

# Behavioral Strategies More Effective Than Persuasion in Promoting Vaccination

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Faced with outbreaks of influenza and other vaccine-preventable diseases, parents, educators, healthcare providers, and policymakers around the world often want to know how to persuade people to get their vaccinations. But a [comprehensive review](#) of the scientific findings from research on vaccination behavior shows that the most effective interventions focus directly on shaping patients' and parents' behavior instead of trying to change their minds.

“A common myth is that it’s easy to persuade people to get vaccinated,” says researcher Noel T. Brewer of the University of North Carolina, first author on the report. “But when was the last time hearing a fact one time led you to exercise regularly, lose weight, or quit smoking? It’s the same for vaccination.”

The [findings](#), published in *Psychological Science in the Public Interest*, a journal of the [Association for Psychological Science](#), suggest that although vaccination campaigns commonly focus on changing people’s perceptions and attitudes about vaccines, there is little evidence that these campaigns are effective.

To understand the factors that underlie vaccination-related behavior, Brewer and coauthors Gretchen B. Chapman (Carnegie Mellon University), Alexander J. Rothman (University of Minnesota), Julie Leask (University of Sydney), and Allison Kempe (University of Colorado Anschutz Medical Campus) examined the latest findings from a variety of fields, including psychological science, public health,

medicine, nursing, sociology, and behavioral economics.

The report is accompanied by a commentary by Victor J. Dzau, President of the United States National Academy of Medicine.

“As Brewer and colleagues note, psychological science offers insight into why people engage in health behaviors including vaccination,” Dzau writes in his commentary. In publishing this report, the authors “are performing a service to society by integrating the disconnected literature on psychological theories and vaccination, which can inform practical interventions to address the challenges of vaccination.”

One of the challenges of vaccination is that uptake varies across vaccines. Childhood vaccination generally has strong public support, with the majority of infants in most countries receiving recommended vaccines. In contrast, many adults forego vaccines such as the seasonal flu shot.

“Vaccination is one of the greatest public health achievements in the past century. Yet, vaccine uptake is well below optimal for some vaccines, and healthcare providers routinely face parents and patients who are hesitant about receiving vaccines,” explains Chapman. “Accessing the full benefits of vaccination entails facilitating behavior, and the insight for doing that comes from psychological science.”

The best available data indicate that the percentage of people who actively refuse all vaccines is incredibly small and that neither vaccine refusal nor delay is on the rise. These findings contradict the media-fueled narrative that an increasing number of people is rejecting immunizations.

In reality, most people receive most vaccines in line with their doctors’ recommendations. Many others have favorable attitudes toward vaccination but do not always follow through to receive vaccines in full or on time. The researchers find that the most effective vaccination interventions build on these favorable intentions, employing behavioral strategies to:

- **Facilitate action** by providing patients with reminders and prompts
- **Reduce barriers** by setting default orders and appointments
- **Shape behavior** by developing incentives, sanctions, and requirements

“Our main message to policy makers and providers is that, surprisingly, the strongest evidence supports impacting vaccination directly by leveraging, but not trying to change, what people think and feel,” Chapman says.

In some cases, people encounter false or misleading information about vaccines. Research shows that the best way to correct this misinformation is to reiterate the facts clearly and in a way that fits with people’s intuitive beliefs.

These conclusions are supported by multiple sources of evidence, but the researchers note that much of the available research on vaccination behavior is limited in quality or quantity. Studies investigating vaccination attitudes and behavior over time are rare and few studies examine the specific mechanisms or components that make for effective interventions.

Despite these limitations, cross-continent studies are increasingly converging on some common findings.

In general, these studies show that vaccine acceptance tends to be high, vaccine hesitancy exists around the world, and the factors that motivate vaccination are similar across countries.

Vaccination is a public health issue, with psychological science providing a lens for understanding the factors that motivate vaccination. The interventions that stand to have the greatest impact are those based on psychological theory and behavioral evidence.

The full report and commentary are available to the public [online](#).

*See a story on the report and its implications in [The Washington Post](#).*