinitely. Therefore, additional abortions are not needed.

8

The correct answer is **C**

Infants are exposed to about 120 milligrams of aluminum during the first six months of life if they are fed soy-based formulas. In comparison, vaccines given during the first 6 months of life contain about 4 milligrams, breast-milk contains about 10 milligrams, and regular infant formula about 40 milligrams.

9

The correct answer is **C**

Gelatin used in vaccines comes from pigs whereas that used in foods typically comes from cows.

10

The correct answer is **D**

Numerous scientific studies have shown no link between vaccines and asthma, diabetes or multiple sclerosis.

