

Integrating with Science Curriculum

In addition to conveying the messages aimed at changing health-related behaviors, the Dangerous Decibels activities are designed to meet the following objectives:

- Introduce science content related to the **physiology of hearing**;
- Introduce science content related to the **physics of sound**;
- Address specific **science standards**, benchmarks, and optional grade level mapping as set forth by AAAS (American Association for the Advancement of Science) *Atlas of Science Literacy* and the Oregon Science Standards set by the Oregon Department of Education. Because the standards change over time, the links to standards are maintained only on the website:
www.dangerousdecibels.org/teachersguide/standards .
- Provide launching points for potential **scientific inquiry** work samples.

Teachers may learn more about the curriculum and gain insight and strategies for teaching the curriculum by watching the training program available on DVD. Teachers in the Pacific Northwest may also schedule the OMSI outreach program for their class. Teachers in and around Portland, Oregon may schedule a classroom field trip to visit the Dangerous Decibels exhibit in OMSI's Life Science Hall. Teachers may alternatively utilize this guide to prepare for implementation of any of the hands-on Dangerous Decibels classroom activities by reading the teacher instructions included with each activity. It would be beneficial to first read the following section of this manual: "The Science of Sound, Hearing, and Noise-Induced Hearing Loss – Background Information for the Teacher."

Primary teachers may integrate these activities into lessons on the senses, music, health, or mathematics (graphing, weighing, sorting).

Intermediate teachers may integrate the activities into units on anatomy, the senses, health, or introductory physical science.

Middle school teachers may integrate the activities into units on the physics of sound and waves, health, mathematics, or anatomy and physiology.