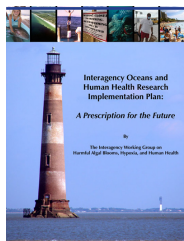


Announcing a New Interagency Report on Oceans and Human Health Research



What is the central issue?

Many human health risks and benefits stem from the oceans, coasts and Great Lakes. By increasing our understanding of the connections between oceans and human health, Federal agencies continue to improve management decisions and help ensure safe beaches, recreational waters, seafood, and drinking water, and promote discovery of new pharmaceuticals and beneficial health products from the sea.

As recommended by all major U.S. state of the ocean reports

Why should I care?

The Health Risks:

Seafood Contamination, Harmful Algal Blooms and Polluted Beaches

- ◆ Seafood-borne illnesses are under-reported, often misdiagnosed and may be increasing. Culprits are harmful microorganisms in shellfish such as oysters, and accumulation of heavy metals, contaminants or biotoxins in seafood that can cause a wide variety of symptoms.



- ◆ Harmful algal blooms (HABs) are increasing in number, type and frequency and result in economic losses greater than \$82 million/year. HABs can cause increased respiratory symptoms in people visiting beaches, marine mammal die-offs, shellfish closures, and seafood poisonings.

- ◆ In 2006, U.S. beaches were under an advisory or closed 34,358 days, or about 5% of the time monitored, due to the presence of bacteria, viruses or other harmful microbes, with potentially large associated public health costs.



The Health Benefits:

New Drugs, Healthy Coasts and Economies, and Healthy Seafood

- ◆ The ocean provides a medicine chest of new pharmaceuticals and natural products with potential treatments for cancer, antibiotic resistant staph infections, pain, inflammation, asthma, deadly viruses, Alzheimer's disease and other ailments.

- ◆ Healthy and functioning coastal ecosystems provide clean beaches that host over 910 million trips/year, support millions of jobs and \$44 billion in spending. Over 40 million people depend on safe drinking water from the Great Lakes alone.



- ◆ Safe seafood does a body good... it supplies protein, nutrients and essential omega-3 fatty acids, protects against cardio-vascular disease and other diseases, benefits brain development in fetuses and children and generates over \$80 billion/year.



How will OHH research and application address health risks and benefits?

The Interagency Oceans and Human Health Research Implementation Plan: A Prescription for the Future

Available at the Council on Environmental Quality's Web site: http://ocean.ceq.gov/about/sup_jsost_iwgs.html

- ◆ Outlines health risks and benefits stemming from the sea, and how Federal research and outreach advances scientific understanding of the connections between oceans and human health (OHH) to provide usable information for improved management and prediction of marine-related public health problems, and development of new treatments of human diseases.
- ◆ Summarizes on-going OHH programs of the National Oceanic and Atmospheric Administration's (NOAA) Oceans and Human Health Initiative (OHHI) and the National Science Foundation (NSF) - National Institute for Environmental Health Sciences (NIEHS) Research Centers of Excellence in OHH and related OHH activities of the Centers for Disease Control and Prevention (CDC), Environmental Protection Agency (EPA), Food and Drug Administration (FDA), National Aeronautics and Space Administration (NASA), U.S. Geological Survey (USGS) and Marine Mammal Commission (MMC).
- ◆ Recommends implementation actions that when taken together will help build a strong Interagency OHH Program and advance OHH research and useful application, leading to reduced health risks and increased health and economic benefits (see next page for list of actions).

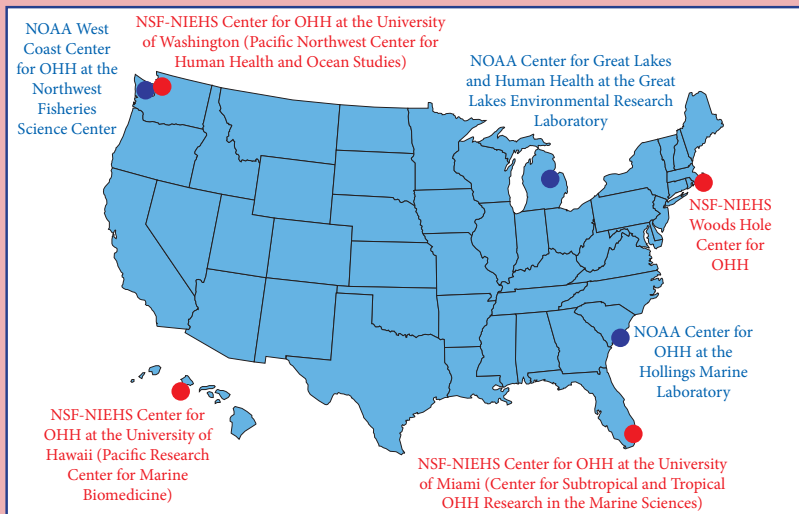
Where can I learn more about this issue?

Please contact Paul.Sandifer@noaa.gov for more information.

The Interagency Oceans and Human Health Research Implementation Plan: *A Prescription for the Future*

What are the recommended actions?

ACTION 1: Work through existing OHH programs and partnerships, specifically NSF-NIEHS OHH Centers and NOAA's OHHI including OHHI Centers, external grants, scholars, and traineeships, and through collaboration with OHH-related activities in the CDC, EPA, FDA, MMC, NASA, and USGS.



ACTION 2: Target priority research dealing with pathogens, chemical contaminants, HABs, seafood safety, pharmaceuticals and other beneficial products and in cross-cutting areas such as epidemiology, sentinel species, genomics and related technologies, and social, behavioral and economic sciences.



ACTION 3: Support research infrastructure in such areas as linking to the ocean observing systems, data management and access, development of standards and standardized methods, and access to the sea.



ACTION 4: Support transition of OHH research to application through targeted OHH outreach and education activities and development of rapid response capabilities to ocean-related human health emergencies.

ACTION 5: Improve coordination of OHH activities within and across agencies and internationally through long-term support for interagency coordination of OHH research and outreach.

How will this improve public health in our Nation?

- ◆ Managers will use information, tools and products (such as forecasts or new drugs) derived from OHH research to make decisions to help ensure healthy and productive marine ecosystems, people, and economies.
- ◆ Development of a dynamic, diverse, and interdisciplinary OHH workforce will continue to advance OHH research and application, both now and in the future.
- ◆ A well informed public that understands the connections between ocean health and human health will act as a steward, and thereby prevent and reduce health risks and maximize health benefits.

Want more information on national OHH programs?

Visit NOAA's OHHI Web site: <http://www.eol.ucar.edu/projects/ohhi/> and NSF-NIEHS Research Centers for OHH Web site: <http://www.who.edu/science/cohh/index.htm>