

The Local Board of Health Environmental Health Primer Risk Assessment Factsheet



ENVIRONMENTAL HEALTH

Background

- Local public health protection requires identifying and prioritizing needs through risk assessment, the process of predicting the likelihood that a problem will occur.
- Risk management is the process of identifying and evaluating intervention strategies to eliminate or minimize the problem.
- Risk communication assures public involvement in the process of risk assessment and management in order to facilitate a broad-based community understanding of hazards and risks.
- A hazard is an adverse consequence resulting from exposure at a particular level to a chemical, pathogen, or physical substance or condition.
- Risk is the likelihood that in a given situation, the conditions or exposure will be adequate to cause the adverse consequence or effect.
- Risk assessment involves evaluating the potential for adverse effects from exposures (identify the hazard), identifying or setting a safe guideline for each route of exposure, identifying exposure points and estimate exposure levels, and predicting the adverse outcome from exposure to the chemical, pathogen, or physical condition (characterize risk).
- Risk management involves the identification, evaluation, selection, and implementation of the most appropriate action. Environmental and health department officials should develop community-specific criteria for conducting the risk management phase of hazard and risk reduction.

Board of Health Actions

- Work with board members and health department staff to develop a proactive attitude and policy toward health risk assessment, management, and communication.
- Assure that staff are adequately prepared and trained to do risk assessment/risk management.
- Appoint a task force, including the public and other stakeholders, to identify and prioritize community hazards and risks.
- See that partnerships and networks are in place to assure access to data, epidemiological and laboratory services, and other risk assessment and management expertise.
- Develop education and regulatory models to build community capacity to reduce risks independent of compliance monitoring.

Resources for Continuing Education

- Robson, M., and Toscano, W. (Eds). (2007). *Risk Assessment for Environmental Health*.
- National Association of Local Boards of Health. (2011). Risk Assessment. In *The Local Board of Health Environmental Health Primer* (2nd ed.).
- California Environmental Protection Agency. (2001). *A Guide to Health Risk Assessment*. Available at <http://oehha.ca.gov/pdf/HRSguide2001.pdf>

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