

FISH SMART! EAT SAFE!
***Risk Communication to Diverse Populations
in an Urban Setting***

2004 National Forum on Contaminants in Fish

January 27, 2004 - San Diego, CA

"Fish Smart! Eat Safe!"

An Outreach Program for Chicago Fishermen and their Families

***Developed by the University of Illinois at Chicago School of Public Health
Great Lakes Centers for Occupational and Environmental Safety and Health
PCB Outreach and Information Project
with funding from the U.S. Environmental Protection Agency
Program on Persistent Bioaccumulative Toxics***

Purpose

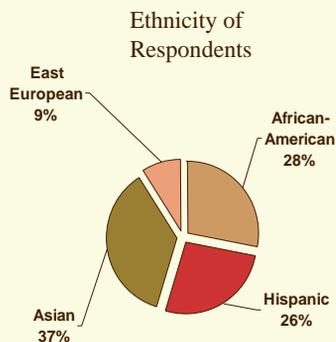
Urban, ethnic fishers may not be reached by fish advisories, particularly if they do not routinely obtain fishing licenses. If Lake Michigan fish are a significant portion of their diet for any reason, they may be disproportionately exposed to PCBs.

Project Components – 2002 - 2003

Outreach letters and phone calls
**Meetings with health advocates from
community groups**
Surveys at fishing piers
Community events
Outreach hand-outs
Chicago Department of Public Health
Newspaper Articles to Chicagoland
African-American and Non-English Press

Survey - 2002

- ✓ 2 Locations on Chicago Lake Michigan lakefront
- ✓ Non-Random selection of ethnic respondents
- ✓ Screened: All eat or share the fish caught
- ✓ Surveys in English, Spanish and Vietnamese
- ✓ 57 Completed Surveys



Survey - 2003

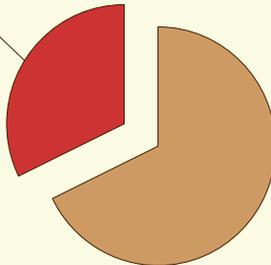
- ✓ 2 Locations on Chicago Lake Michigan lakefront
- ✓ All willing fishermen interviewed
- ✓ Screened: All eat or share the fish caught
- ✓ Surveys in English and Spanish
- ✓ 160 Completed surveys

Native Language of Respondents

English
Spanish
Korean
Chinese
Vietnamese
Polish
Romanian
Bulgarian
Czech
Italian
Tagalog

English and Non-English Speakers 2002-2003

Non-English Speakers
73 (32%)

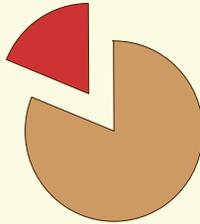


English Speakers
156 (68%)

2002-2003 Outreach - Knowledge of PCBs

English Speakers

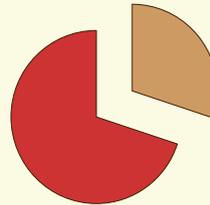
No = 28 (19%)



Yes = 109 (81%)

Non-English Speakers

Yes = 20 (30%)



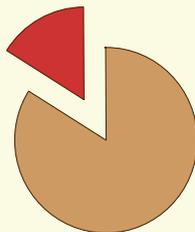
No = 46 (70%)

OR = 9.7750, 95% Conf: 5.0163, 19.0479 DF=7, $\chi^2 = <0.001$

2002-2003 Outreach - Knowledge Of Health Risk

English Speakers

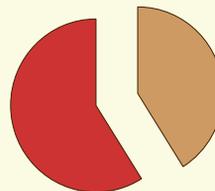
No = 24 (16%)



Yes = 126 (84%)

Non-English Speakers

Yes = 24 (41%)



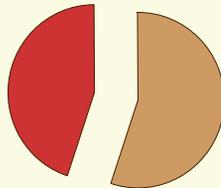
No = 35 (59%)

OR = 7.6563, 95% Conf: 3.8846, 15.0899, DF=7, $\chi^2 = <0.001$

2002-2003 Outreach - Knowledge of Fish Advisories

English Speakers

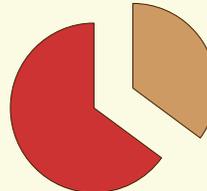
No = 67 (45%)



Yes = 82 (55%)

Non-English Speakers

Yes = 24 (35%)



No = 44 (65%)

OR = 2.2438, 95% Confidence: 2.402, 4.0596, DF=7, $\chi^2 = <0.007$

Additional Findings . . .

- ✓ Median age of fishermen was 40-49 years
- ✓ 86% were men
- ✓ 82% of fishermen share their catch with family and friends
- ✓ 14% of non-Native English speakers and 8% of English speakers identified carp or catfish as one of the two fish eaten most frequently
- ✓ The mode value for consumption of catch frequency was "more than one time per week"
- ✓ Almost all fishers [2002] obtained fishing licenses (91%)
- ✓ Family physician identified as most trustworthy source of information about fish contamination; the media (tv, newspaper, radio) the most common source of information about contaminants in fish
- ✓ Fishermen came to Lake Michigan from multiple neighborhoods and communities in the Chicagoland area

Conclusions . . .

- ✓ *In urban communities struggling with multiple social challenges, fish consumption issues are frequently underestimated or unrecognized as relevant. Subsistence fishing often occurs “below the radar.”*
- ✓ *In populations which are heterogeneous, culturally and language-diverse, risk communication requires additional resources and new strategies for reaching target fishermen.*
- ✓ *Access to information about the risks of PCB contamination in Lake Michigan fish and risk of mercury contamination in other waterways remains a significant environmental justice issue; knowledge is not accessible uniformly, and significant disparities remain in non-English speaking communities about these risks.*

Conclusions (continued) . . .

- ✓ *Fish advisory information is not easily accessible to key populations such as pregnant women, and many health providers at the community level do not have the information or tools to address the issue even if they are interested.*
- ✓ *Existing fish advisories are difficult to find, difficult to follow, and pay inadequate attention to cultural preferences and practices*
- ✓ *Fish consumption advice is conflicting and inconsistent*

Recommendations:

- ✓ **Develop ongoing media campaigns and risk communication materials which:**
 - *recognize the heterogeneity of targeted communities in urban settings,*
 - *are designed in consultation with community representatives,*
 - *are culturally sensitive and appropriate,*
 - *are widely translated into multiple languages to assure accessibility to the broad diversity of target communities; e.g., regular dissemination of information to foreign-language radio stations and print media*
- ✓ **Consistency between agency guidelines**

Recommendations (continued):

- ✓ **Focus on primary health care providers, obstetricians, and pediatricians as key messengers of fish consumption information in target communities**
- ✓ **Develop an outreach program for EPA regions, where needed, which includes:**
 - *1) an outreach campaign to community groups and health care personnel,*
 - *2) dedication of at least one individual trained to do outreach presentations and act as a local resource person,*
 - *3) a widely-disseminated toll-free phone number which connects to a live person who can answer questions about advisories specific to relevant areas in the region, and is available for outreach presentations to interested groups and organizations.*

**PCB Risk Communication and Outreach Project
2002-2003**

“Fish Smart, Eat Safe!”

The University of Illinois at Chicago School of Public Health
Great Lakes Centers for Occupational and Environmental Safety and Health
U. S. Environmental Protection Agency Program on Persistent Bioaccumulative Toxics

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2002

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