

• The Legiolert® Test outperforms BCYE solid culture methods in study after study

Peer-reviewed studies find the Legiolert liquid culture test is:

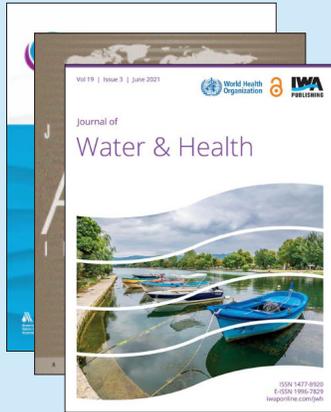
- More sensitive than BCYE solid culture methods.
- Highly specific for *Legionella pneumophila*.



IDEXX

11 peer-reviewed studies tested 2,071 environmental samples to compare the Legiolert® Test to BCYE solid culture methods

11 Peer-reviewed studies



Multiple methods compared

- ISO 11731
- CDC Protocol
- SM9260-J
- Customized BCYE methods

19 Participating laboratories

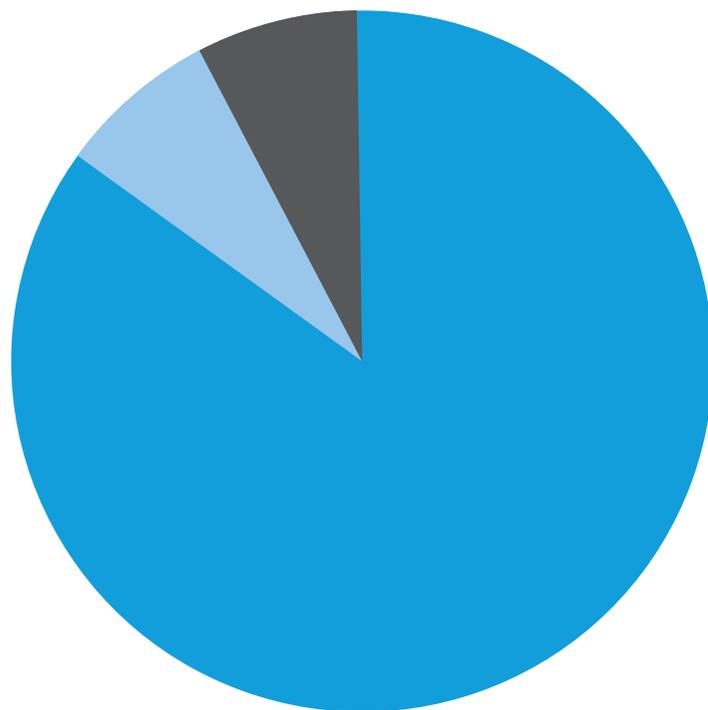
Across 7 countries and 3 continents

Legiolert liquid culture was shown to be more sensitive than BCYE solid culture

9 of 11 studies showed the Legiolert Test to be **statistically more sensitive**

100%

of peer-reviewed papers showed **Legiolert to be at least as sensitive** (either more sensitive or equal to) as BCYE solid culture methods



Statistically greater sensitivity

Greater sensitivity; statistical test not performed

Statistically equal sensitivity

All studies showed the Legiolert Test to be highly specific

Study*	Calculated specificity
Sartory et al, 2017	96%
Spies et al, 2018	98%
Rech et al, 2018	97%
Petrisek and Hall, 2018	100%
Barrette, 2019	96%
Checa et al, 2021	100%
Boczek et al, 2021	97%

“...there was no evidence of interference by nontarget microorganisms when using the Legiolert method.”

—Researchers at the **US EPA**

*4 of 11 studies did not calculate specificity. All peer-reviewed specificity calculations are included above.

The Legiolert Test is trusted by public and private labs around the world

**ASTM International
D8429-21**

Accepted as an international standard for quantifying *L. pneumophila*



N° IDX 33/06 06/19

The Legiolert Test is AFNOR “NF Validation” Certified for *Legionella pneumophila* testing in hot and cold sanitary water and cooling tower water



**BLUE BOOK
Acceptance**

Included in the UK Standing Committee of Analysts blue book for Legionella

“Legiolert is characterized by very easy and rapid sample preparation, with the additional advantages of avoiding the need for large sampling volumes, membrane filtration, treatments, plating, colony isolation, and additional confirmation or identification.”

—Researchers at the **National Institute of Health, Italy**

“First, Legiolert employs a simple sample preparation and test procedure that can improve laboratory workflow and efficiency. Second, positive wells were easy to identify and could be counted rapidly, accurately, and with little to no interpretation.”

—Researchers at **EMSL**, a major US private laboratory

The 11 studies

Barrette I. Comparison of Legiolert and a conventional culture method for detection of *Legionella pneumophila* from cooling towers in Québec. *J AOAC Int.* 2019;102(4):1235–1240. [doi:10.5740/jaoacint.18-0245](https://doi.org/10.5740/jaoacint.18-0245)



Boczek LA, Tang M, Formal C, Lytle D, Ryu H. Comparison of two culture methods for the enumeration of *Legionella pneumophila* from potable water samples. *J Water Health.* 2021;19(3):468–477. [doi:10.2166/wh.2021.051](https://doi.org/10.2166/wh.2021.051)



Checa J, Carbonell I, Manero N, Martí I. Comparative study of Legiolert with ISO 11731-1998 standard method-conclusions from a Public Health Laboratory. *J Microbiol Methods.* 2021;186:106242. [doi:10.1016/j.mimet.2021.106242](https://doi.org/10.1016/j.mimet.2021.106242)



Inoue H, Baba M, Tayama S. Evaluation of Legiolert for quantification of *Legionella pneumophila* from bath water samples. *Biocontrol Sci.* 2020;25(3):179–182. [doi:10.4265/bio.25.179](https://doi.org/10.4265/bio.25.179)



McCuin RM, Bartrand TA, Clancy JL. *Legionella pneumophila* recovery using Legiolert and a traditional culture method. *AWWA Water Sci.* 2021;3(3):e1228. [doi:10.1002/aws2.1228](https://doi.org/10.1002/aws2.1228)



Monteiro SN, Robalo AM, Santos RJ. Evaluation of Legiolert for the detection of *Legionella pneumophila* and comparison with spread-plate culture and qPCR methods. *Curr Microbiol.* 2021;78(5):1792–1797. [doi:10.1007/s00284-021-02436-6](https://doi.org/10.1007/s00284-021-02436-6)



Petrisek R, Hall J. Evaluation of a most probable number method for the enumeration of *Legionella pneumophila* from North American potable and nonpotable water samples. *J Water Health.* 2018;16(1):25–33. [doi:10.2166/wh.2017.118](https://doi.org/10.2166/wh.2017.118)



Rech MM, Swalla BM, Dobranic JK. Evaluation of Legiolert for quantification of *Legionella pneumophila* from non-potable water. *Curr Microbiol.* 2018;75(10):1282–1289. [doi:10.1007/s00284-018-1522-0](https://doi.org/10.1007/s00284-018-1522-0)



Sartory DP, Spies K, Lange B, Schneider S, Langer B. Evaluation of a most probable number method for the enumeration of *Legionella pneumophila* from potable and related water samples. *Lett Appl Microbiol.* 2017;64(4):271–275. [doi:10.1111/lam.12719](https://doi.org/10.1111/lam.12719)



Scaturro M, Buffoni M, Girolamo A, et al. Performance of Legiolert Test vs. ISO 11731 to confirm *Legionella pneumophila* contamination in potable water samples. *Pathogens.* 2020;9(9):690. [doi:10.3390/pathogens9090690](https://doi.org/10.3390/pathogens9090690)



Spies K, Pleischl S, Lange B, et al. Comparison of the Legiolert/Quanti-Tray MPN test for the enumeration of *Legionella pneumophila* from potable water samples with the German regulatory requirements methods ISO 11731-2 and ISO 11731. *Int J Hyg Environ Health.* 2018;221(7):1047–1053. [doi:10.1016/j.ijheh.2018.07.006](https://doi.org/10.1016/j.ijheh.2018.07.006)

