

Polio is one of the diseases that humanity has been successfully fighting for more than half a century. The poliomyelitis virus that causes the disease can in some cases attack the nerve cells controlling the limbs and cause their paralysis. Especially dangerous are then the cases of infections of the respiratory neurons, which can lead to death without help. Mainly thanks to the scientists Salk and Sabin, two vaccines were created which, despite their disadvantages, successfully reduced the worldwide incidence of polio by 99%. However, there are still places where no vaccine is commonly available and where the virus is still endemic. The Salk vaccine, which was used first, uses an inactivated virus to prompt an immune response. However, its disadvantage is lower efficiency. Several years later, Sabin came with his live attenuated vaccine, unable to destroy human nerve cells. Sabin's vaccine conquered the world with simple oral administration and high efficacy. The disadvantage, which arises especially today, is the possibility of reverse mutation of the virus and the formation of pathogenic forms. This vaccine-derived virus can cause local outbreaks at low vaccination sites. Therefore, the use of the Sabine vaccine is being abandoned in favor of the Salk vaccine, possibly along with boosters. But scientists are still looking for new ways of protecting against poliovirus and eradicating it.