

Actinomycetales: A Key Indicator of Indoor Environmental Conditions for CIRS

Patent Pending

Assess bacterial exposure in water-damaged buildings.

The Actino Test helps identify toxic Actinomycetes, pathogenic species, and Cyanobacteria patterns that may be relevant in water-damaged indoor environments, especially for individuals concerned about Chronic Inflammatory Response Syndrome (CIRS).

Actino Testing for Water-Damaged Buildings

The Actino Test is designed to identify 33 toxic Actinomycetes species and 11 control species, generating an Actino CIRS Score based on quartile distribution levels. This score helps evaluate bacterial contamination associated with water-damaged buildings.

Actino CIRS Score

Actinomycetes are among the most commonly found bacteria in water-damaged buildings, often referred to as sick buildings. Certain Actino species are strongly associated with these environments, making them important markers when assessing indoor microbial exposure.

For individuals concerned about CIRS, the recommended Actino CIRS Score is Q1 or Q2.

Pathogen Score

The Pathogen Score measures the presence of human-specific pathogenic Actinomycetes in the sample. This score is especially important for individuals with inflammatory conditions, including CIRS.

The Pathogen Score ranges from Q1 to Q4, with Q4 representing the highest level. For CIRS-related concerns, the recommended level is Q2 or lower.

CYANO Score

The CYANO Score measures the distribution of toxic Cyanobacteria in the sample. In most cases, the recommended level is Q2 or lower.

Why Individual Species Matter

While the summary scores provide a useful overview, accurate interpretation depends on reviewing the results for each individual species.

- its concentration in bacteria equivalents per milligram (B.E./mg)
- whether it is marked with an asterisk (*), which indicates an elevated level

This species-by-species review provides a clearer understanding of the sample and helps identify specific bacterial concerns that may require further attention.

How to Interpret the Report

Quartile levels help show the relative significance of the findings:

Quartile	Interpretation
Q1 to Q2	Generally considered the recommended range
Q3	May indicate a potential concern
Q4	Indicates a significant concern and should be reviewed carefully

If results fall into the Q4 range, especially when elevated species are present, the findings should be reviewed with both an indoor environmental professional and the treating medical practitioner.

Recommended Ranges for CIRS

For individuals concerned about CIRS, the following ranges are generally recommended:

- Actino CIRS Score: Q1 or Q2
- Pathogen Score: Q2 or lower
- CYANO Score: Q2 or lower

Important Note for Detailed Review

For a more detailed analysis, look for individual species with Q4 levels and the letter (P) next to the species result. This indicates that an important pathogen was detected at the highest possible level and may require closer review.

Understand bacterial exposure in water-damaged buildings with greater clarity.

The Actino Test helps identify toxic Actinomycetes, pathogenic species, and Cyanobacteria patterns that may be linked to indoor environmental concerns, especially for individuals evaluating CIRS-related exposure.

Host Actino Testing.

Toxic Actino species can also be found at abnormal levels in the skin, nose and stools and eventually even in blood circulation, in other words Actino from water damaged building can be transfer to the habitants of the same building. If after remediation the CIRS condition is still not resolved, a test of the human host is a recommended option always with medical practitioner supervision.