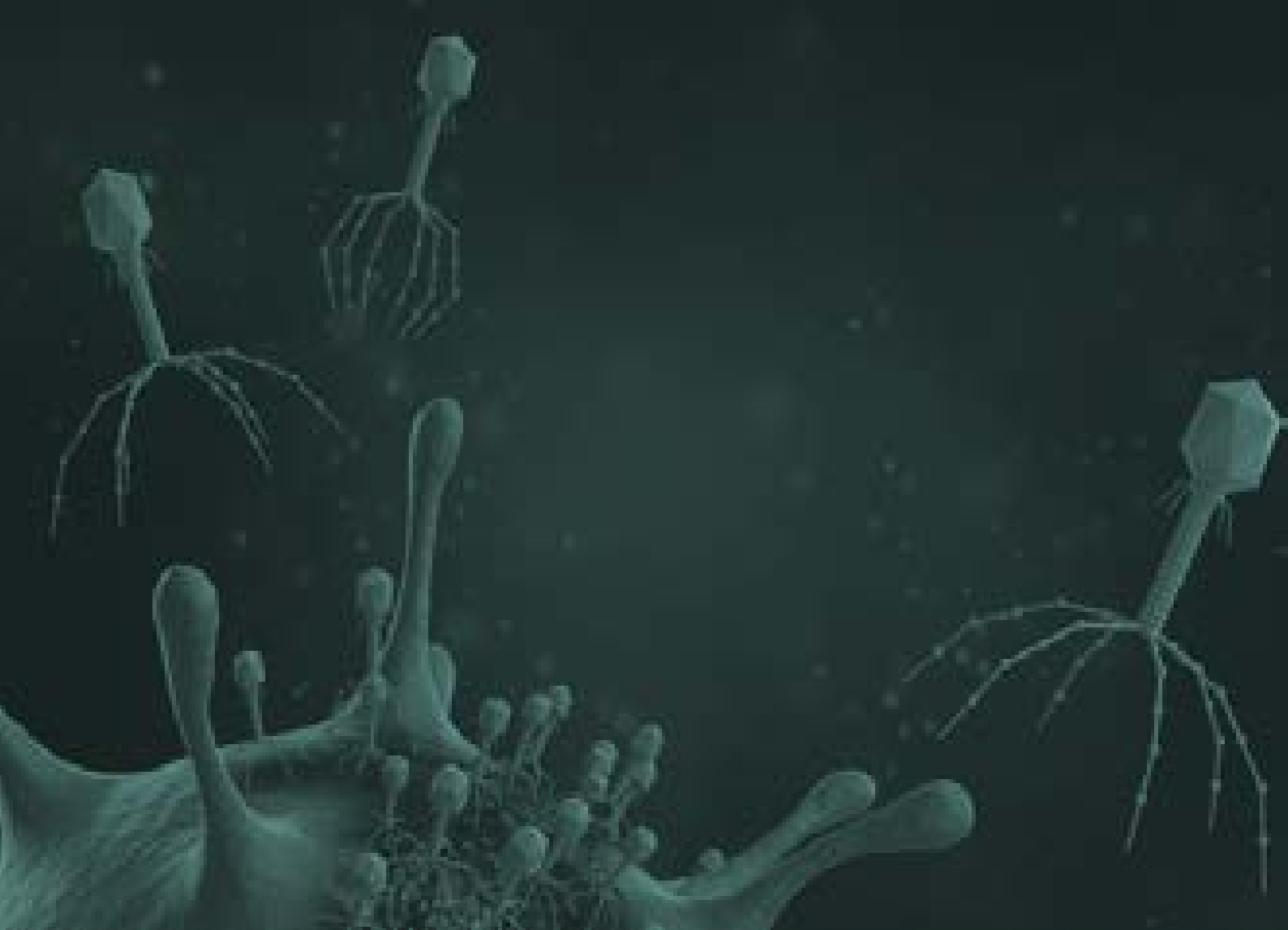


Bacteriophages

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Bacteriophages

Historically, microbiological control has been mainly done through bacterial indicators, but currently viral indicators are trending in quality control of water, biosolids and food. The new European Directive (EU) 2020/2184 December 16th, 2020 on the quality of water intended for human consumption includes the somatic coliphage parameter as an indicator to verify the effectiveness of treatment processes against microbiological risks.

Bacteriophages as viral indicators provide additional advantages to bacterial indicators, since they are present in the environment in a similar amount to bacterial indicators, usually persist longer and provide more information on viral pathogens which are not properly represented by studying only bacterial indicators.

Somatic coliphages are bacteriophages of enteric origin that can infect *Escherichia coli* through cell surface receptors.

F-specific coliphages, also named sexual coliphages or male-specific bacteriophages, infect bacteria through the sex pili.

The presence of both somatic and/or F-specific coliphages in water samples usually indicates pollution by human or animal faeces, or by sewage containing these excreta. Therefore, these coliphages provide a simple and relatively rapid tool for the detection of faecal pollution, and their resistance in water and food tends to resemble that of human enteric virus more closely than faecal bacteria, commonly used as water or food quality indicators.

Both somatic and F-specific coliphages are included in water, wastewater, biosolids and food guidelines and regulations complementing the use of other bacterial indicators.

Bacteriophages

[ref. 992512]



Round I	Round II	Round III
<i>Week 7</i> 9th February 2026	<i>Week 18</i> 27th April 2026	<i>Week 39</i> 21st September 2026
F-specific bacteriophages Somatic bacteriophages Evaluation: Concentration, elution and culture Matrix: Drinking water - Outlet water	F-specific bacteriophages Somatic bacteriophages Evaluation: Culture Matrix: Wastewater and reclaimed water	F-specific bacteriophages Somatic bacteriophages Evaluation: Concentration, elution and culture Matrix: Drinking water - Inlet water