

外 国 語

次の英文は *U.S. News & World Report* (2015年2月18日) に掲載された “Anti-Vaccine Movements Not Unique to the U.S.” (Teresa Welsh) の記事を一部改変したものです。この文章をよく読んで、医学科と歯学科の受験者は問題 **3**, **4**, **5**, **6** に答えなさい。保健衛生学科と口腔保健学科の受験者は問題 **1**, **2**, **3**, **5**, **6** に答えなさい。解答は解答用紙の指定された欄に記入すること。

*印のついている語の注は本文のあとに示されています。

With widespread access to medical care and immunizations, the U.S. typically doesn't see massive outbreaks of preventable diseases like the measles. But American antivaxxers — parents who refuse to have their children vaccinated and seek exemptions from immunization requirements — aren't alone in their *misgivings*: Skepticism abounds in many other countries about the safety and effectiveness of disease-fighting injections.

“There is opposition to vaccine I think in every country around the world, and the nature of the opposition varies from place to place,” says Dr. Alan Hinman, a senior public health scientist with The Task Force for Global Health.

Vaccine hesitancy, according to a World Health Organization (WHO) working group created to study the phenomenon, is a “delay in acceptance or refusal of vaccines despite availability of vaccine services.” The group studied the issue for more than two years and found that it¹⁾ is “complex and context-specific, varying across time, place and vaccines.”

“It can be due to religious beliefs, it can be through personal beliefs or it can just be through misinformation on the need and importance of vaccination,” says Hayatee Hasan, a technical officer in the WHO's Department of Immunization, Vaccines and Biologicals.

In the U.S., where a recent measles outbreak has renewed calls for parents to

vaccinate their children, some parents are still hesitant to do so because of a 1998 study linking the vaccine for measles, mumps and rubella to autism, even though that study has long since been disproven. Similarly, misconceptions about the potentially *adverse* effects of vaccinations also impact the rates at which certain communities abroad vaccinate their children.

Researchers often cite an episode in northern Nigeria about a decade ago, when political and religious leaders instructed parents not to immunize their children against polio. The leaders said they believed the vaccines could be contaminated with an antifertility agent meant to sterilize the population, as well as with HIV, and immunizations stopped. Polio cases spread, and the vaccines were shown not to have been *tainted*.

“The leaders actually admitted that they didn’t really believe the vaccine was contaminated, but they were opposed to the polio *eradication* effort because they viewed it as a Western-led activity,” Hinman says.

In India, suspicion of the West also has sparked aversion to vaccinations. Lois Privor-Dumm, director of policy, advocacy and communications at the Johns Hopkins Bloomberg School of Public Health’s International Vaccine Access Center, says her team works with Indian physicians to provide them with data so they can make informed decisions about immunizations. She says some vaccines have been widely accepted in India for years while other, newer vaccines have been resisted because they aren’t manufactured by Indian suppliers and Indians think they are too expensive.²⁾

Distrust of efforts to battle disease also isn’t unique to immunization programs. In West Africa — the heart of the recent Ebola epidemic — some have considered Ebola a government conspiracy or not a real *malady*, and vulnerable residents have resisted *amending* burial practices to avoid spreading the disease. Health workers trying to increase awareness about the dangers of Ebola have even been attacked and killed.

The WHO working group found that efforts tailored to specific countries are

most effective in addressing vaccine hesitancy around the world. In Bulgaria, an analysis of the Roma population — a *nomadic* ethnic group also known as Gypsies — found the main reason the community resisted vaccination wasn't a lack of knowledge about vaccines or a lack of confidence in their effectiveness; rather, it was due to a lack of immunization programs that were welcoming to Roma.

3) For that community, the quality of the patient's encounter with a health worker was the most important factor.⁴⁾

"These diagnostic findings were used to *tailor* and target programs designed to address the main cause of Roma vaccine hesitancy," the working group explained.

Religious beliefs also have been a barrier to vaccination efforts around the world, with some Muslim communities in the U.K. objecting to porcine elements in a nasal flu vaccine. The porcine gelatin is used to stabilize the vaccine, but Islam does not permit the consumption of pork. Officials have also sought to allay concerns among Jews in the U.K. about the vaccine.

Last year in Kenya, a group of Catholic bishops vocally opposed a WHO-led tetanus vaccination campaign because they said the immunization was "laced" with a birth-control hormone that could eventually lead to sterilization. The bishops were suspicious of the campaign, which targeted women of reproductive age, and said they were convinced it was "a disguised population control program." They also said the Catholic Church had not been given "adequate stakeholder* engagement."⁵⁾

"There's the belief that vaccines may be some type of plot against their religion" to control the population, Privor-Dumm says.

All 50 U.S. states have immunization requirements for public school students, but vaccine mandates vary around the world. In Canada, only a small number of provinces require vaccinations for students, while a study of Iceland, Norway and 27 European Union countries published in 2012 found that 15 countries had no vaccination requirements. Vaccine opposition in England dates back to the 1800s, when people objected to smallpox vaccinations.

⁽¹⁾ Many low-income countries also lack an advisory body to make vaccine recommendations, so governments often take the WHO's advice for what vaccines to recommend to their populations. Dr. Kathy Neuzil, program leader for vaccine access and delivery at PATH, an international nonprofit that focuses on global health, says many developing countries also lack a program the U.S. has to provide **compensation** for those who suffer a vaccine-related injury.

Neuzil notes that adverse effects such as sudden illness from vaccinations do occur, so the medical community must be careful to document such cases to show that they are very rare. But proximity doesn't necessarily prove cause: A child could have a seizure for the first time two hours after being vaccinated — leading parents to believe the vaccination caused the problem — but that may not be the case, Neuzil says.

“Some of these adverse events or safety concerns are going to occur by chance, but it's very difficult as a mother to not believe that a vaccine may have caused something that's temporally related,” Neuzil says.

In developed countries like the U.S., Hasan says the WHO leaves it to national health authorities to address vaccine hesitancy, because they are better able to identify the cause behind it.

“Is it because people don't understand the need for immunization? Is it because people are questioning does vaccine cause autism, even though billions of children around the world have been vaccinated with the measles vaccine since the 1960s?” Hasan asks.

Measles was declared eliminated from the U.S. in 2000. In comparison, Hinman says there are more than 100,000 deaths from the disease around the world each year, mostly in India and sub-Saharan Africa, where children rarely receive vaccinations for it.

“That means that today's parents of young children [in the U.S.] have never seen measles. It also means that many younger physicians have also not seen measles, and so it's difficult for them to maintain what we consider to be the proper respect for a highly **contagious** and potentially fatal disease,” Hinman

says.

Heidi Larson, an anthropologist who leads The Vaccine Confidence Project at the London School of Hygiene and Tropical Medicine, says the “back-to-nature movement” fueling oppositions to vaccines in the U.S. is also present in Japan and elsewhere. Some also refuse vaccinations because they object to government intervention, she says.

But in some developed countries, Hasan says, children are not vaccinated simply because their parents don’t have time to take them to the doctor. Some children receive a first round of vaccinations, but don’t get booster shots and therefore don’t develop full immunity. And in poorer countries where parents must travel long distances to clinics or take time off work, time constraints and transportation can also be barriers.

Many parents and caregivers in developing countries also simply haven’t learned why vaccines are important. Logistically, it can be difficult for health workers to reach populations to educate them about the necessity of immunization, while properly storing vaccinations that require refrigeration also presents a challenge for ensuring populations are vaccinated according to schedule.

The Gavi Alliance, an organization that seeks to improve access to vaccines in poor countries, says the key to the success of an immunization program is having buy-in from the community. And when children aren’t vaccinated, it can impact more than just their immunity to particular diseases, Privor-Dumm says. Healthy children don’t have to miss school and can stay on track to climb out of poverty.

While some Americans have grown “complacent” about vaccinations, Neuzil says, parents in poorer countries can’t afford that luxury.

“That’s a major difference as compared to these places where it’s ... an everyday part of their life that children are dying from vaccine-preventable diseases,” Neuzil says.

注

stakeholder 利害關係者

問題

保健衛生学科と口腔保健学科のみ

1 The following words appear in bold italics in the text. On the answer sheet, circle the letter indicating the best definition for each word (based on how the word is used in the text).

misgivings

- | | | |
|-----------|----------------------|--------------|
| a) anger | b) beliefs | c) decisions |
| d) doubts | e) misunderstandings | |

adverse

- | | | |
|---------------|----------------|-------------|
| a) allergic | b) extreme | c) negative |
| d) surprising | e) untreatable | |

tainted

- | | | |
|----------------|---------------------|---------------|
| a) discolored | b) effective | c) fertilized |
| d) made impure | e) working properly | |

eradication

- | | | |
|------------------|-----------------|--------------|
| a) elimination | b) immunization | c) reduction |
| d) sterilization | e) treatment | |

malady

- | | | |
|-------------|------------|--------------|
| a) disaster | b) disease | c) invention |
| d) program | e) vaccine | |

amending

- | | | |
|------------------|-------------|-------------|
| a) adding | b) banning | c) changing |
| d) investigating | e) stopping | |

nomadic

- | | | |
|---------------|--------------|--------------|
| a) hereditary | b) local | c) primitive |
| d) small | e) traveling | |

tailor

- | | | |
|------------|------------|----------------|
| a) adapt | b) examine | c) incorporate |
| d) measure | e) uncover | |

compensation

- | | | |
|--------------|------------|-----------|
| a) apologies | b) care | c) claims |
| d) insurance | e) payment | |

contagious

- | | | |
|---------------|------------------|--------------|
| a) aggressive | b) controversial | c) dangerous |
| d) infectious | e) offensive | |

- 9) The article implies that burial practices in West Africa contributed to the spread of Ebola in that region.
- 10) The article states that health workers in West Africa have been killed for treating Ebola patients.
- 11) A World Health Organization working group found that vaccination programs specifically designed for particular groups can be a good solution to the problem of vaccine hesitancy.
- 12) The article implies that Gypsies resisted vaccination because the available immunization programs did not suit their culture.
- 13) A nasal flu vaccine in the U.K. contains a pig-related product, which is a problem for Muslims living there.
- 14) All American children, no matter what state they live in, are required by law to be immunized against certain diseases.
- 15) According to Dr. Kathy Neuzil, vaccinations can lead to illnesses or other side effects, but these problems are very uncommon.
- 16) Hasan implies that the WHO tries to identify why people are vaccine hesitant in countries like the U.S.
- 17) Dr. Alan Hinman implies that young American doctors do not know how to treat measles as the disease is unfamiliar to them.
- 18) Hasan claims that some parents in richer countries are too busy to get their children vaccinated properly.
- 19) The article implies that some children in developed countries receive incomplete vaccinations.
- 20) In developing countries, transportation problems and time-related issues can prevent parents from getting their children vaccinated.
- 21) The Gavi Alliance is an organization that helps improve the availability of vaccines in developing countries.
- 22) The Gavi Alliance implies that communities in poor countries have to be able to buy their own vaccines for programs to be successful.

- 23) It is implied in the article that unvaccinated children in poor countries are more likely to remain poor than vaccinated ones.
- 24) Dr. Neuzil claims that vaccines are currently a luxury that people in poor countries just cannot afford.

医学科と歯学科のみ

4 *Briefly (in 10 to 25 words) answer the following questions in your own words, using complete English sentences. Base your answers on the information presented in the article.*

- 1) Why did the Kenyan bishops oppose the WHO-led tetanus vaccination campaign?
- 2) Compare and contrast immunization requirements in the United States with those in Canada and Europe.
- 3) According to Heidi Larson, why are some people in developed countries not getting vaccinated?

全学科

5 下線部(ア)と(イ)を日本語に訳しなさい。

全学科

6 予防接種が拒否されてきた理由としてこの記事の著者が挙げているものを、次のキーワードを用いて日本語で 400 字以内にまとめなさい：

開発途上国 (“developing countries”)
人口 (“population”)
はしか (“measles”).