

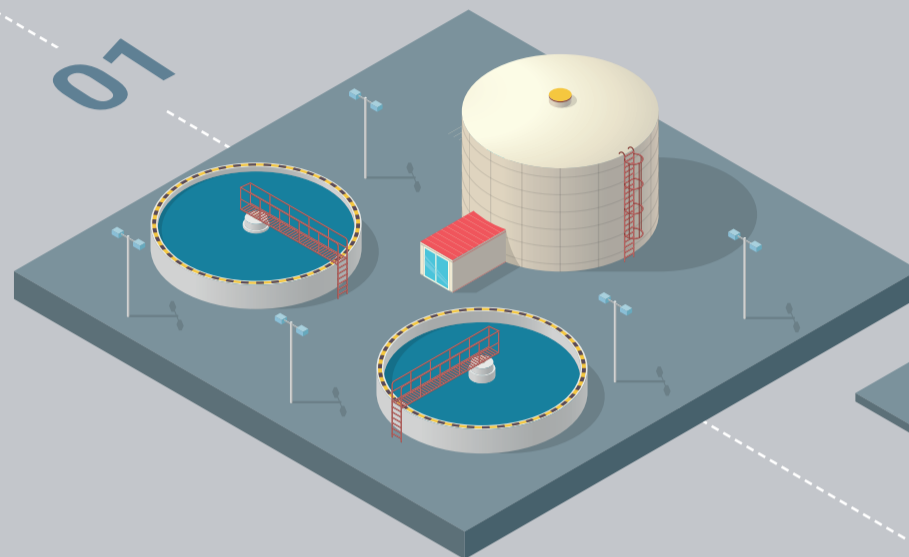
WASTEWATER MONITORING

HOW DOES IT WORK?

In Germany, wastewater monitoring is used in addition to existing systems for tracking diseases. The aim is to assess the spread of infectious diseases and to use this information to protect the population. Wastewater monitoring can help identify outbreaks, assess how serious they are, and find out where they started. But how does wastewater-based surveillance work?

01 SAMPLING AT THE WASTEWATER TREATMENT PLANT

Samples are taken at the inlet to the wastewater treatment plant throughout the day and then combined to get a 24-hour composite sample. This process is repeated several times a week.



02 TRANSPORT TO THE LABORATORY

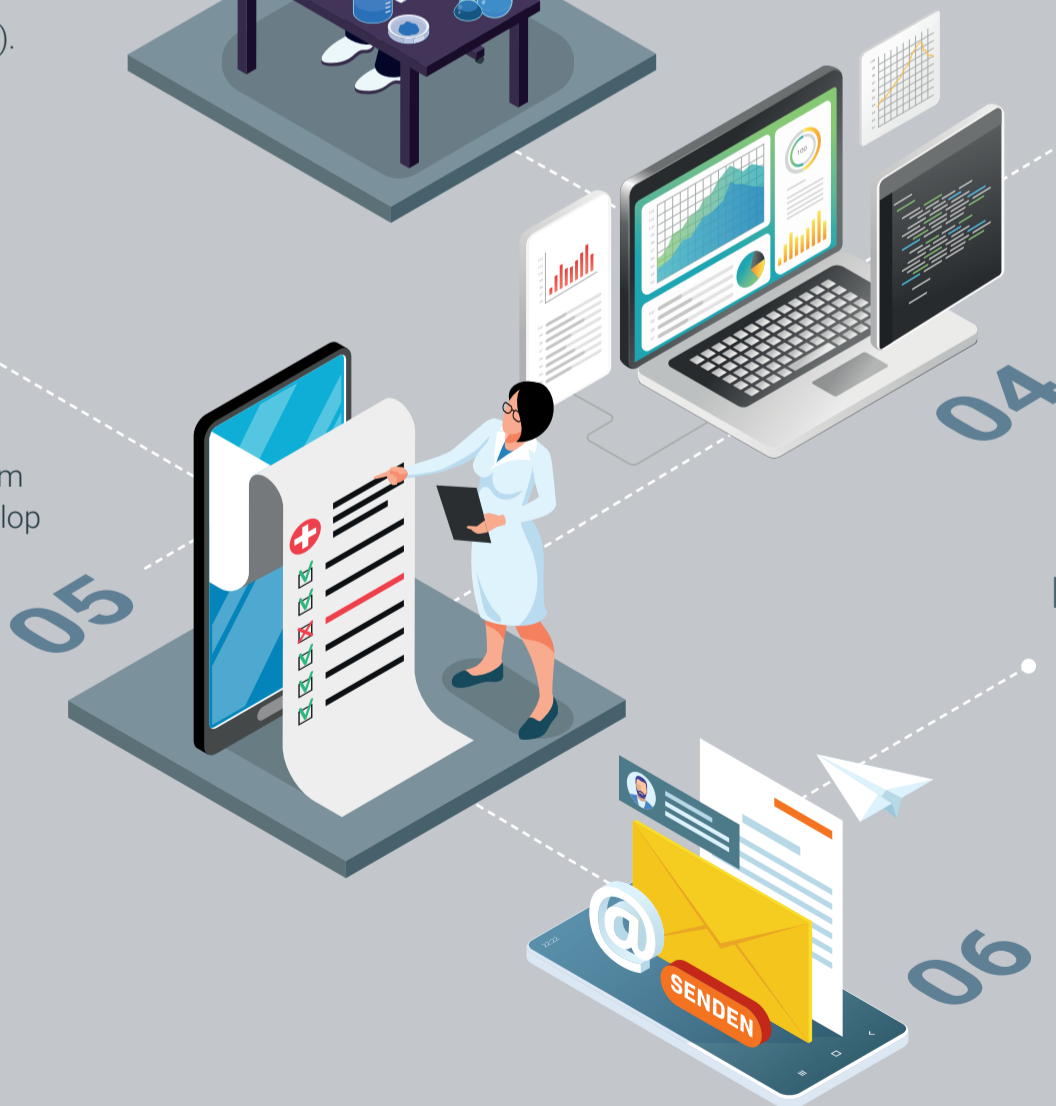
The wastewater sample is refrigerated and taken to the appropriate laboratory.

In the laboratory, we analyse the sample to see if we can detect genetic material from any pathogens. To do this we use the Polymerase Chain Reaction (PCR). We decide which pathogens to investigate based on the current situation.



03 SAMPLE PROCESSING AND ANALYSIS

Trends are calculated for each site. We perform epidemiological assessments, also using data from other monitoring systems, to develop measures to protect the health of the population.



04 DATA PROCESSING

The results from the laboratories are quality-checked, evaluated and reconciled with reference parameters to make the data comparable.

05 EPIDEMIOLOGICAL ASSESSMENT

The results are published on the internet. Also, we publish data and make methodological guidelines available so that anybody who is interested can download them.



06 COMMUNICATION/PUBLICATION OF DATA