

## Vaccine hesitancy: a generation at risk

Vaccine hesitancy, which is defined by WHO as a “delay in acceptance or refusal of vaccines despite availability of vaccination services”, has been reported in more than 90% of countries in the world. In many areas, immunisation for measles, a vaccine-preventable disease that was largely eliminated following widespread use of the measles-mumps-rubella (MMR) vaccine, has decreased to less than the 95% threshold set by WHO as that required for herd immunity.

In the UK, for example, coverage of the MMR vaccine decreased to 91.2%, the fourth annual decline in a row and to its lowest level since 2011–12. In the USA, the percentage of children aged 19–35 months who received the MMR vaccine slightly decreased from 91.6% in 2011, to 91.5% in 2017, with very low rates of coverage reported in some communities (eg, 60% in ultra-Orthodox Jews in the state of New York where a measles outbreak is ongoing). Similar trends elsewhere have resulted in a 30% rise in measles cases worldwide—even in countries such as the USA, where measles had been eradicated in 2000—prompting WHO to declare vaccine hesitancy one of the ten biggest threats to global health.

Paediatricians and family doctors have a key role in helping parents appreciate the benefits of vaccination; physicians’ advice has been shown to be the most important predictor of vaccine acceptance. All child health workers must promote vaccination—conflicting advice from medical professionals is especially damaging—and must be afforded sufficient time with each family to effectively do so. A clear presentation of the risks that delaying or refusing vaccination might pose to the child is pivotal to help parents understand how critical their decision is. As Michael Gannon, president of the Australian Medical Association, said, children “are 10 000 times more likely to be brain damaged by measles than [...] by vaccination”. In order to support health-care workers, WHO has developed training modules to build capacity in engaging in difficult conversations with hesitant caregivers. Vaccine hesitancy can be difficult for paediatricians to understand, but when interacting with vaccine-hesitant parents, it is important to remember that the health of their children is their primary concern.

Vaccine hesitancy cannot be addressed by paediatricians alone: governments and health policy makers also play an essential role in promoting vaccination, educating the

general public, and implementing policies that reduce the public health risks associated with vaccine hesitancy. WHO/Europe created the Guide to Tailoring Immunization Programmes that considers the need to tailor any intervention to account for the diverse reasons that make parents reluctant to vaccinate their children. Some countries have implemented specific sanctions for such families, and school entry requirements including specific vaccinations have been normal public health practice for many years. France has made vaccination with 11 vaccines mandatory for children—unvaccinated children cannot be enrolled at nurseries or schools. In Australia, parents of children who are not vaccinated are denied the universal Family Allowance welfare payments.

Media platforms (including social media) have been enormously influential in the spread of vaccine hesitancy. As Anthony Fauci, director of the National Institute for Allergies and Infectious Diseases, told in a hearing at the US Congress in February, the main issue with vaccine hesitancy is misinformation. Vaccine-hesitant parents are usually more active in searching for information online than vaccine-compliant parents, and are susceptible to unverified reports of adverse effects of vaccination and scare tactics promoted by anti-vaccination campaigners. Realising this problem, Kyle Yasuda, president of the American Academy of Paediatrics, contacted the chief executive officers of Google, Facebook, and Pinterest requesting that they partner with the Academy to make sure parents using their platforms are seeing only credible, science-based information. In response, Facebook announced that groups and pages that share anti-vaccine misinformation would be removed from its recommendation algorithm. Such partnerships are crucial for allowing widespread promotion of evidence-based information explaining the benefits of vaccination.

Vaccine hesitancy is threatening the historical achievements made in reducing the burden of infectious diseases, which have plagued humanity for centuries. Only a collaborative effort between paediatricians, family doctors, parents, public health officials, governments, the technology sector, and civil society will allow myths and misinformation around vaccination to be dispelled. If we fail, the future health of unvaccinated children and their communities will suffer greatly. ■ *The Lancet Child & Adolescent Health*



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For WHO tools to address vaccine hesitancy see [https://www.who.int/immunization/programmes\\_systems/vaccine\\_hesitancy/en/](https://www.who.int/immunization/programmes_systems/vaccine_hesitancy/en/)