

7,000 and counting – That's how many diseases are linked to mutations that could be corrected with gene editing

Researchers have already identified DNA errors as the cause of nearly 7,000 diseases. Thankfully, the growing world of genome editing could be the “spell-checker” needed to detect and eventually fix these problems.

Genome editing is often equated with designer babies and CRISPR/Cas9. However, the world of genome editing is far more diverse and complex and goes well beyond just CRISPR, which is only the latest in a long line of editing “tools”.

Follow the latest news and policy debates on sustainable agriculture, biomedicine, and other ‘disruptive’ innovations. Subscribe to our newsletter.

[SIGN UP](#)

Researchers could one day remove malaria from mosquitoes. Researchers have already created mosquitoes that are resistant to malaria by deleting a specific segment of mosquitoes' DNA. Neurodegenerative diseases like Alzheimer's and Parkinson's could potentially become a thing of the past. Scientists are already working on CRISPR-based platforms to identify the genes controlling the cellular processes that lead to neurodegenerative diseases. In 2017, researchers used CRISPR to shut down the HIV virus' ability to replicate, eliminating the HIV virus from infected cells.

In 2016, a lung cancer patient in China became the first human to receive an injection of cells that had been modified using CRISPR. Researchers used CRISPR to disable a gene used by the cancer cells to divide and multiply. Without the gene, researchers hope the cancer cells will not multiply.

From agriculture to pharmaceuticals, gene editing could one day help us build a better world.

[Read the original post](#)