

Vaxxed is a 90 minute film that claims the measles-mumps-rubella (MMR) vaccine is responsible for a rise in children developing autism. It says the Centers for Disease Control (CDC) in the United States had evidence of this link and destroyed the data. A researcher, Brian Hooker, is featured in the film talking about how he re-analysed the CDC data and 'discovered' the link the CDC tried to hide.

There is no scientific basis to the claims made by this film. The MMR vaccine is considered an extremely safe and effective vaccine that protects children and our community from significant and potentially serious illness caused by measles, mumps and rubella diseases.

Key points

- *Vaxxed* is written and directed by the discredited former gastroenterologist Andrew Wakefield. It appears to be an attempt to stir up fear against the MMR vaccine. Wakefield has a patent for a measles-only vaccine.
- The background to this film begins in 1998. A small research study by Andrew Wakefield and colleagues appeared in a medical journal. This study involved just 12 children and was later shown to have used data obtained using unethical methods and then falsified. The study has since been widely discredited and withdrawn from publication.
- Wakefield was found to have worked for attorneys who were suing the MMR vaccine manufacturers and he had filed a patent for his own version of a measles-only vaccine. He did not disclose this information and has been struck off the UK Medical Register for unethical research and fraudulent behaviour.
- The phone call clips included in the movie between a CDC scientist William Thompson and the researcher, Brian Hooker, are manipulated and edited to tell the story Wakefield wishes to tell. They differ from the original transcripts.
- The re-analysis of the CDC data by Hooker used the wrong analytical methods for the type of data. The paper he wrote using the reanalysed data was withdrawn by the journal that published it because of these errors and Hooker's failure to disclose his conflicts of interest.
- Autism is a complex and varied condition caused by many interacting factors. There are extensive and highly credible scientific studies that clearly show no link between the MMR vaccine and autism (refer to *Vaccine Safety: Examine the Evidence* using the link on this page). These studies include very large numbers (in the millions) of children and compare those who were vaccinated with those who were not. The *Vaxxed* film does not mention the existence of these other studies.
- *Vaxxed* claims there is an exponential rise in children with autism. Estimates from the Global Burden of Disease Study indicate that globally 62.2 million people are currently affected by autism spectrum disorder. The proportion of children with autism has not changed significantly over the last decade.
- New evidence from brain-imaging studies shows measurable changes in the brains of children with autism, and that brain overgrowth can be detected in their scans by the age of 6–12 months of age. This is well before children have the MMR vaccine.
 - Some brain changes in children with autism have been shown to occur much earlier, including during pregnancy.

- When public confidence in the MMR vaccine wavered in the 1990s, MMR immunisation rates dropped and measles cases increased, leading to many children being hospitalised and some deaths from measles. The number of children diagnosed with autism over this time increased.
- Protecting children by immunising them with the MMR vaccine is by far the safest option to prevent measles, mumps, and rubella and the associated illness and complications.

Useful links

Altogether Autism rejects measles vaccine myth
www.altogetherautism.org.nz/media-releases/3942/altogether-autism-rejects-measles-vaccine-myth

Anti-vaccination film secrecy upsets top community doctor
www.voxy.co.nz/health/5/279558

The Australian Academy of Science: The science of immunisation/Questions and answers
www.science.org.au/learning/general-audience/science-booklets/science-immunisation

Autism speaks – What causes autism?
www.autismspeaks.org/what-autism/learn-more-autism/what-causes-autism

Autism spectrum disorder: If not vaccines, then what?
peterhotez.org/2017/02/24/autism-spectrum-disorder-if-not-vaccines-then-what

Comment on Vaxxed – Alison Mau
www.stuff.co.nz/national/health/91093182/alison-mau-if-you-go-to-watch-vaxxed-today-know-that-youre-buying-into-the-made-manipulation-of-a-disgraced-fraud

Film review of Vaxxed
www.hollywoodreporter.com/news/anti-vaccine-doc-vaxxed-a-882651

The “Why Vaccines Don’t Cause Autism” papers
peterhotez.org/2017/01/20/the-why-vaccines-dont-cause-autism-papers

Vaccine Safety: Examine the Evidence
www.healthychildren.org/English/safety-prevention/immunizations/Pages/Vaccine-Studies-Examine-the-Evidence.aspx