

## WHO WE ARE

Toxicology Excellence for Risk Assessment (*TERA*) is a non-profit corporation dedicated to the protection of public health through the best use of toxicity and exposure data for risk assessment. *TERA* helps environmental, industry, and government groups find common ground through the application of good science to risk assessment.

*TERA* is organized exclusively for scientific purposes, *TERA* has chosen to organize as a non-profit corporation as a way to facilitate successful partnerships between environmental, industry and government groups.



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## TERA's Other Programs

With many years of risk assessment experience at U.S. EPA and in industry, our staff is highly qualified to provide help in the following program areas:

**Verifiable Estimates for Risk Assessment** – developing new environmental and occupational risk values. For information contact [maier@tera.org](mailto:maier@tera.org)

**Research** – conducting original risk assessment research, developing risk methods, and designing toxicological and exposure studies. For information contact [haber@tera.org](mailto:haber@tera.org)

**Peer Review and Peer Consultation** – providing for peer reviews and consultations of assessments prepared by other parties. For information contact [patterson@tera.org](mailto:patterson@tera.org)

**Education** – analyzing risk positions, regulatory, and other approaches of government agencies and industry, and preparing educational or training materials. For information contact [strawson@tera.org](mailto:strawson@tera.org)

**International Toxicity Estimates for Risk** - the *ITER* database provides a web-based database for comparison of human health risk values. For information contact [wullenweber@tera.org](mailto:wullenweber@tera.org)

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## Toxicology Excellence for Risk Assessment

### Proactive Hazard Ranking and Risk Assessment



#### *Toxicology Excellence for Risk Assessment ...*

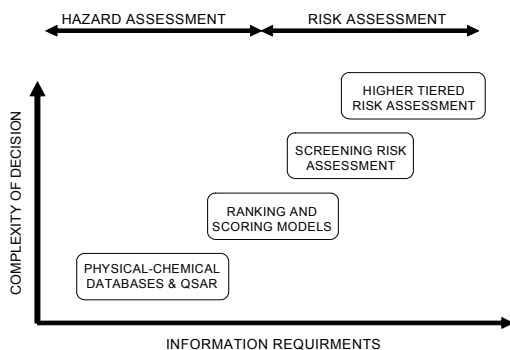
a non-profit corporation with a mission to protect public health through the best use of toxicity and exposure data for risk assessment.

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## What is proactive hazard ranking and risk assessment?

An initiative allowing an organization to understand the health, safety and environmental profile of their services and operations to optimize public health benefits and mitigate potential adverse impacts.

There are literally hundreds of hazard/risk databases, models, and algorithms. The available tools are very diverse having different scientific, geographical, and chemical product focuses, as well as differing levels of sophistication.



This figure (adapted from a publication Risk Analysis, Pittenger, et al. 2003) shows how information needs vary with the complexity of risk management decisions. We provide the right data and apply accurate interpretations to make realistic decisions about chemical and site management.

Based on the diversity in these methods it is difficult for organizations to maintain current in the broad array of applicable methods and apply the right tool for the health question at hand.

## Why proactive hazard ranking and risk assessment?

**Protecting public health and the environment: Understanding comparative risk profiles early in product development allows for directing resources to substances with better safety profiles. For existing chemicals or products, hazard ranking and screening tools allow for setting priorities in implementing risk management strategies.**

**Meeting or exceeding regulatory requirements: These include: chemical registrations, emissions reporting, compliance monitoring of air and water emissions, High Production Volume chemical testing, etc.**

**Satisfying stewardship goals and public expectations: ISO 14000, Responsible Care, “green certification programs”, socially responsible investments, etc.**

**Maintaining a positive public image: Help to ensure the appropriate use and interpretation of public information.**

## How can TERA help?

TERA provides sponsors with an array of services to address needs in the area of proactive hazard ranking and risk assessment. Our collective experience in risk assessment, database searches and Internet models provide a cost-effective way to stay in touch, and to make sound decisions that don't have unforeseen consequences. Relevant scientific areas of expertise covered in hazard ranking and proactive risk assessment methods include:

- ◆ Human health and toxicology
- ◆ Ecological assessment
- ◆ Exposure assessment
- ◆ Sustainability and product stewardship
- ◆ Regulations and risk perception

## What services do we offer?

### TAILORING SERVICES TO SPONSOR'S NEEDS

We offer a range of services depending on our sponsor's needs. Our services include:

**Information Retrieval.** From our library of over 200 data sources, we help our sponsors identify public information sources the public can access to learn about products, services, chemicals and sites.

**Hazard Ranking & Scoring.** Many approaches, available as publications, software programs and databases or web-sites allow users to rank or score chemicals. We develop a hazard screening profile for a chemical or site of interest, and provide reference data to help interpret the results.

**Screening-level Risk Assessments.** Some approaches from publications, software and databases or web-sites allow users to compare health effects with potential exposure to chemicals. These screening risk assessments are often used by regulatory agencies to evaluate chemical management plans. We apply the same methods and data to help sponsors understand how their chemicals will be evaluated.

**Method Validation.** Many approaches in publications, software, or websites have the potential to be inappropriately used, resulting in unreliable and unrealistic predictions and conclusions about human health and ecological risks. We apply technical experience to help sponsors identify appropriate tools. We interpret data and results in a scientifically sound manner, and put the results in perspective.

**Risk Management.** We can help sponsors weigh the costs and benefits of their chemical and site management options and decisions.

**Training.** We provide on-site training to enable sponsors to conduct their own assessments.