



# MMR & AUTISM: UNRAVELING THE MYTH



I'm concerned about autism. Is MMR safe for my child?

## 1 MMR vaccine does not cause autism

Large-scale studies in multiple countries have all reached the same conclusion: MMR (measles, mumps, and rubella) vaccination does not increase a child's risk of autism.<sup>1,2</sup>

In the biggest and most recent study, Danish researchers followed over 657,000 children born over the course of 11 years. Researchers compared children who received MMR vaccine with those who hadn't. They found no link between MMR and autism, even in children with risk factors like a family history of autism.<sup>3</sup>

## 2 The myth rests on a misleading, discredited study

In 1998, physician Andrew Wakefield published a study in a journal called *The Lancet*. The *Lancet* later retracted the study. In an interview, the journal's editor explained, "it was utterly clear, without any ambiguity at all, that the statements in the paper were utterly false." Wakefield lost his license to practice medicine in his home country, the U.K.<sup>4</sup>

Since then, no one - not even Wakefield - has been able to replicate the results of his study.

But wasn't there a study showing a link between MMR and autism?



# 3 The study was unethical and deceptive in many ways



Why shouldn't I trust Wakefield's study?

## \* Wakefield stood to profit

Even before his study, Wakefield was a paid consultant to lawyers who wanted to discredit the MMR vaccine. He'd also filed for a patent to produce his own measles vaccine. It was in his interest to discredit MMR and knock out the competition.<sup>5</sup>

## \* The study was too small to produce reliable data

The study included just 12 children -- far too few to accurately represent the general population.

## \* Wakefield falsified data about study participants

Wakefield implied that MMR vaccine caused the children in his study to develop autism. In reality, some of the children had developmental issues before they were vaccinated. Meanwhile, others were never actually diagnosed with autism after getting vaccinated.<sup>6</sup>



# 4 Autism doesn't have a single cause

Well then what causes autism?

Vaccines do not cause autism. We know that autism can be influenced by genes, family history, prenatal exposures, and a child's environment.<sup>7</sup> With support and love from parents and caregivers, autistic children can lead happy and productive lives.

Vaccination is one of the safest, most effective steps you can take to protect your child's health, now and in the future.

## Sources

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- 2 **Autism Science Foundation** [Internet]. New York; c2019. Autism and vaccines. [Cited 2019 Jun 14]. Available from: <https://autismsciencefoundation.org/what-is-autism/autism-and-vaccines/>
- 3 Hviid A, Hansen JV et al. **Measles, Mumps, Rubella Vaccination: A Nationwide Cohort Study.** *Ann Intern Med.* 2019;170(8):513-520. Available from: <https://annals.org/aim/fullarticle/2727726/measles-mumps-rubella-vaccination-autism-nationwide-cohort-study>
- 4 Bosely S. **Lancet retracts 'utterly false' MMR paper.** The Guardian [Internet]. 2010 Feb 2 [cited 2019 June 14]. Available from: <https://www.theguardian.com/society/2010/feb/02/lancet-retracts-mmr-paper>
- 5 **How the vaccine crisis was meant to make money.** *BMJ.* 2011;342:c5258. Available from: <https://www.bmj.com/content/342/bmj.c5258>
- 6 **How the case against the MMR vaccine was fixed.** *BMJ.* 2011;342:c5347. Available from: <https://www.bmj.com/content/342/bmj.c5347>
- 7 **Autism Speaks** [Internet]. New York; c2019. What causes autism? [Cited 2019 Jun 4]. Available from: <https://www.autismspeaks.org/what-causes-autism>