**TOPIC** Safety

**Fact**

Vaccines cannot cause the disease they are meant to protect against.

Most available vaccines contain killed pathogens or their components (known as killed or inactivated vaccines). Inactivated vaccines cannot cause the disease that they protect against. In addition, there are also so-called live, attenuated vaccines, which contain weakened but still living pathogens. Only a few vaccines available in Germany are of this type. Live, attenuated vaccines are also incapable of causing the disease they are meant to protect against. However, in rare cases they can produce illnesses which mimic the clinical symptoms of the disease in individuals with weakened immune systems. Therefore, live, attenuated vaccines are administered to individuals with weakened immune systems only after very careful consideration of the contraindications.

**Myth**

“Vaccinations cause the diseases that they are supposed to protect us against.”

**Explanation of fallacy**

Some people think that vaccinations can cause the disease that they are supposed to protect against. This is not the case. However, the possible complications of a vaccine can sometimes be mistaken for the disease itself. For example, fever and muscle or limb pains can occasionally develop after an influenza vaccination. This can make it seem as though the vaccine caused the flu. In reality, these symptoms are simply evidence that the immune system is responding to the vaccine. The symptoms generally resolve after one to two days.

**Fact**

In fact: Vaccines cannot cause the disease they are meant to protect against.

Only in very rare, isolated cases can the use of live, attenuated vaccines in individuals with weakened immune systems lead to an illness with the same symptoms, which is why these are not recommended for these risk groups.

**This was a truth sandwich.**

More information at www.rki.de/vaccination-myths