

OHHI Vision

A Healthy Ocean for Healthy People

OHHI Mission

Improve understanding and management of the ocean, coasts and Great Lakes to enhance benefits to human health and reduce public health risks

As the nation's lead ocean agency, NOAA's OHHI investigates the relationship between environmental stressors, coastal condition and human health to maximize health benefits from the ocean, improve the safety of seafood and drinking waters, reduce beach closures, and detect emerging health threats.

OHHI Approach

Catalyze innovative and interdisciplinary oceans and human health research

Foster and facilitate strong partnerships among agencies, academia and the private sector on oceans and human health

Develop and deliver useful tools, technologies and environmental information to public health and natural resource managers, decision-makers and the public

OHHI Goals

Goal 1: Lead the development of early warning systems to forecast threats and predict long-term risks to human health throughout U.S. coastal and Great Lakes waters

Strategic Objectives:

- Develop methods, tools, and technologies to predict ocean-related public health risks from pathogens, chemical pollutants, and toxins
 - (Potential Performance Measures: #, type, diversity of application, sensitivity, specificity, reliability, reproducibility)
- Characterize impacts of coastal ecosystem change, in response to natural factors and environmental stressors such as climate change, land-use and pollution, on ecosystem goods and services related to human health
 - (Potential Performance Measures: #, diversity, strength, extent of coverage)
- Use sentinel species and habitats as integrative indicators of ocean health threats to humans

- (Potential Performance Measures: identify # and types of species/habitats that are good indicators; assess relative effectiveness to integrate and indicate human health threats by sentinel type)
- Develop and integrate data, tools and technologies applicable to human health into ocean observing systems
 - (Potential Performance Measures: # of products developed, # incorporated into OOS)
- Engage public health and natural resource managers and decision-makers in order to develop and deliver useful products and services
 - (Potential Performance Measures: # of partnerships, # workshops, # of products used by managers and/or public health officials)
- Evaluate prototype early warning systems and their components for readiness and plan for transition to operations
 - (Potential Performance Measures: # of products transitioned)
- Evaluate utility and value of early warning systems and their components to identify, mitigate and reduce public health risks and related economic and socio-cultural impacts
 - (Potential Performance Measures: # of times used for public health decision-making, # of evaluations, # of exposure prevented, value of increased access to healthy resources)

Goal 2: Investigate and optimize health benefits from the sea

Strategic Objectives:

- Assess health benefits and risks of seafood consumption through partnerships with fishery and aquaculture communities
 - (Potential Performance Measures: # of risk indicators evaluated)
- Partner with subsistence communities to document and evaluate the benefit and risk of marine food products for health promotion and socio-cultural value
 - (Potential Performance Measures: # of partnerships and or communities involved)
- Develop and transfer technology to enhance the healthful characteristics of seafood and minimize ocean-related contamination of seafood
 - (Potential Performance Measures: # of technologies developed, # of technologies transferred)

- Increase and leverage partnerships to discover and develop pharmaceuticals, molecular probes, bioactive compounds, and other marine natural products through innovative and ecologically sound exploration and laboratory approaches
 - (Potential Performance Measures: # of partnerships, # of discoveries)
- Develop and transfer, to other researchers and the private sector, useful aquatic biomedical models to enhance understanding of human disease processes and provide other health benefits
 - (Potential Performance Measures: # developed, # transferred)
- Characterize and estimate public health related economic, socio-cultural and broader health benefits (and risks) of coastal and marine resources
 - (Potential Performance Measures: # of characterizations, # of economic and socio-cultural evaluations)
- Evaluate utility and value of tools, technologies and information transferred to managers, decision-makers, and other partners
 - (Potential Performance Measures: XX)

Goal 3: Develop a robust oceans and human health community working across disciplines and institutions to improve public health

Strategic Objectives:

- Provide opportunities and institutional mechanisms to support interdisciplinary OHH research such as Centers of Excellence, traineeships, early career and distinguished scholar awards, grants and research collaborations
 - (Potential Performance Measures: # of opportunities, diversity and nature reflective of OHH)
- Partner with the OHH programs of the NSF and NIEHS, as well as other interested agencies, to stimulate scientific interest in OHH across broad institutional and disciplinary boundaries
 - (Potential Performance Measures: # scientific symposia led/conducted; participation in Gordon Research Conference)
- Identify key end-users and their needs in order to develop and deliver useful OHH tools, technologies and information
 - (Potential Performance Measures: # of needs assessment workshops, meetings with end-users, # of audiences)

- Communicate findings to decision-makers, managers, scientists and the public
 - (Potential Performance Measures: # of workshops, meetings, reports, informational products)

- Provide OHHI information to ocean education programs and media outlets for their use in promoting ocean literacy and stewardship
 - (Potential Performance Measures: # input into curricula, # of public displays, # of issue papers, # of news articles, # teachers or other educators using OHH materials)

- Partner with other agencies to enable a rapid and coordinated OHH community response to ocean and coastal public health emergencies
 - Potential Performance Measures: (# of plans, # of partnerships)