### TOPIC: Safety

#### Fact

**Vaccines can protect against cancer.**

Some vaccines protect against infections which can cause cancer. Examples include the HPV vaccine, which can prevent, among other types of cancer, cervical cancer, and the Hepatitis-B vaccine, which protects against liver cancer.

#### Myth

**“Vaccines can cause cancer.”**

#### Explanation of fallacy

When social media and other sources spread the notion that vaccines contain cancer-causing substances, this can understandably lead to uncertainty. It would be disastrous if harmful, let alone cancer-forming, substances were to get into a vaccine. There are multiple safety systems in place worldwide to prevent this. However, cancer is a particularly emotional topic where facts alone do not hold sway. In many peoples’ minds, a diagnosis of cancer is associated with fears of serious health issues and the question of survival. Addressing such fears is a targeted strategy which is used repeatedly by anti-vaxxers. They use made-up terms such as “turbocancer” to create an association between vaccines and cancer.

However, this supposed association has absolutely no scientific basis. Vaccine components are very closely monitored by independent scientists throughout the world, so that it would quickly become apparent if any cancer-causing substances were to be found in vaccines. In addition, cancer cases are collated internationally in cancer registries. We would therefore notice if cancer cases were to accumulate after a particular vaccination. Even after many billions of delivered vaccine doses, there is no scientific evidence that vaccines cause cancer.

#### In fact: Vaccines can protect against cancer.

Cancer can have multiple causes. Some types of cancer are caused by viruses, and some of these serious consequences of infection can be prevented by vaccination.

\[\text{This was a truth sandwich.}
\text{More information at www.rki.de/vaccination-myths}\]