

BACTIQUICK®

Bactiquick® (by Molendotech) is a handheld, rapid water-testing device designed to deliver a ‘risk-level’ of bacterial contamination in approximately 15 minutes. It’s built on the same biosensor technology as Molendotech’s Bacterisk® platform and was designed to give communities and researchers fast, field-based results. It’s especially useful for water-users, as can enable them to make a near-real-time risk assessment of water safety, which is a big advantage during storm overflows or suspected pollution events. Lab testing can take multiple days.

Bactiquick® provides a rapid snapshot, and doesn’t test for one specific bacteria such as E.Coli or Enterococci. Rather, it detects endotoxins from a group of bacteria, including E.coli, Salmonella, Leptospira and Vibrio. It doesn’t provide data on what bacteria are present – only their levels.

HOW DOES IT WORK?

1. **Collect a sample:** Volunteers take a water sample from the river or stream.
2. **Load the device:** The sample is placed into a Bactiquick® test cartridge.
3. **Detection:** The biosensor reacts chemically to any endotoxins present, triggering a signal.
4. **Readout:** Within around 15 minutes, the device produces a reading showing whether bacterial contamination is low, medium, or high.
5. **Log and share:** Results are recorded via a companion app and can be shared with project partners or uploaded to community data platforms.

Because Bactiquick® measures a chemical signal rather than growing live bacteria, it provides near-instant feedback — ideal for early warning and public awareness, though still complemented by slower laboratory confirmation when needed.

Endotoxins:

Endotoxins are molecules found on the outer walls of specific bacteria – mostly faecal bacteria, like E. coli. When the bacteria dies, the endotoxins remain, so are a footprint of pollution.

TRIED AND TESTED

Communities across the UK are using Molendotech’s Bacterisk® and Bactiquick® technologies to monitor and improve water quality in their local rivers. On the River Thames, [RiverWatch](#), [Thames21](#) and others are monitoring coliform bacteria, which can indicate the presence of harmful pathogens, especially following sewage discharges. So are groups along the River Deben, including [Save the Deben](#) and [Deben Climate Centre](#) – as well as [Clean Mersey](#) on the River Mersey.

Along the River Ure, the [Stop Ure Pollution](#) group has [issued red alerts](#) after detecting dangerous levels of E. coli and other bacteria, highlighting the need for improved water quality monitoring.

The [River Dee community](#) is advocating for designated bathing water status and conducting bacteria counts to assess water safety – so are the [Lostwithiel Environment Action Forum \(LEAF\)](#) for the River Fowey.

WHERE TO BUY

Bactiquick® is a Molendotech product. You can find out more here: [Real Time Water Testing Kits – Fast and Reliable Results – Bactiquick | Water Testing Kit](#)

RELATED ACADEMIC STUDIES

[Endotoxin as a Marker for Water Quality - PubMed](#)

[Endotoxin, a novel biomarker for the rapid risk assessment of faecal contamination of coastal and transitional waters - PubMed](#)

[Real-time water quality risk: Molendotech's Bactiquick - Surfers Against Sewage • Data HQ](#)