



*A symposium by and for high school students in Washington State, March 18, 2008*

### **Student Project Guidelines**

Goal: Students will work in small groups to research and prepare a 10 minute presentation to educate other students about a health or environmental health issue of importance to them or their community. The TEAMS presentation will demonstrate that the students understand the role that toxicology plays in identifying, characterizing and solving such issues. Each group of students will be assigned a toxicologist advisor to help with their project.

Toxicology is the study of the negative effects of chemicals on living organisms. Toxicologists help identify and characterize the risks associated with exposure to chemicals and work to prevent and repair the consequences of exposure to harmful substances.

Presentations should be informative, engaging and based on sound scientific principles and data.

Presentations can be in the form of speeches, skits, multimedia, art or other approaches approved by your teacher.

Students are encouraged to work in small groups to prepare and present their projects. Groups of 3-5 students are recommended, but not mandated.

Each student group will have a toxicologist mentor available for consultation, advice and discussion, starting in January 2008.

For classes that have more than one student group preparing presentations, the teacher (and/or the class, at the teacher's discretion) will decide which presentation will be presented in the live videoconference and which presentations will be presented in the virtual poster session.

All groups presenting at the Society of Toxicology meeting (either in the live videoconference or in the virtual poster session) will receive comments and feedback on their projects from a panel of toxicology experts.

Each student participating in TEAMS will receive a certificate acknowledging participation for their graduation portfolio and a memento from the Society of Toxicology.

There is no cost to students or schools to participate in this event.

**Questions to consider in preparing your TEAMS presentation:**

1. What issue have you chosen to research?
2. What is the community or population that the issue affects?
3. What is the problem?
4. How does it (or might it) affect the health of the community or population now or in the future?
5. What knowledge (data, surveys, brochures, hotlines, etc) is already available to help solve the problem?
6. What scientific data exists to help understand the problem? What data is still needed?
7. What role has toxicology played in identifying, characterizing, or solving the problem?
8. What toxicology principles are important in understanding this problem?
9. What are the various viewpoints about the problem? How do different groups (ie, government agencies, industry representatives, community advocates, workers, health care workers, citizens, etc) feel about the problem?
10. What knowledge is still needed to address the problem?
11. What is already being done about it?
12. What action still needs to take place to manage the problem and protect human health?
13. How can you effectively communicate all of the above information in a short videoconference presentation? Consider using creative ways to communicate your ideas such as skits, debates, or mock TV news segments. What visual aids will be most useful (posters, graphs, photographs, demonstrations, etc)? What information must be included and what can be omitted?
14. Be prepared to tell your audience how you did your research. What sources did you use? What roadblocks did you encounter? What additional research could you do or action could you take?

**Some ideas for topics to get your imagination going:**

- Safety of reclaimed water
- Latex allergies
- Biohazards in your high school
- Effects of pesticides on farm workers
- Mercury levels in fish
- Septic tanks and water quality

- Fetal alcohol syndrome
- Second hand smoke
- Are vaccines safe?
- Water fluoridation
- Red tides and their impact
- Health effects of woodstoves
- Does “natural” mean safer?
- What does “not tested in animals” on a shampoo bottle really mean?
- Safety/toxicity of dietary supplements

**How to get the most out of your toxicologist mentor:**

- Be prepared- plan what you want to ask about, know what you want to get out of the communication
- Be responsible. Don't miss deadlines and don't fail to do what you said you were going to.
- Allow a reasonable turnaround time for answers from your mentor. All of them have full time jobs and may not be able to get back to you immediately.
- Don't expect your mentor to tell you what to do or give you all the information you need.
- Do expect your mentor to point you towards interesting new information and resources, to ask questions that get you thinking about the problem in a whole new way, to give you fair and constructive feedback on your ideas and your presentation plan.
- Ask questions! Your mentor wants to help, but can't read your mind. No question is “too dumb”. If you don't know it, odds are no one else in the group does either.

Full program information is found at <http://www.toxicology.org/ai/k12o/TEAMSAM08.asp> .