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Oil Spill Public Health Advice - Report No. 2

Fortunately, the toxicity to humans from exposure to crude oil, and especially to "weathered" crude oil is very low. The major health hazards to workers and residents involved in cleanup operations are from acute injuries. The major known potential human health hazard from exposure to crude oil is from skin irritation.

Crude oil contains chemicals that can, in high dose and with prolonged exposure, cause skin cancer. While this risk is small, prudent and simple measures such as avoiding direct skin contact and prompt washing of skin and soiled clothing are recommended. Risks of skin cancer will be negligible. **(Advice provided in our May 5, 1989 Bulletin continues to be accurate and consistent with all new findings to this time.)**

The Section of Epidemiology, Alaska Division of Public Health, has continued to investigate potential human health impacts that relate to the Exxon Valdez oil spill. We continue to work with many scientists from industry, unions, and state, federal, and local agencies. Our efforts have concentrated in the following areas:

- Evaluate toxicity from acute and chronic exposure of crude oil to workers, residents, and tourists.
- Evaluate potential for human toxicity from exposure of fish and other seafood to crude oil.
- Conduct surveillance and investigate reports of illness.
- Assure protection of workers and residents involved in cleanup operations.
- Assure safe water and food, provide for human waste disposal, and maintain a high standard of food and restaurant inspection.
- Evaluate potential impact related to subsistence.

Potential Impact on Seafood

In May, the Division of Subsistence of the Alaska Department of Fish and Game began a pilot study called "Testing Subsistence Foods for Contaminants in Prince William Sound and Lower Cook Inlet," in collaboration with the Alaska Department of Environmental Conservation (DEC) and the U.S. Food and Drug Administration (FDA). The purpose of the study was to collect and provide information about the level of contamination and relative health risks, if any, of consuming selected types of subsistence foods harvested in customary village harvest areas. Efforts have been focused on the villages of Tatitlek, Chenega Bay, Port Graham, and English Bay.

The collection phase of the project is ongoing. During May and June, local residents and division personnel collected samples of salmon, clams, and halibut. The samples were then submitted for testing to the DEC Palmer Laboratory and to FDA labs in Bothell, Washington and Washington D.C. Testing includes various chemical tests and organoleptic testing (smelling and tasting). While testing continues, all test results so far have been negative.

When all the results of the tests and interpretations of the results are available, we will all work together with the Alaska Native Health Service and The North Pacific Rim to report and discuss the project's findings in each community.

In addition to these samples, additional subsistence food items from affected villages have been and will continue to be submitted to DEC for testing. So far more than 300 samples have been tested. None have shown signs of contamination with oil.*

These findings reinforce our recommendation that living clams, mussels, and shellfish from inter-tidal areas and fish which do not smell or taste of oil are safe to eat. Seafoods that smell or taste of petroleum should not be eaten.

We will continue to work together to address the health concerns of all persons affected by the oil spill. Subsistence foods will be collected and tested throughout the summer. Studies addressing the long-term impact on the food chain and on human health are being planned and will be done. There will be opportunities for individuals in affected communities to participate in planning and designing these long-term studies.

*Samples tested include salmon, cockles, bidarkas (chitons), snails, dead worms, crab, blue mussels, halibut, butter clams, little neck clams, razor clams, tom cod, and gray cod from English Bay, Port Graham, Larsen Bay, Tatitlek, Karluk, Jacobs Beach, Pilot Point, Akhiok, Skinny Bay, Bligh Island, Busby Island, Ouzinkie, Cat Island, Camel Rock, and Boneyard Beach.

Agencies and organizations participating in the evaluation of potential acute and chronic health effects from the spill include the following:

State: Division of Public Health; Department of Environmental Conservation; Department of Fish & Game, Division of Subsistence; Department of Labor.

Federal: Alaska Area Native Health Service, Indian Health Service (IHS); Centers for Disease Control; National Institute for Occupational Safety & Health (NIOSH); Centers for Environmental Health & Injury Control (CEHIC); Agency for Toxic Substances & Disease Registry (ATSDR); National Institute for Environmental Health Services (NEIHS); Food & Drug Administration (FDA); U.S. Department of Agriculture (USDA); U.S. Department of Labor; Laborers Union Local 341; Laborers National Health & Safety Fund; Exxon; Occupational Medicine Program, Harborview Medical Center, Seattle.