

Collaborating to Provide Louisiana's Communities with the Environmental Health Tools to Make Informed Decisions



Photo courtesy of Cade Martin, CDC

Emán Williams and Kate Friedman Louisiana Department of Health

“

*Alone we can do so little; together
we can do so much”*

Helen Keller

”

Presentation Topics

- Today's Objectives
- SEET and SEET Resources
- CDC's Environmental Public Health Tracking Program
- Louisiana Environmental Public Health Tracking Pilot Projects
- LDH/LDEQ Collaboration through the Years
- Louisiana's Environmental Public Health Tracking Program
- LDH Health Data Portal Demonstration

Objectives

- Increase awareness about the Centers for Disease Control and Prevention's (CDC) Environmental Public Health Tracking (Tracking) and the Louisiana Department of Health's (LDH) Tracking Programs
- Increase awareness about LDH/LDEQ 's Tracking partnership
- Increase awareness about additional LDH resources available through the Health Data Portal & Section of Environmental Epidemiology & Toxicology (SEET)
- Increase awareness about LDH's Health Data Portal

Getting to Know the LDH Section of Environmental Epidemiology & Toxicology (SEET)

Chemical
Emergency and
Surveillance

Environmental
Health Assessment
& Public Health
Advisories

Environmental
Health Education

Environmental Public
Health Tracking

Heavy Metal and
Carbon Monoxide
Exposure

Indoor
Environmental
Quality

Occupational Health
Surveillance

Pesticide Exposure

Private Well
Initiative

SEET Resources

- Knowledgeable staff
- Environmental Publications on a variety of Louisiana specific topics
- Toll Free Hotline 1-888-293-7020
- Website: <http://ldh.la.gov/seet>

SEET Publications

CONTAMINANT	CONTAMINANT SOURCE/POSSIBLE INDICATORS
STANDARD SYSTEM TESTS	
Water hardness, pH* (e.g., Calcium, Ca ²⁺ , Magnesium, Mg ²⁺) Alkalinity, Corrosivity*	Natural properties of the source water or surface water (springs)/system corrosion and staining of toilet, bathtub, or sink. Formation of white (scale-colored) hard water deposits on plumbing fixtures.
TOXICOLOGICAL/ENVIRONMENTAL MICROORGANISMS/PAHs	
Total/Total Coliforms, E. coli ^o , cryptosporidium*	Surface water intrusion in areas of intensive agriculture, livestock, CAFOs, construction, development, flooding or leaking septic tanks.
Turbidity, Total Dissolved Solids (TDS)*	Water may be cloudy, taste salty or gritty; recurring gastrointestinal problems.
Iron bacteria, Iron* (Fe ²⁺)	Naturally occurring but more likely to be present in corroding systems where iron exists in high pH or from leaching; clogs, clogs; brown growth in toilet, low water pressure.
Hydrogen Sulfide (H ₂ S) gas	Surface water intrusion creates a favorable environment for anaerobic bacteria, applying deoxygenation (chlorine has rotten egg smell).
INORGANIC CHEMICALS (NOX), METALS	
Arsenic (As) ³⁺	Naturally occurring, detected in Louisiana Alluvial Aquifers (Shallow Mississippi River); runoff from ornamental, industrial sources (e.g., electronics production, glass, waste sites or treated wood sites).
Cadmium (Cd) ²⁺	Naturally occurring, but man-made sources include manufacturing (batteries, pigments, coatings, plating, metal production) and phosphate fertilizers.
Chromium (Cr) ⁶⁺	Naturally occurring, other potential sources include industrial wastewater (e.g., steel, pulp/mill).
Copper (Cu) ²⁺ **	Naturally occurring, or caused by system corrosion (blue or green stains on fixtures and laundry).
Lead (Pb) ²⁺ **	Naturally occurring or caused by system corrosion (older homes with lead plumbing or solder); possibly in homes located near historical highways (leaded gasoline run-off pre-1980s), industrial areas (battery production), leaded, agricultural, or pesticide storage (above or below ground).
Manganese (Mn) ²⁺	Naturally occurring (brown or black stains on fixtures and laundry).
Nitrate/Nitrite (NO ₃ ⁻ , NO ₂ ⁻) ^o	May occur naturally, but man-made sources include areas of intensive agriculture (runoff from fertilizer use), CAFOs, landfills, dumps, sewage and leaking septic tanks.
ORGANIC CHEMICALS (OCs) *Highly variable and limited to a small area	
Dioxin ^o , PCBs ^o (Polychlorinated Biphenyls)	Emissions from waste incineration or combustion, health, chemical industrial discharge, older petroleum storage, underground leaching, persistent in the environment.
Pesticides: Herbicides (e.g., Atrazine ^o), Fungicides (e.g., DDT, organophosphates), Phthalates, Insecticides	Nearly agricultural or residential areas, gardens, cattle or hives (to control wasps, bees, or other pests) may be introduced through backflow or flooding; some are no longer used yet persist in the environment (e.g. lead arsenate, chlordane ^o).
Volatile Organic Chemicals (VOCs) ^o (e.g., Benzene ^o , Penta-chlorophenol ^o , Trichloro-ethene ^o , Vinyl Chloride ^o)	Source tend to be industrial, and may include paints, solvents, gas stations, dry cleaners, industrial waste sites and heated hot tanks. Sources may also include pesticide application.
PAHs/PCB/DEP^o	
Balium ^o , Uranium ^o , Radon gas	Naturally occurring from erosion of natural deposits, but radon gas may be introduced from man-made sources. In Louisiana this would mean by include oil pits or waste ponds, drilling sites or equipment.

For information on chemicals and their health effects:
Louisiana Department of Health (LDH)
Section of Environmental Epidemiology & Toxicology (SEET)
 (225) 342-7136 or (888) 293-7020

For information on the steps to sample your private well:
LDH Private Well Institute
 www.lch.la.gov/PWI

For more information on specific water contaminants and tests:
LDH Louisiana Safe Drinking Water Program (LSOWP)
 (225) 342-7420

U.S. Environmental Protection Agency (U.S. EPA) Safe Drinking Water Hotline: (800) 426-4791 or visit www.water.epa.gov

To contact your parish sanitarian about submitting well samples in your area:
LDH Onsite Wastewater Program
 (225) 342-8958 - www.lch.la.gov/CreditWasteWater

To submit notification and register your private water well:
Louisiana Department of Natural Resources (LDNR) Environmental Drinking Ground Water Resources Program
 (225) 342-8244 or visit www.dnr.louisiana.gov/groundwater

To locate a Louisiana licensed well contractor:
LDNR Office of Conservation (225) 342-8244 or visit http://sonlito.dnr.state.la.us/surround/cert_prod/cert_con_www_active_offices

For more information on aquifer monitoring and water quality:
Louisiana Department of Environmental Quality (LDEQ) Business Community Outreach & Incentives District: (225) 219-3510, (866) 896-LDEQ (5337) or visit www.doeq.la.gov

Louisiana Department of Agriculture and Forestry (LDAF) 24-hour pesticide hotline: (855) 452-5323 or visit www.lcafla.gov

Additional information on private water well health and safety:
National Ground Water Association (NGWA)
 (800) 551-7379 or visit www.ngwa.org, www.wellowner.org

Louisiana Ground Water Association (LGMWA)
 (225) 744-4554 or visit www.lgmwa.org

U.S. Centers for Disease Control and Prevention (U.S. CDC) Water-related Diseases and Contaminants in Private Wells
www.cdc.gov/healthywater/drinking/privatewells/diseases.html
 (800) 232-4636 or email ocoinfo@cdc.gov

U.S. Environmental Protection Agency (U.S. EPA) Private Drinking Water Wells
www.epa.gov/safewater/privatewells/index2.html

Drinking Water Contaminants
www.epa.gov/ground-water-and-drinking-water/national-primary-drinking-water-regulations
 or visit www.water.epa.gov

US Geological Survey Louisiana Water Science Center
<https://la.water.usgs.gov/GWResources.htm>

LSU Ag Center
 Food & Water Safety: Testing Your Well Water for Safety
www.lsuagcenter.com

Private Water Well Testing in Louisiana



What You Need to Know to Protect Your Water



What is the Best Way to Prepare Seafood?

Seafood is naturally nutritious and low in fat and calories (180-200 calories in most 6-ounce servings). It is important to select techniques and recipes that minimize fat, so you don't spoil the nutritional benefits of seafood. While cooking methods are important for maintaining the health benefits of seafood, mercury is found throughout the fish, so cleaning techniques will not reduce the amount of mercury in a fish meal.

Healthy Cooking Methods Include:
 Baking, broiling, poaching, steaming, grilling, microwaving, or pan-frying in a little butter or oil will minimize the amount of fat in your dish.

One standard technique that can be used for a variety of fish is to bake for 10 minutes at 400 degrees for each inch of thickness, turning the fish half-way through cooking.

Avoid
 Deep-frying and cream sauces will add fat and calories to a meal.

How Do I Spot Quality Frozen Fish?

Packaging should never be damaged- don't buy packages covered in frost or ice crystals. These fish may have been stored a long time or thawed and refrozen. The color of fresh fish fillets vary but should always be bright and uniform, never chalky or yellow at the edge. Filets should be moist and firm, and should always smell fresh and mild, never fishy.



How Do I Store Fish at Home?
 Keep fish on ice and out of direct sunlight. Cook and eat fresh fish or thawed frozen fish within 2 days. Fish can be kept in the freezer for up to 3 months. Cooked fish can be refrigerated for 3-4 days and frozen for one month.

Should I Eat the Fish I Catch in Louisiana?

YES! Locally-caught fish are always fresher and in general, more nutritious than frozen fish. However, it is always wise to be informed of fish consumption advisories in your area. Follow recommendations outlined in advisories issued by the Louisiana Office of Public Health to avoid health risks.

Louisiana Fish Advisories can be found on the web at www.seet.dh.louisiana.gov or by calling 1-888-293-7020.

Where Can I Find More Information?

Seafood Information and Resources: The Food & Drug Administration (FDA) Toll Free: 1-888-SAFEFOOD www.cfsan.fda.gov/seafood1.html

Mercury levels in fish not in this brochure: <http://www.cfsan.fda.gov/~frf/sea-mehq.html>

Mercury and its health effects: Environmental Protection Agency (EPA) <http://www.epa.gov/mercury/effects.htm>

Fish consumption during pregnancy: Environmental Protection Agency (EPA) <http://www.epa.gov/waterscience/fishadvice/advice.html>

Cooking and recipe ideas: Louisiana Seafood and Promotion Marketing Board <http://www.louisianaseafood.com/>

The National Fisheries Institute www.aboutseafood.com

Acknowledgements
 This brochure was produced by the Louisiana Department of Health and Hospitals (LDHH), Office of Public Health (OPH), Section of Environmental Epidemiology and Toxicology (SEET).

This public document was printed at a cost of \$00.08. In this printing 75,000 copies were produced. This document was produced by Department of Health and Hospitals Office of Public Health, P.O. Box 3234, Baton Rouge, LA 70821, to inform the public, under the authority of R.S. 36:258(B). It was printed in accordance with the standards for printing by state agencies established pursuant to R.S. 43:31.

Promoting Healthy Living in Louisiana

Seafood for a Healthy Lifestyle



“

*Better Information for a
Better Health*

”

<https://www.youtube.com/watch?v=T1Ad79HGeJE>

Making Connections

- The environment plays a role in our development and our health.
- Researchers have been able to link some environmental hazards to certain diseases.



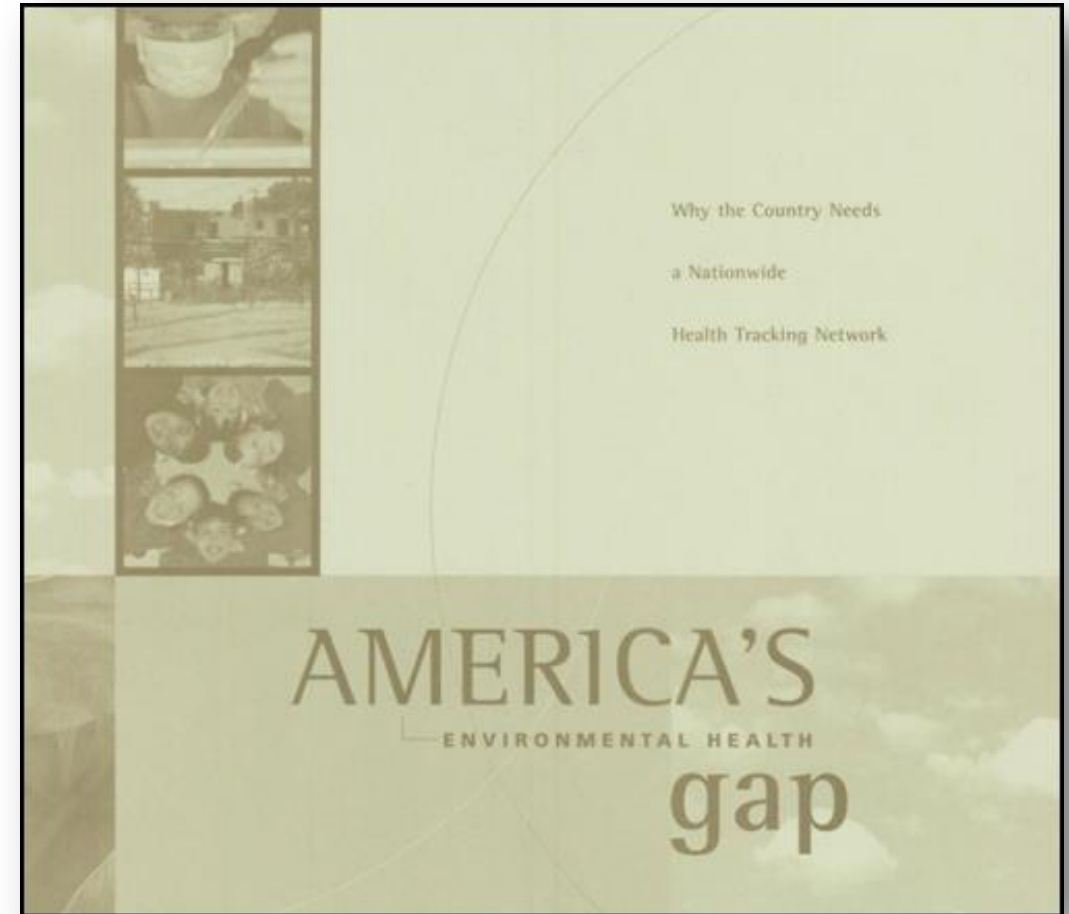
Connections Between the Environmental Hazards and Health Outcomes

- Lead and Neurological Problems
- Air Quality and Asthma
- Asbestos and Mesothelioma



Birth of Environmental Public Health Tracking

- **2001:** Pew Environmental Health Commission released “America’s Environmental Health Gap: Why the Country Needs a Nationwide Health Tracking Network.”
- **Report Findings:** Existing environmental health system is neither adequate nor well organized, recommended the creation of a “Nationwide Health Tracking Network for diseases and exposures (CDC, 2005).”

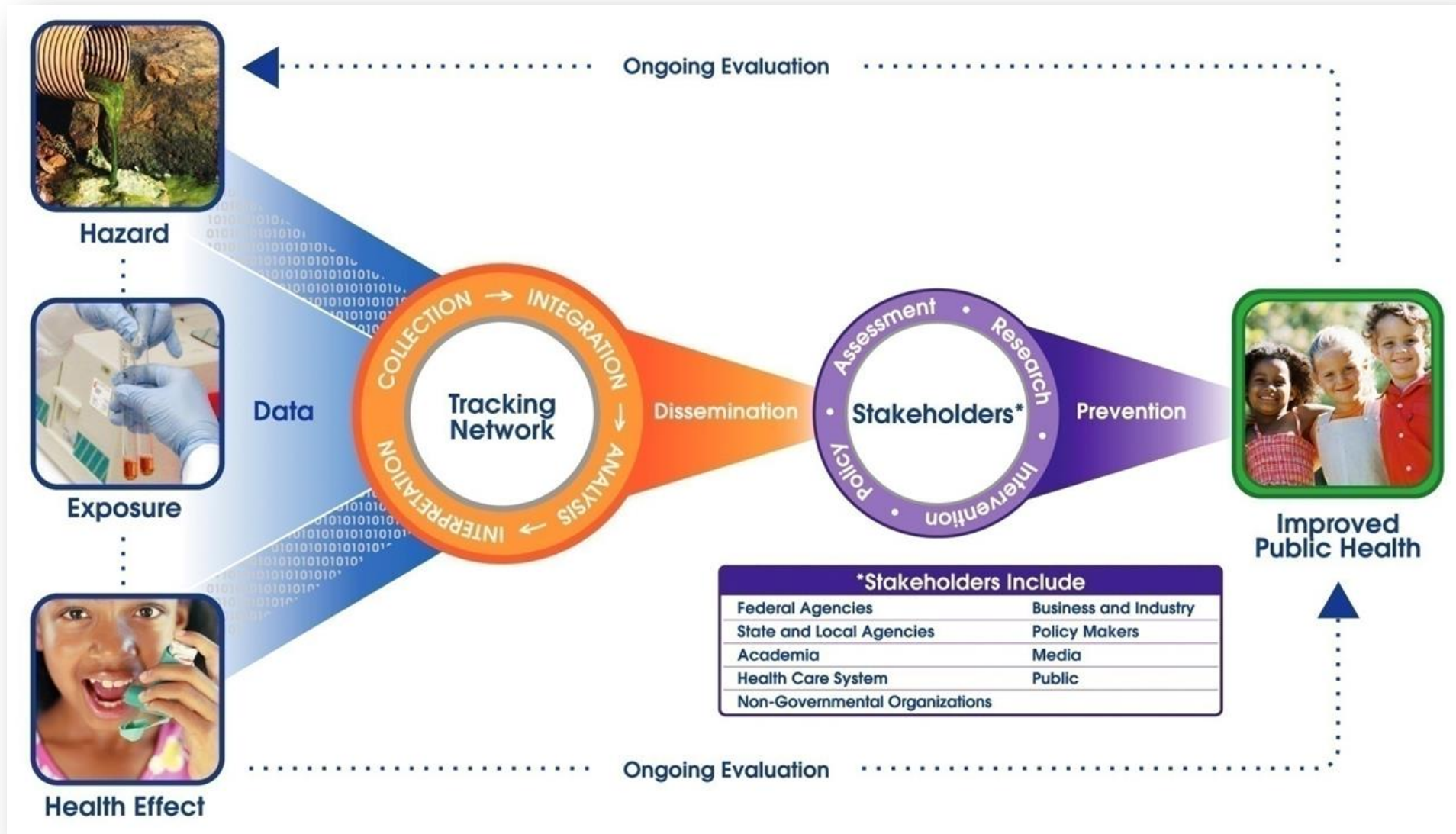


Let's Get Tracking

- **2002-2006:** Congress provided the CDC with funding for Tracking pilot projects.
- **2006:** Congress provided the CDC with funding to establish the CDC's Tracking Program
- **2009:** CDC launched the CDC's Tracking Program
www.ephtracking.cdc.gov



Environmental Public Health Tracking Program



Tracking Data

- Types of Indicators
 - Core Indicators
 - Indicators of community interest



** Source Louisiana Department of Environmental Quality (LDEQ)*

Health Indicators

- Asthma
- Birth Defects - new
- Cancer
- Carbon Monoxide Poisoning
- Childhood Lead Poisoning
- Heart Attack
- Reproductive and Birth Outcomes



Environmental Indicators

- Climate
- Ambient Air (ozone and particulate matter)
- Public Drinking Water (Arsenic and Nitrates)



* Source LDEQ

Population Indicators

- Health Factors and Behaviors
- Sociodemographics
- Populations Exposures
- Pesticide Exposures
- Childhood Blood Lead (coming soon)



CDC's Tracking Website



National Environmental Public Health Tracking Network



Better information for better health

The National Environmental Public Health Tracking Network (Tracking Network) brings together health data and environment data from national, state, and city sources and provides supporting information to make the data easier to understand. The Tracking Network has data and information on [environments and hazards](#), [health effects](#), and [population health](#).

On the Tracking Network, you can:

- Use the [Query Tool](#) to view interactive maps, tables, and charts
- View [Info by Location](#) for county level data snapshots
- Visit [state & local tracking websites](#)

CDC's National Environmental Public Health Tracking Program created and maintains the Tracking Network. [Learn more about Tracking.](#)



EXPLORE OUR NEW DATA QUERY TOOL

View & download all data
Maps · Charts · Tables

[GO](#)

INFO BY LOCATION

Data for you!
View data by county or zip code

[GO](#)

STATE & LOCAL TRACKING PROGRAMS

Websites
Grantee Profiles
Data Highlights

[GO](#)

Environments



Pesticide Exposures
Climate Change
Outdoor Air

[More >](#)

Health Effects



Asthma
Cancer
Childhood Lead Poisoning

[More >](#)

Population Health



Populations and Vulnerabilities
Health Impact Assessments
Children's Environmental Health

[More >](#)

 COMMUNICATION RESOURCES

 SUCCESS STORIES

 TRACKING IN ACTION VIDEOS

 QUICK REPORTS: DATA TABLES

 DOWNLOADABLE DATASETS

 INDICATORS AND DATA

Louisiana's Tracking Pilot Projects and Program



LA Act 666

- ▶ **2003:** LA Act 666 required the state to develop an environmental health surveillance system to track physical, chemical, biological, and social factors that may play a role in the development of chronic diseases affecting the citizens of Louisiana.



History of Tracking in Louisiana



- Wood Preservation and Treatment Pilot Project

- Fish Tissue & Blood Mercury Project

- Tracking Network Implementation

- Maintenance and Enhancement of the Tracking Network

- Enhancing Innovation & Capabilities

Wood Preservation and Treatment Pilot Project



This project focused on linking environmental, exposure and health outcome data from wood preservation and treatment sites.

Fish Tissue and Blood Mercury Project

The purpose of this project was to collect fish-tissue mercury and human blood mercury data to identify communities where the residents had high blood mercury levels and were eating fish that had high levels of mercury.



“

Our goal was to create a site that makes it easy for researchers and anyone else who is interested in Louisiana's health care data to find and analyze the information ”

Dr. Rebekah Gee, Secretary of the Louisiana Department of Health

Components of LA Tracking

- IT Network Planning & Development
- **Partnerships, Agreements & Contracts**
- Data Preparation & Analysis
- Promotion, Marketing and Outreach and Risk Messaging



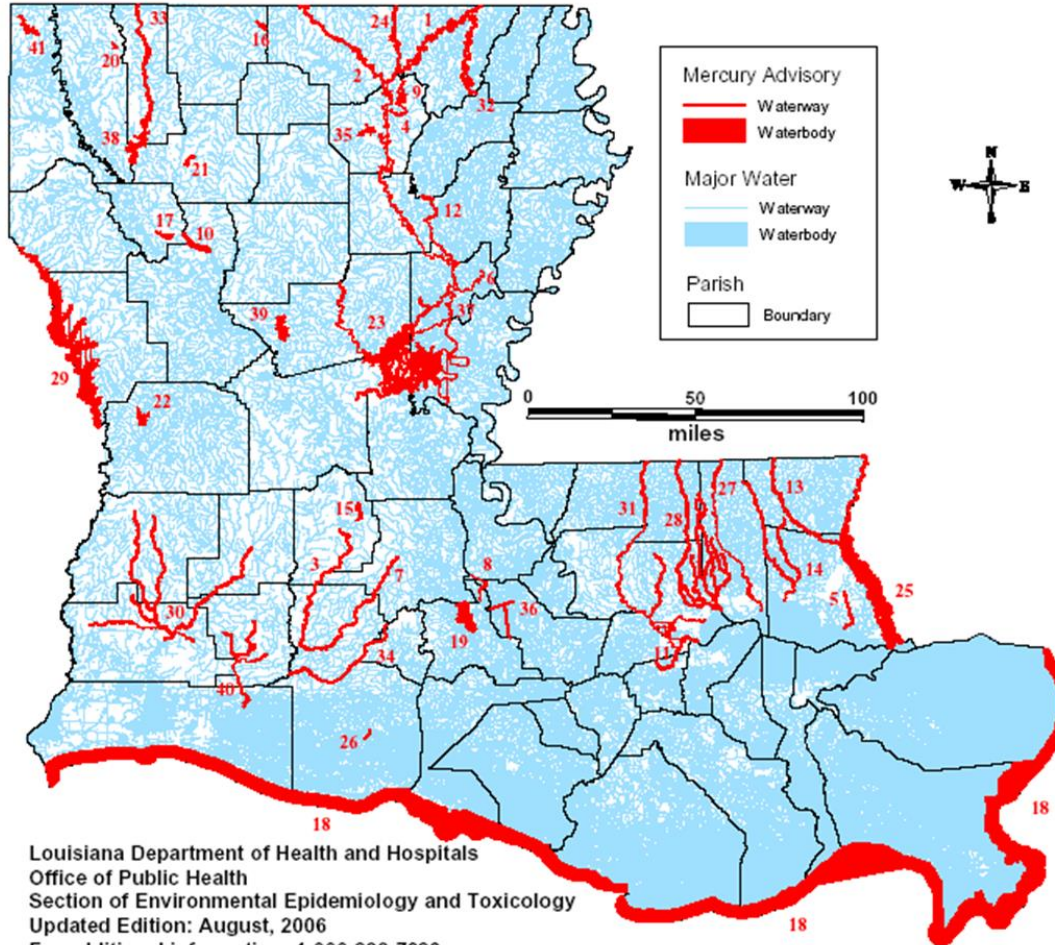
LDH/LDEQ Partnership: Air Quality



Source: LDEQ

LDH/LDEQ Partnership: Fish Advisory Program

Louisiana Mercury Fish Consumption Advisories



Louisiana Department of Health and Hospitals
Office of Public Health
Section of Environmental Epidemiology and Toxicology
Updated Edition: August, 2006
For additional information: 1-888-293-7020
Web site: [Http://www.dhh.louisiana.gov/offices/page.asp?id=205&detail=6532](http://www.dhh.louisiana.gov/offices/page.asp?id=205&detail=6532)

The Louisiana Department of Health and Hospitals/Office of Public Health/
Section of Environmental Epidemiology and Toxicology (SEET) cannot guarantee the accuracy
of the information contained on this map and expressly disclaims liability for errors and omissions in its contents.

LOCATION	NUM
Amite River Drainage Basin	31
Bayou Bartholomew	1
Bayou Bonne Idee	32
Bayou Chene and Bayou Lacassine	40
Bayou De Loutre and Associated Lakes	2
Bayou des Cannes	3
Bayou DeSiard	4
Bayou Dorcheat	33
Bayou Liberty	5
Bayou Louis and Lake Louis	6
Bayou Plaquemine Brule	7
Bayou Queue De Tortue	34
Big Alabama Bayou	8
Black Bayou Lake (Caddo)	41
Black Bayou Lake (Ouachita)	9
Black Lake	10
Blind River	11
Boeuf River	12
Bogue Chitto River	13
Bogue Falaya and Tchefuncte Rivers	14
Calcasieu River Drainage Basin	30
Cheniere Lake	35
Chicot Lake	15
Corney Lake	16
Grand Bayou Reservoir	17
Gulf of Mexico	18
Henderson Lake Area	19
I-10 Canal and Work Canal	36
Iatt Lake	39
Ivan Lake	20
Kepler Creek Lake	21
Lake Bistineau	38
Lake Vernon	22
Little River/Catahoula Lake Area	23
Ouachita River	24
Pearl River	25
Seventh Ward Canal	26
Tangipahoa River	27
Tew Lake	37
Tickfaw River Drainage Basin	28
Toledo Bend Reservoir	29

LDH/LDEQ Partnership: Environmental Health Assessment



Source LDEQ: Devil's Swamp Lake (proposed Superfund site)

The Louisiana Tracking Website

The screenshot shows the website's header with the Louisiana Department of Health logo and the name of the Secretary, Rebekah E. GEE, MD, MPH. A navigation bar below the header contains the text "ENVIRONMENTAL PUBLIC HEALTH TRACKING" and a breadcrumb trail: "Louisiana.gov > LDH > Environmental Public Health Tracking".

On the left side, there is a vertical menu with the following items: HOME, ABOUT US, WHAT WE TRACK, EXPLORE DATA, and RESOURCES.

The main content area features a large image of a child blowing bubbles, with a map of Louisiana overlaid on the scene. Below the image, the text reads: "Environmental Public Health Tracking provides data and information on health outcomes, the environment, population, and exposures. Louisiana is one of 26 state and local health departments to be part of the U.S. Center of Disease Control and Prevention's (CDC) National Environmental Public Health Tracking Network. The Louisiana Department of Health Environmental Public Health Tracking Program has partnered with the Bureau of Health Informatics to create and launch an open data portal for Louisiana residents to explore data related to health and the environment. To access this data portal, click here." Below this text is an email contact: "Questions? Email us at tracking@la.gov".

At the bottom of the main content area, there is a call to action: "Visit CDC Tracking Network today: www.cdc.gov/ephttracking".

On the right side, there is a section titled "CDC's Tracking Netw..." with a video player icon and the text "NATIONAL ENVIRONMENTAL PUBLIC HEALTH TRACKING NETWORK". Below this is a "CONTACT US" section with the phone number "1.888.293.7020" and two "REQUEST MORE INFO" buttons. The text "For Environmental Epidemiology & Toxicology" is also present. At the bottom right, there is a large "EXPLORE DATA" button with a magnifying glass icon.

www.ldh.la.gov/tracking

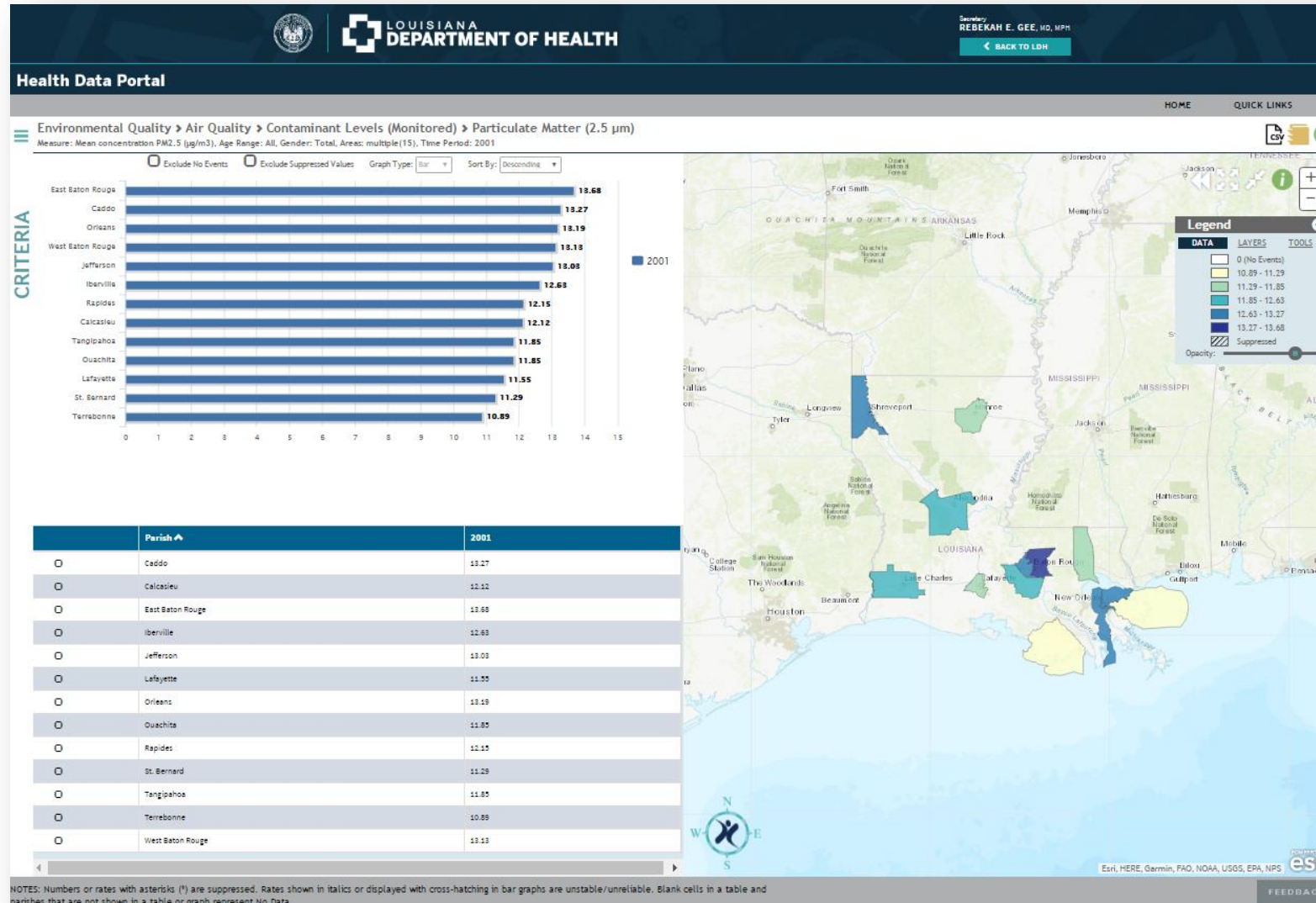
LDH Health Data Portal

- ▶ Partnership between the LDH Office of Public Health Bureau of Health Informatics and the Louisiana Tracking Program
- ▶ <http://healthdata.dhh.la.gov>

The screenshot shows the Louisiana Department of Health Health Data Portal. At the top, there is a dark blue header with the Louisiana Department of Health logo and name on the left, and the Secretary's name, REBEKAH E. GEE, MD, MPH, on the right, along with a "BACK TO LDH" button. Below the header, the page title "Health Data Portal" is displayed. A navigation bar contains "HOME" and "QUICK LINKS". The main content area is divided into two columns. The left column, titled "CRITERIA", contains a "Step 1: Select Criteria" section with four dropdown menus for "Category" (set to "Health Outcomes"), "Topic", "Focus", and "Indicator". Below these are three buttons: "View Additional Dataset" (with a plus icon), "Clear", and "Explore". The right column, titled "Explore Louisiana's Health Data Portal", contains a paragraph about the portal's mission, a paragraph about data interactivity, a paragraph about the partnership with the CDC, and an "Acknowledgements" section. At the bottom of the page, there are three logos: "openData Louisiana DEPARTMENT OF HEALTH", "Visit CDC Tracking Network today: www.cdc.gov/ephttracking", and "LOUISIANA DEPARTMENT OF HEALTH Environmental Public Health Tracking".

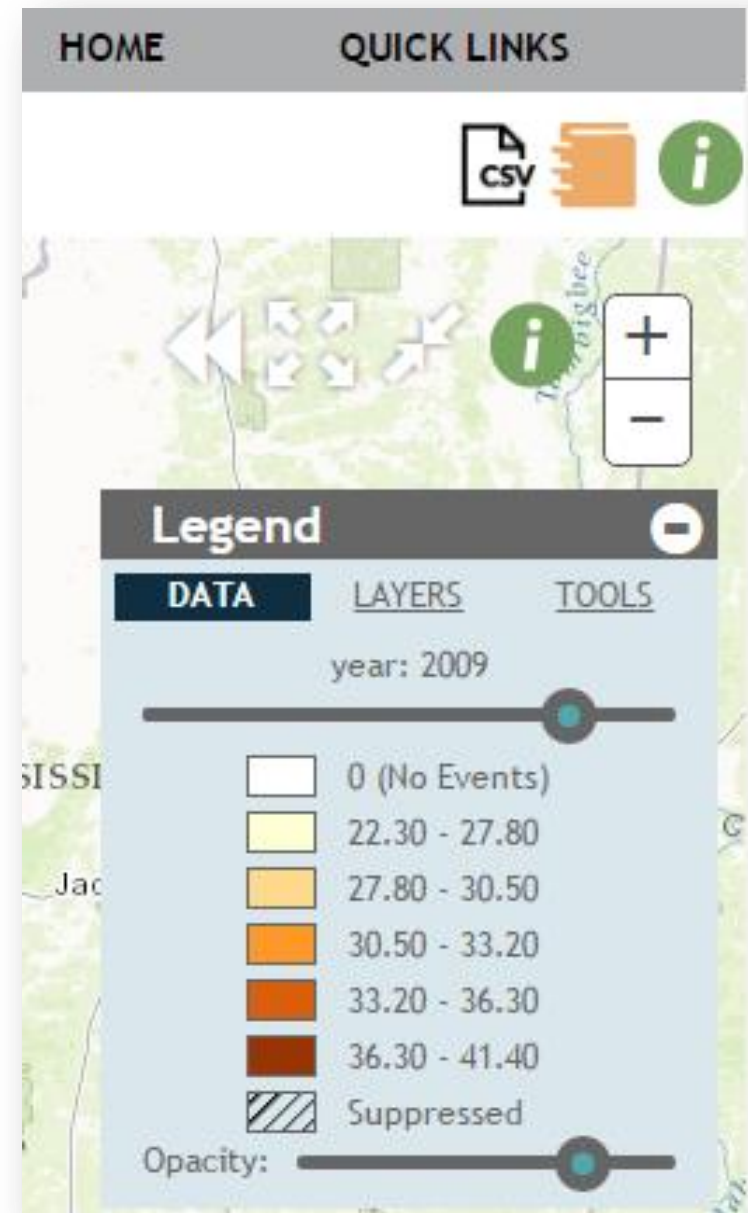
Portal Screenshot

- A portal demonstration will follow the LDH & LDEQ speakers



Query and Map Features

- ▶ Dual, linked views
- ▶ Pop-out windows
- ▶ Time Slider
- ▶ Info Tab (Metadata)
- ▶ CSV Download
- ▶ Glossary
- ▶ Benchmarks (US & State Rates)
- ▶ Layer Opacity
- ▶ Coming Soon:
 - Integration of New Background Layers from Federal and State Partners (Land Use, Forest Canopy, Elevation)



Data Requests

- Contact us at tracking@la.gov
- Tell us about your project
- We will contact the data owner and IRB designees
- Final decision will be made to disseminate data



Tracking Resources

- ▶ CDC National Tracking Network:
 - www.ephtracking.cdc.gov
- ▶ LDH Tracking:
 - Website: www.ldh.la.gov/tracking
 - Health Data Portal:
<http://healthdata.dhh.la.gov>
 - E-mail: tracking@la.gov



Contact Information

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