

Collaboration on Ototoxicity Risk Assessment (CORA)



Our Mission

The collaborative mission of the committee is to better understand the impacts on the inner ear, resulting from co-exposures to noise and known and suspected ototoxic substances, in the pursuit of identifying safe exposure levels which minimize or eliminate the risk of ototoxicity to the consumer or worker.

Chairs

Public Chair

Dr. Rick Neitzel (University of Michigan)

Private Chair

Dr. Laura Maurer (ExxonMobil Biomedical Sciences, Inc.)

HESI Staff

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Webpage

<https://hesiglobal.org/collaboration-on-ototoxicity-risk-assessment/>

Working Groups

- **Collaboration on Ototoxicity Risk Assessment (CORA).** CORA was officially convened in March 2021 as the newest HESI Emerging Issues 2019-20 Call for Proposals, HESI's traditional new project adoption process. CORA's initial focus is on identifying gaps through a contemporary targeted review of the literature. Through the literature search, the committee aims to understand and identify gaps in hazard assessment of co-exposure to noise and chemical solvents. The results will be published in a manuscript.



Toxicologist Subgroup. This new subgroup is focused on planning a future animal toxicology study. The study will explore co-exposure to noise and a selected chemical in rodents.

Areas of Focus for 2023

- Use results from the literature search, compare clinical metrics and new methods, and determine what existing methods are used in animal studies.
- Develop a study plan to address gaps identified using fit-for-purpose animal studies.
- Begin the assessment of current, historically utilized clinical metrics for ototoxicity against new, improved methods.
- Investigate the necessary perspective for use of large biometric databases.

Strategic Impact Areas

Enhanced efficiency and accuracy in safety assessment practice

The group aims to provide a better understanding of the risk assessment of co-exposures to noise and chemical solvents.



Catalysis of new science

Following a literature search, the group is planning to conduct a new laboratory study generating de novo data to address identified gaps in the field.



2022 Committee Highlights



Participating Organizations

7 government/regulatory agencies,
6 academic/research institutes, 4 industry,
1 other



Publications

1 in progress



Geographic Representation

Canada, France, Japan, United Kingdom,
and United States



Publications

In Progress

Advancing the Science on Ototoxicity: A Comprehensive Targeted Review of Occupational Co-Exposures to Solvents and Noise.



Participating Organizations

Government/Regulatory Agencies

National Institute of Health Sciences (Japan)

Public Health England

US Air Force

US Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health

US Environmental Protection Agency (EPA)

US Food and Drug Administration (FDA)

US Navy

Academic/Research Institutes

French National Research and Safety Institute for the Prevention of Occupational Accidents and Disease (INRS)

Newcastle University

SUNY Plattsburgh

University of Connecticut

University of Michigan

University of Montreal

Industry

Charles River Laboratories

Chevron

ExxonMobil Biomedical Sciences, Inc.

Shell Chemicals, Ltd.

Other

American Chemistry Council