

## SOCIO-TECHNICAL BARRIERS TO THE UPTAKE OF NAMs

Barriers to the uptake of NAMs are not merely **technical** (the structures of, and the processes within, the system), but **social** (behaviours of actors in the system). Findings highlight the presence of these barriers at various levels and across the chemical landscape as well as the **interconnectedness** between different socio-technical barriers.

Over the past decade, considerable progress has been made in developing new approach methodologies (NAMs). Nonetheless, the use of animal testing persists in chemical safety assessments. The research of PrecisionTox Working Group 6 (Regulatory Analysis & Application) explores the barriers, as perceived by stakeholders, that inhibit the take-up of NAMs. The results were informed by an empirical study that generated qualitative data from semi-structured interviews. This involved individual and small group interviews across 32 stakeholders, including industry representatives, regulators, and policy makers from the EU and other jurisdictions.

## Major Identified Barriers to the Uptake of NAMs

Theme	Sub-theme
Views of regulatory science and the legislative framework	Regulatory culture: <ul style="list-style-type: none"> <li>• Acceptance</li> <li>• Familiarity and confidence in animal studies</li> <li>• Lack of trust between actors</li> </ul>
Validation and standardisation	<ul style="list-style-type: none"> <li>• Time to achieve consensus</li> <li>• Human relevance</li> </ul>
Expertise and resources	<ul style="list-style-type: none"> <li>• Pressure on regulatory capacity</li> <li>• Unfamiliarity/lack of experience with NAMs</li> </ul>
Regulatory objectives	<ul style="list-style-type: none"> <li>• Jurisdiction</li> <li>• Principles of exposure versus hazard that underpin the legal framework on industrial chemicals</li> </ul>
Social perceptions	<ul style="list-style-type: none"> <li>• Public unaware of NAMs</li> <li>• Fears of diluting chemical safety</li> </ul>
Scientific development	<ul style="list-style-type: none"> <li>• Comprehensive NAMs for complex endpoints</li> <li>• Mechanisms rather than apical outcomes</li> </ul>

Recommendations based on these findings will be explored in a forthcoming report of the PrecisionTox consortium scheduled to be published January 2025

### Full Report

For the full report, please see the PrecisionTox website <https://precisiontox.org/read-the-report-on-socio-technical-barriers-to-the-uptake-of-nams-here/>

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