Career Opportunities for Toxicologists in the Public Health Field
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What is Public Health?

- What does public health mean to you?
Public Health our Perspective

- Encompasses general population human health, worker health, ecological health and emergency response
Toxicology and Public Health

• What do you think is the role of the toxicologist in the public health field?
Toxicology and Public Health our Perspective

• Diverse applications of toxicology expertise – many issues to address.

• Integration with allied public health science teams to develop proactive solutions.

• Ability to use skills to serve the public health in many sectors
Patient Safety - Viracept Case
Safety Assessment of Ethyl Methanesulfonate

An Occupational Toxicologist Communicates the Hazards of a Chemical
Occupational Exposure Limit (OEL) and its Role in Risk Assessment

Hazard Assessment
- OEL
- Toxicology
- Potency

Risk Assessment
- IH Data
- Engineering Controls
- Work Practices
- PPE
- Form
- Scale

Assess workplace exposure
Does potential exposure exceed the OEL?
Reduce exposure potential
Environmental Toxicology
A Drug Used for Cattle Is Said to Be Killing Vultures

By JAMES GORMAN
Published: January 29, 2004
Exposure Estimations

% penetration to market

Sewage Treatment

Surface Water

Sediment

Soil

Ground Water
PBT

Persistent + Bioaccumulative + Toxic
Example Environmental Toxicology Studies
Emergency Response

Some roles of the public health toxicologist might include:

• Providing hazard and toxicity information to the incident command.
• Interface with medical providers about effects of responses from a spill scenario.
• Engagement with the community on hazards and health effects.
Toxicology and Public Health Career Opportunities

• What jobs do you think are available for a toxicologist in the public health field?

Audience participation – Please use your Q & A window to participate
Example Career Opportunities for Toxicology in Public Health: Government

- There are open positions at many levels of the government.

- Consider the following options:
  - What level of geography?: International, Federal, State, or local options
  - Preferred topical focus? Clinical, food safety, environmental health, occupational.
  - Nature of the expertise application: Is the position primarily regulatory (developing policy) or application oriented?

- Can be high impact, steady work load, with regular funding, but in some cases pace of change may be slower than other sectors.
Example Career Opportunities for Toxicology in Public Health: Academia

- Excellent career to drive developments in the field.
- Consider the following options:
  - What type of impact do you want to make – narrow and deep or broader topical impacts?
  - Often positions focus on research or education – challenging to do both.
  - Would I most enjoy interacting with associate, undergraduate, or graduate students?
- Can be high impact with opportunity to do novel work, but in some cases ideal positions hard to find and securing funding can be challenging. Develop key mentors!
Example Career Opportunities for Toxicology in Public Health: Non Profit Organizations

• There are open positions in many organizations.
• Consider the following options:
  – What type of organization is the best fit? Federal contract support, educational institution, trade organization, or advocacy group are some options.
  – There are non-profit organizations for every topic and scale of issue.
  – Small organizations may require more diverse expertise or effort on your part.
• Can be high impact. In smaller organizations may be self directed with limited resources – so build a network or peers! Fund raising can be an ongoing challenge.
Example Career Opportunities for Toxicology in Public Health: Consulting

• Most large consulting organizations are hiring. This is a growing sector.

• Consider the following options:
  – What type of consulting organization is the best fit? Federal contract support, industry support, litigation support?
  – Many of these groups allow some flexibility in location.
  – For typical consulting ability to travel is often important.

• Can be high impact, with opportunity to work on diverse issues at a fast pace. Needing to deliver high quality technical products on tight timeline and budget can be an ongoing challenge.
Industry that Use Toxicology / Public Health
Resources

• What resources can you use to get a job in public health?

Audience participation – Please use your Q & A window to participate
Our suggested resources

SOT Job Bank

Job Seekers Access
Free Job Search for SOT Members

Employers/Recruiters

RECRUITING

SOT Society of Toxicology
Training in Toxicology an Public

• What kind of classes / training do you think you need?

Audience participation – Please use your Q & A window to participate
Training Resources
Questions and Answers

Audience participation – Please use your Q & A window to participate