Informing the Public:
Risk Communication Recommendations for the Maryland Public Health Tracking Program

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What is Environmental Public Health Tracking?

- CDC-funded effort to integrate databases that store health and environmental information
- Born out of 2001 Pew study that prompted Congress to provide CDC with $17.5 million to develop a nationwide public health-environmental tracking network
- Similar efforts underway in 15 states
- Plans call for program to expand nationwide in the next decade

What Kind of Information?

Environmental surveillance data:

- Water quality
- Air quality
- Landfills
- Industrial chemicals

Health outcomes data:

- Cancer
- Asthma
- Birth defects

Purpose of PHASE Project

- As part of CDC grant, DHMH and MDE must write risk-communication guidelines that outline how knowledge should be managed and communicated to public
- My PHASE project involved writing a white paper that offered recommendations for the risk-communication guidelines
- The paper involved the following preparatory elements:
  - Lit review to determine best practices in risk communication
  - Examination of efforts in other states
  - Regular meetings with reps from DHMH/MDE to determine goals of program
  - Regular meetings with reps from Hopkins and University of Maryland, as well as DHMH/MDE, to discuss progress of White Paper and to get feedback on recommendations as they progressed

Best Practices in Risk Communication

- The following principles appear frequently in risk-communication literature:
  - Involve the public as a partner in ongoing dialogue
  - Tailor information for different audiences and media
  - Convey messages as clearly as possible; do not use unclear comparisons or try to make light of the situation
  - Describe both quantitatively and qualitatively the estimates of probability that have been made; if information not available, let audience know when information might be expected

Best Practices in Risk Communication, cont.

- Major challenge posed by available research was a lack of information about online risk communication
- How do planned efforts for risk communication Web site adhere to best practices? Should any current plans be altered?

Planned Elements of Web Site

- Many examples of Web sites that allow users at home to “map” exposures and outcomes.
- This was an approach that had started to seem very attractive for presenting exposure/outcome data
- One example can be seen on the Silent Spring Web site

Silent Spring Institute - HEIS - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://library.silentspring.org/website/FemaleBreastCancer/viewer.htm?Query=TOWN_ID=35&QueryZoom=

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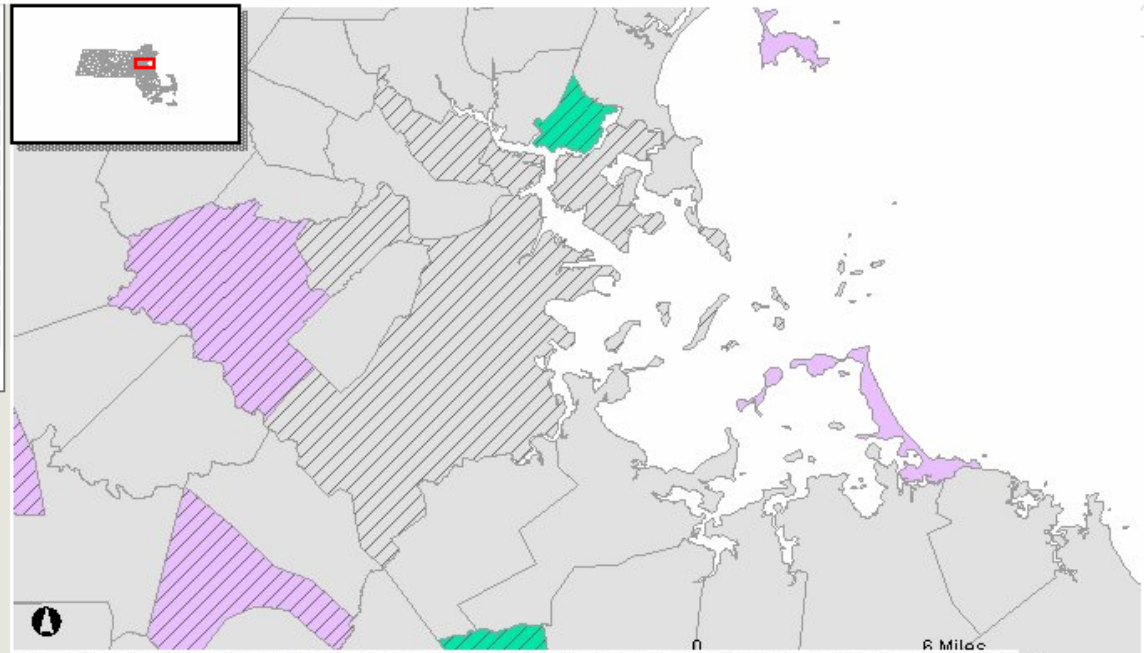
Map Tools

Help



Map created Wed Mar 21 2007 13:32:01 GMT-0400 (Eastern Daylight Time) Silent Spring Institute - HEIS. Terms of Use Apply

Your Health | Your Community | Map Information

Female Breast Cancer Under 50 Statistical Significance is now the Active Layer

Layers | Legend

Town Labels and Outlines

Female Breast Cancer Statistical

1995 to 2002

Incidence different from expected, p 0.05

Female Breast Cancer Standardiz

1995 to 2002

- more than 100 % above expected
- 51 % to 100 % above expected
- 15 % to 50 % above expected
- within 15 % of expected
- 15 % to 50 % below expected
- more than 50 % below expected
- SIR Not Calculated; < 5 Cases

::Active Tool::

Pan

Data Sources include: MassGIS, Commonwealth of Massachusetts Executive Office of

Done

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Mapping Functions, Cont.

- These mapping functions are compelling because they allow users to create their own content, and they offer visual displays of toxins/disease by location
- But will this function work for the Tracking program?

Mapping Functions, Cont.

- Important to recognize that incidence/prevalence of a disease are relatively straight-forward concepts compared with the tricky terrain of explaining how environmental factors might contribute to unusually high or low rates of health conditions
- By overlapping exposure and outcome data on the same map, people will be prompted to draw their own conclusions, which might not be substantiated by research
- As such, it started to become clear that mapping might be a tool that can be incorporated in the Web site … but mapping, alone, might create too much ambiguity

Proposed Plan

- The Tracking program should adopt a strategy that prioritizes clarity of information over abundance of information
- Instead of allowing users to parse together data, staff at DHMH and MDE should create a library of static reports
- Note: The final risk communication strategy should ensure that the Web site incorporate mapping functions and other advances elements as researchers and the public grow increasingly comfortable with the data and the inferences that can be made using the data

Minimum Necessary Content for Static Reports (OECD)

- Begin with a statement of commitment to maintaining a communications flow of information *pertinent to public* concerns about the case at hand
- Distinguish clearly between hazard (the types of possible harms) and risks (the likelihood for individuals or populations to suffer those harms)
- If the type of possible harms has special qualities, eliciting feelings of “dread” or heightened fears, be aware of them and acknowledge them in the communications
- Specify what is known about exposures and whether it is likely that sensitive populations (especially children) are likely to be exposed

Minimum Necessary Content, Cont.

- Describe qualitatively the uncertainties in the knowledge base and what further steps might reduce these uncertainties, and when
- Describe both quantitatively and qualitatively the estimates of probability that have made, if available, or if not available when the might be expected
- Provide justification for what is thought to be a tolerable or acceptable level of risk in this case, using either risk/risk or risk/benefit tradeoffs, or both
- Provide a clear and compelling justification for the type of action response that has been chosen or recommended in this case
- Provide contact information where responses to questions may be obtained

Enfranchising the Public

- Tracking program must develop policies that ensure that user feedback is built into the site and that there are convenient avenues for users to provide feedback and get additional information
- In addition, staff must ensure that reports reflect what the public wants to know

Public Enfranchisement Recs.

- Offer contact information so users can ask questions and request reports
- Use Web tracking software to see which reports are most popular and which might need stronger presence on Web site
- Use a “rate this page” feature on reports so users can let you know if they find the content helpful

Take-Away Points

- Extant research does not focus enough on new media
- The public must feel enfranchised in two-way dialogue; great potential for this on the Internet
- Web site should be viewed as a work in progress that will be expanded over time
- Meaning must purposely be created by experts and actively communicated to public; it could be very problematic to give too much or too little access to the public