NEWMOA WORKSHOP
Communicating Risk to the Public

Dartmouth SRP Case Study:
Arsenic in Food Products
Controlling and Managing Your Message

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http://www.dartmouth.edu/~toxmetal/
Main points of the paper:

• Use of OBRS as an ingredient increases arsenic concentration of the product
• For toddler formula this leads to inorganic arsenic concentrations that are too high
• These foods are an additional, newly identified, source of arsenic to diet
• “Urgent need for regulatory limits on arsenic in food”

Arsenic, Organic Foods, and Brown Rice Syrup
Brian P. Jackson, Vivien F. Taylor, Margaret R. Karagas, Tracy Punshon, Kathryn L. Cottingham

Release date: Feb. 16, 2012
The Aftermath:

- Multiple TV news reports including major networks
- ~50 media stories
- ~300 emails to Brian Jackson, lead author
- Numerous emails to co-authors and others in Program
- Over 19,000 hits within first two weeks of publication
- ~23,000 hits within first month of online release

Figure 1: Hits to the DSRP website over the year (Sept 1, 2011-Sept 1, 2012). Each point represents a weekly total of visits to the DSRP webpage. The total visits during the week following the release of the Jackson et al paper (February 12th-18th, 2012) were 1885.
Figure 2: The average number of page visits to the online edition of EHP by article type for the month following initial publication of the Jackson et al. paper.

Development of the Perfect Storm…

Baby Formula + Organic Foods + Arsenic

Papers & Interviews

Press Release

Consumer Reports

ABC News

NBC News
What we didn’t expect…

1. Misinterpretation of the data
   • Misunderstanding arsenic levels in formula compared to drinking water
     – powder vs. liquid
     – inorganic vs. organic arsenic
   • Applying the public drinking water limit to cereal bars

2. Products Uncovered!

Effective Communication with the Public

Emerging Science—Emerging Contaminants—Potential Synergistic Effects = UNCERTAINTY
Arsenic: odorless, colorless, tasteless

Health effects at high levels of exposure known—over 100 ppb in water.

Health effects less than 10 ppb (maximum contaminant level for public water supplies as set by EPA)— UNCERTAIN

#1 on ATSDR Priority List of Hazardous Substances

IDEAL

Risk related message. Be Clear.

Present:

1) The Problem.

2) Information about the problem.

3) Action.
REALITY

• What are effects—???

• What action should I take—???

REALITY

What we know

✓ Could be long term health effects
✓ Not good for young children to be drinking/eating that much Arsenic based on current knowledge
✓ Emerging Risk—be careful about making recommendations that could change an important dietary requirement for an individual
✓ Contaminant in food—responsibility to convey Benefits as well as Risks
REALITY

What we don’t know.

• What are effects—???

• What action should people take—???

What we can say… (in some cases)

✓ Reduce your exposure to contaminant

Contaminants of Emerging Concern (CECs)
PBDEs, PPCPs, TCE, MTBE, 1,4-Dioxane

UNCERTAINTY

✓ Building Trust

✓ Connecting to Community/Target Audience
“At the end of the day people won't remember what you said or did, they will remember how you made them feel.”
— Maya Angelou

“When people are stressed out or upset, they typically: want to know that you care before they care what you know.”
— Dr. Vincent Covello, Center for Risk Communication

✓ Brian Jackson--Personal sense of responsibility to reply to all emails
   —Building Trust without realizing it

Lessons Learned:
✓ Talk to local communities
✓ Message plan—know your audience/media
✓ Emerging science—will information change an important behavior for an individual?
✓ Timing
✓ Notify
✓ Update—FAQ
✓ Burnout
√Review Numerical Information:

µg   ppb ng/g

- Will the media/public know how to interpret these numbers?
- Based on the numbers, is there a way for them to gauge the risk and put it in perspective?
- Is there a possibility that the numerical information could be skewed and become misleading?

✓ Prepare ahead:

- What you know/What you don’t know/What you are trying to find out
- Talk to local communities to get a sense of the types of information that would be helpful to them
- Keep messages clear and simple (3 main points)
- Prepare Press Release with care
- If you have more than one spokesperson, make sure you are all using the same message
- Remember how easy it is for people to access information they might not understand
- Be ready with clear, easy to understand follow-up/background information on your website.
• Put yourself into the position of being an objective, trusted resource

• Brian received thank you emails—people were grateful for the information and clarification.

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