

What causes autism/ASD?

Though autism research has come a long way in the past decade, the exact causes are not known in most cases. Only about 10-15% of cases have an identified primary genetic cause. (For example, we know that about one third of people with Fragile X syndrome also have ASD.) For the other 85-90% of cases, the precise cause is still not known. Research suggests, however, that genetics are strongly involved.

Sometimes ASD runs in families and there appears to be a significant genetic connection. In other cases, there is no family history or only subtle examples of ASD-like symptoms in a relative. Even in these cases, there is probably a strong genetic component, but the types of genetic influences likely differ.

Researchers believe that there are multiple and different risk genes that combine in various ways to cause ASD in any individual. Many of the risk genes seem to have only a small influence, and they require a specific combination of risk factors to cause ASDs. In most cases, though, it is apparent that genes cannot be the whole story -- genes are likely combining with other non-genetic (also known as environmental) sources of influence to cause ASDs.

There is very little understanding of what those other non-genetic causes might be. Researchers are hopeful that, once the genetic factors are discovered, the non-genetic sources of influence will be easier to identify. It is generally accepted, however, that ASDs do not occur because of psychological factors, and they are not the result of parenting behaviors or practices.

Research on causes is the most active area of autism research. Understanding the causes better will produce much more obvious roads to effective treatments.