

# Summarizing the value of AURORA: Closing words on five years of research

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# Key take-home messages

- **Exposure is widespread.** MNPs are found throughout indoor environments — a major, potentially modifiable source of early-life exposure.
- **Plastic reaches the placenta.** MNPs cross the placental barrier, but transfer is minor and strongly size-dependent. *Potential for direct and indirect effects.*
- **Acute toxicity is limited; chronic effects unknown.** MNPs are taken up by cells and tissues with no or minimal acute toxicity (except for polyamide). Chronic exposure, mixtures and human developmental effects remain open questions.
- **A risk-assessment framework is now in place.** AURORA delivered an early-life-stage risk-assessment framework for MNPs, ready for testing and policy use.
- **Methods and standards are the foundation.** Reliable reference materials, harmonised protocols and rigorous QA/QC are prerequisites for trustworthy human exposure data.
- **Scientific uncertainty ≠ inaction.** There is scientific consensus that humans are exposed to MNPs, that they reach tissues, and that they trigger biological responses. That is reason enough to act.

