

## Autism and Vaccines

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In 1998 Dr. Andrew Wakefield published a paper in *The Lancet* claiming that the measles-mumps-rubella (MMR) vaccine was linked to the development of autism. While Wakefield's claim has since been debunked and Wakefield has been heavily scrutinized, the damage has been done. Whether he knew it or not, Wakefield's actions started what has become known as the anti-vaccination movement. Anti-vaxxers, or people who don't believe that children should be vaccinated, have become an unignorable part of our modern day society. Anti-vaxxers don't believe in vaccines for a number of unfounded reasons, but one of the most prevalent reasons is that they still believe vaccines cause autism. Because of these beliefs many diseases that nowadays are considered to be of minimal risk, are making a comeback in places like California. There is no real evidence to support the idea that vaccines cause autism and there are several other factors to consider. While there is no known exact cause of autism, in this paper we hope to explore why the numbers of diagnosed cases of autism has risen and we also hope to further debunk any relationship between vaccines and autism.

In order to fully understand the scope of this issue, first a sound definition of autism is required. However, that in and of itself has been difficult to pin down and has partially led to an 'increase' in diagnosed cases. For example, according to an article written in the *Turkish Journal of Neurological Sciences* by Emine Vatanoglue-Lutz and Ahmet Dogan Ataman titled "Medicine in Stamps: History of Autism Spectrum Disorder (ASd) Through Philately", autism was originally understood to be "the earliest form of schizophrenic psychosis" (427). That is until Dr. Leo Kanner began to study the disorder in the 1940s and identified it as totally different from schizophrenia and calling it "infantile autism... a distinct syndrome instead of previous depictions of such children as feeble-minded, retarded, moronic, idiotic or schizoid" (427). Over the next few decades the definition would change drastically and now in 2018 it has a totally different definition.

According to [autismspeaks.org](http://autismspeaks.org), one of the premier organizations that deals with awareness and acceptance of the disorder, and the Center for Disease Control autism is prevalent in 1 in 59 children. While the number of children diagnosed with autism is rising, this isn't necessarily cause for concern and it certainly isn't any reason to not vaccinate children. [Autismspeaks.org](http://autismspeaks.org) defines autism as "Autism, or

autism spectrum disorder (ASD), refers to a broad range of conditions characterized by challenges with social skills, repetitive behaviors, speech and nonverbal communication." Because science and the understanding of diseases and disorders changes as we gain a greater understanding of disorders the definition of autism has also changed and the idea of the autism spectrum has also been expanded. What this means is that with these changing definitions more people are going to fall under the umbrella of what constitutes Autism. According to the *Los Angeles Times*, autism began to gain national attention in the late 1980s and early 1990s. Autism wasn't even regularly diagnosed until around this time.

So it would stand to reason that the increased number of diagnosed cases of autism has been brought about by the changing, greater encompassing definition and more widespread awareness of the disorder. According to Jessica Wright in an article published by the [scientificamerican.com](http://scientificamerican.com), "Studies show that parents who are aware of autism's presentation—by living near someone with the condition, for example—are more likely to seek a diagnosis for their children than parents with no knowledge of the condition. Living close to urban centers and having access to good medical care also boost the likelihood of diagnosis." While greater public awareness is important in order to help those with autism, it has also contributed to an increased number of diagnosed cases.

How does this relate to the idea that vaccines cause autism? The main reason is that because of the increase in diagnosed cases there is a call for an answer. Understandably, parents want to be able to find a reason as to why their child has autism. Because if Andrew Wakefield's research, many unfortunately misinformed parents have pointed their finger at the MMR vaccine and vaccines in general. Perhaps the most notable anti-vax celebrity is Jenny McCarthy. McCarthy has spearheaded this movement for several years now and what is most concerning about her position is two fold. First, and perhaps most importantly, is the fact that she can use her celebrity status to reach more people and give them misinformation about vaccines. Second, is her anti-autism rhetoric. For example, in a 2010 interview with Karl Greenfield, McCarthy had this to say about autism, "I look at autism like a bus accident, and you don't become cured from a bus accident, but you can recover." Therein lies an important issue with McCarthy's position. McCarthy, and others in the anti-vaccine movement, talk about autistic children as if

they are damaged beyond repair. She makes it sound as if autism is a worst case scenario. However, the reality for children with autism and their families is that autism is not a worst case scenario. While raising a child with autism does take more time and patience, it shouldn't be seen as a life ending disorder.

Being someone that is caught in the crossfire of the should we vaccinate or not argument could be stressful. If someone is not very educated in the matter, he or she could feel under pressure to join a side. The fact that there are people trying to push the statement that vaccines do or could lead to the development of autism are enough to alarm someone in the decision making process. If the thought process of being a parent that was concerned for his or her child's health is if I get my child vaccinated he or she can be at risk of developing autism or if I do not vaccinate my child he or she is at risk of dying prematurely from a bad disease. So as a parent if the vaccines were said to truly increase the chance of the child developing autism, what is more important to the parent. Is preventing the child from any extra chance of developing autism or giving the child an antibody capable of defending them from awful diseases that could disable them or even kill them worse or sooner than autism could.

With all of this being said, those who are misinformed or uninformed shouldn't be dismissed or berated for their opinion, even if it does endanger others. As Dr. Wolyniak has taught us, this approach to the uninformed can actually push them more in the other direction. No one wants to be told they're wrong, but it's important that anti-vaxxers become educated on the topic of vaccines and the ramifications of choosing to not vaccinate. As a result, those of us who are educated on and understand the issue have a responsibility to explain the importance and safety of vaccines without coming across as condescending or rude to those who are not. On a societal level, it is also important to maintain a more educational rhetoric instead of attacking anti-vaxxers. In addition, we should also help to continue to raise awareness about autism. As educated members of society, we also have a responsibility to support actual scientific papers about autism and its causes, as well as papers that show the facts about vaccines. This is the only way to rectify this issue.

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