

# How Andrew Wakefield's campaign against vaccines threatens public health

Posted by Alan Wirzbicki

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By Amy Tuteur

A serial killer has been released on parole — even though the original case was air-tight, the evidence overwhelming, and the public clamored for the ultimate punishment.

To understand what happened, we need to know the identity of the predator — and why it's been let loose. The killer, in this case, is vaccine-preventable illness. And it's free because of parents who refuse to vaccinate their children. Many of those parents have been duped by charlatans like Andrew Wakefield, the now-discredited British researcher who brought his anti-vaccine campaign to Brandeis on Wednesday night.

Wakefield's advocacy against vaccines has had tragic consequences by letting dangerous diseases back on the streets. Megan Campbell's 10-month-old son was one of the first victims in January 2008. He had the misfortune to be in the pediatrician's waiting room when an intentionally unvaccinated child was brought in with undiagnosed measles. Campbell's son became desperately ill and his parents thought he might die.

In an interview on the radio program *This American Life*, Campbell remembered: "There were moments I was worried he wouldn't make it because this fever just wasn't letting up. This 106-degree fever, and this rash that made my son look like an alien almost, and I wondered if he was going to be the same boy he was a week before."

What would lead a parent to intentionally withhold a vaccine, endangering their own child and others? Vaccination to arrest childhood infectious diseases is one of the greatest public health achievements of all time, and was widely hailed when first developed. For example, in 1920, there were more than 450,000 cases of measles per year in the US, with over 7,500 deaths. By the early part of the last decade, measles had dropped to approximately 50 cases per year with no deaths. There were comparable drops in cases and deaths for other vaccine-preventable illnesses. Unfortunately, as the decades passed, memories have faded — so much that some parents now doubt that the deaths even happened.

Instead, they've been fooled by anti-vaccination hucksters like Wakefield, who reportedly received a standing ovation at Brandeis. Wakefield's claim that vaccines cause autism has been thoroughly disproved, and his original paper has been withdrawn as a fraud by the journal that published it. He has lost his medical license, and journalists have documented that he stood to gain financially from a purported "replacement" vaccine in which he held a financial interest. Nonetheless, anti-vaccine activists like actress Jenny McCarthy insist that Wakefield is being "silenced" for telling the truth.

Like members of a misguided parole board, anti-vaccine activists are no longer shocked by the original deaths. They insist that the victim has been reformed, that vaccine-preventable illnesses are no longer dangerous to the public. Rather than keeping a serial killer at bay, they have released it, and now the threat extends to everyone in the community.

Only a few parents withholding vaccines can have a widespread impact. Vaccines imprison an illness, by depriving the bacteria or viruses of an opportunity to spread. That's not because vaccines are 100 percent effective, and that's not because 100 percent of people can be vaccinated. All vaccines have a failure rate (just like any other form of medical treatment) and there are some members of society who cannot be vaccinated because they are too young or they are immuno-compromised by illness or cancer treatment. But when the vast majority of children are fully vaccinated, vaccine-preventable illnesses cannot take hold in the community because they cannot spread. Therefore, even if the vaccine is not 100 percent effective on an individual level and even if some people cannot be vaccinated, everyone is protected.

When parents refuse to vaccinate their children, as Wakefield urges, they offer vaccine-preventable illnesses a

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hideout within the community. And that is the greatest danger of Wakefield's misguided campaign: purposefully unvaccinated children will suffer, but, inevitably, the most vulnerable members of society, like Megan Campbell's son, will suffer, too.

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