

# SCIENCE IN ACTION

www.epa.gov/research

## **POPULAR SCIENCE DATABASES**

#### **Science Inventory**

https://cfpub.epa.gov/si/

The Science Inventory is a searchable database of EPA science activities and scientific and technical products conducted by EPA and through EPA-funded assistance agreements. Science Inventory records provide descriptions of the activity or product, contact information, and links to available printed material or Web sites.

#### Integrated Risk Information System (IRIS)

https://www.epa.gov/iris



Intended for users without extensive training in toxicology, but with some knowledge of health sciences, IRIS is a human health assessment program that evaluates quantitative and qualitative risk information on effects that may result from exposure to environmental contaminants.

#### Aggregated Computational Toxicology Resource (ACToR)

http://actor.epa.gov/actor/faces/ACToRHome.jsp

EPA's online warehouse of all publicly available chemical toxicity data can be used to find all publicly available data about potential chemical risks to human health and the environment. ACToR aggregates data from over 1,000 public sources on over 500,000 chemicals and is searchable by chemical name and other identifiers.

ACToR allows users to search and query data from other EPA chemical toxicity databases including:

- ToxRefDB ToxRefDB contains thousands of animal toxicity studies on hundreds of chemicals from 30 years- worth of animal toxicity studies.
- **ToxCast** ToxCast provides chemical testing data for in vitro high throughput screening of 300 chemicals. Data can be used to help prioritize chemicals and predict toxicity.
- **ExpoCast** ExpoCast is a database with increasing data and functionality—long term, the database will consolidate observational human exposure data and link to ToxRefDB, AcTOR, and ToxCastDB to help make high throughput exposure predictions. The database currently contains consolidated observational human exposure data and improves access and linkages to health related data.
- DSSTox DSSTox provides a high quality public chemistry resource for supporting improved predicted toxicology.

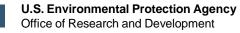
#### Ecotoxicology Database (ECOTOX)

https://cfpub.epa.gov/ecotox/

Integrating three previously independent databases - AQUIRE, PHYTOTOX, and TERRETOX - into a unique system which includes toxicity data derived predominately from peer-reviewed literature, EPA's ECOTOX is a source for locating single chemical toxicity data for aquatic life, terrestrial plants and wildlife.

XXX

1



#### Consolidated Human Activity Database (CHAD)

https://www.epa.gov/healthresearch/consolidated-human-activity-database-chad-use-human-exposure-and-health-studies-and

CHAD contains human activity data from 23 EPA exposure and time-use studies. These studies include information that can help researchers understand the patterns of human behavior that influence their exposure to chemicals in their environment. CHAD is regularly used in EPA research, and is also available to users external to EPA who can use the information in human exposure studies, predictive models, and exposure and risk assessments.

### Health and Environmental Research Online (HERO) https://hero.epa.gov/hero/

Including more than 300,000 scientific articles from peer-reviewed literature, HERO is a database of scientific studies and other references used to develop EPA's risk assessments aimed at understanding the health and environmental effects of pollutants and chemicals.

#### **Environmental Modeling**

https://www.epa.gov/modeling

Modeling is an important component of all environmental work at EPA. It helps inform both decisions and policies. Models improve the understanding of natural systems and how they react to changing conditions, such as exposure to hazardous substances and the temporal and does effects from the exposure.

#### Drinking Water Treatability Database (TDB)

https://www.epa.gov/water-research/drinking-water-treatability-database-tdb-0

TDB presents referenced information on the control of contaminants in drinking water, allowing drinking water utilities, first responders to spills or emergencies, treatment process designers, research organizations, academicians, regulators and others to access referenced information gathered from thousands of literature sources and assembled on one site.

For more information, visit: www.epa.gov/research











www.epa.gov/research