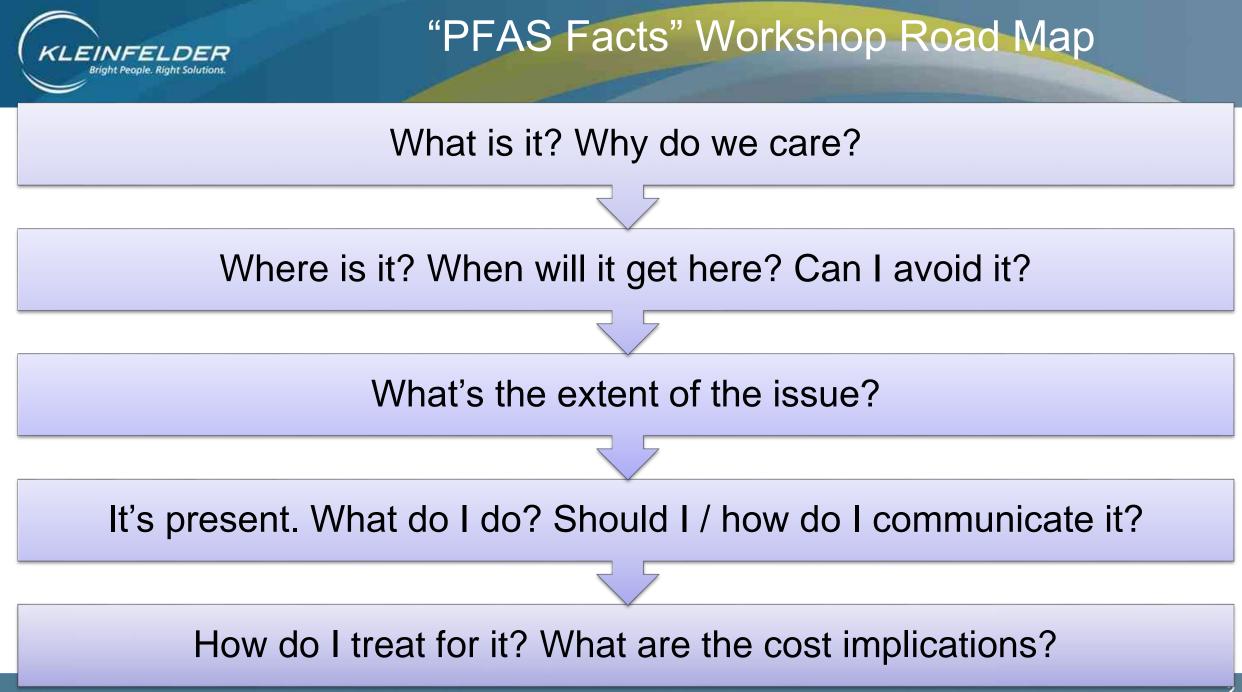
"PFAS Facts" Workshop for Public Water Suppliers

Kleinfelder, Rocky Hill, CT August 13, 2019





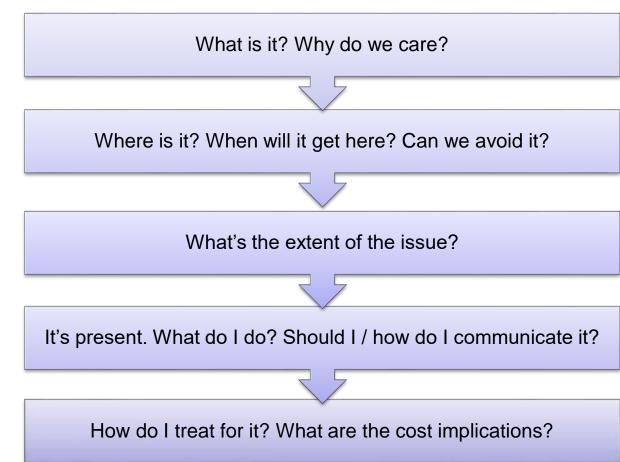


Agenda & Speakers – "PFAS Facts" for PWS

- Introductions / Learning Objectives
- Regulatory Update & Trends Kirsten Ryan, PG
- Chemistry, Sources, Occurrence;
- Watershed Protection & Defensive Strategies – *Jeffrey Hale, PG*
- Sampling and Laboratory Considerations
 Lindsay Hutnick

Break

- Public Communication Kirsten; Group
- PFAS Treatment DingFang Liu, PE
- Discussion / Wrap Up Kirsten; Group



How do I communicate about it?

Public Outreach & Communication "PFAS Facts" Workshop for Public Water Suppliers

Kirsten Ryan, PG, Kleinfelder, Rocky Hill CT, August 13, 2019





- 1. Communication Challenges Discussion
- 2. Risk Communication Tools & Best Practices
- 3. Risk Communication Theory -Communicating and Stress
- 4. Communication 'Case Studies' / Group Discussion
- 5. Questions





What makes this so challenging?

- Intense traditional media focus & hyperbole
- Social media speed
- Advocacy group pressures
- Availability of public information (and misinformation)
- Other factors?







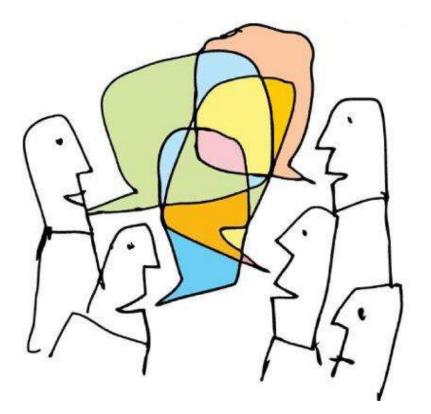
Group Discussion – Communication challenges:

- What information are your customers receiving about PFAS? From where?
- How do you approach communication with customers on PFAS?
- Is this very different than for other chemicals (eg lead, boil water orders?)
- What are some of your concerns? What are you customers' concerns?
- What are some of your experiences?



What is effective risk communication?

- Enhancing knowledge & understanding of subject
- Building trust and credibility
- Encouraging constructive dialogue
- Expressing appropriate levels of concern
- Providing guidance on protective behavior and actions



5



Seven General Rules of Risk Communication –

By Dr. Vincent Covello, Center for Risk Communication

- 1. Accept and involve stakeholders as legitimate partners
- 2. Listen to people
- 3. Be truthful, honest, frank, and open
- 4. Coordinate, collaborate, and partner with other credible sources
- 5. Meet the needs of the media
- 6. Speak clearly, and with compassion
- 7. Plan thoroughly and carefully

Proactive communication will reduce stress... for you AND your customers



Communication and Stress -- Establishing Trust for Effective Communication

Stress: feeling upset, angry, fearful, outraged, concerned...

Under stress, people -

- Have difficulty processing information
- Become distrustful
- Give greater weight to negative information than to positive



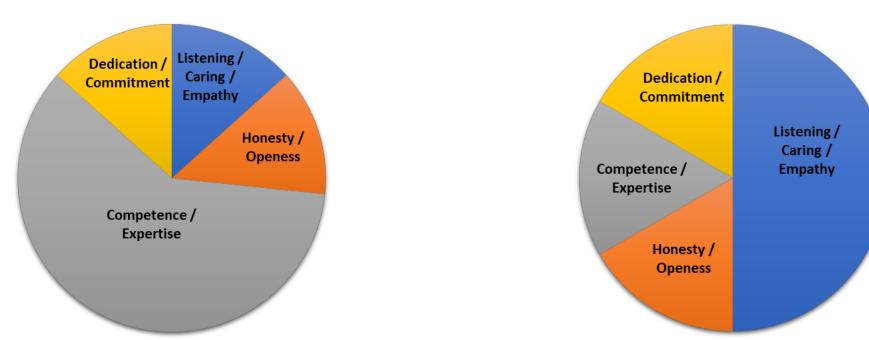
All parts of the brain are highly active Best communication is equally divided between intellectual, emotional, and visual forms



Establishing Trust for Effective Communication

NON-STRESSED CONDITIONS

• "When people are stressed and upset, they want to know that you care before they care about what you know."



UNDER STRESS



'Message Maps' Process

- ✓ Identify Potential Stakeholders
- Identify Potential Stakeholder Questions
- Analyze Questions to Identify Common Sets of Concerns
- ✓ Develop Key Messages
- ✓ Develop Supporting Facts
- Test and Practice Messages
- Deliver through Appropriate Information Channels



Source: Effective Risk and Crisis Communication during Water Supply Emergencies, EPA 2007



Communication "Case Studies" – PFAS and Emerging Contaminants

- Kennebunk / Kennebunkport / Wells District, ME
- Hudson, MA
- Wareham, MA
- Mashpee, MA
- Group Success stories? War stories?



Kennebunk / Kennebunkport / Wells Water District, ME

- 50 ppt detection in spring 2016
- Source: farm application of sludge from paper mill; municipal sludge
- District waited until spring 2017 to notify public
- Newsletter was delayed at printer; local media broke story first

Maine dairy farm plagued by chemical contaminants may be 'tip of the toxic iceberg'



Lessons Learned:

• Superintendent: "Stay ahead of the communication curve"

Hudson, MA

- Testing since 2016
- Jan 2019: Well 90 ppt offline
- 4/17 Water Forum
 - BOS Chair, State Rep/Sen, DEP Commissioner, Regional Director, MassDPH, Town Health Dept

Pros –

- Transparency; public engagement
- PFAS Website Resources; forum video
- Close involvement by Health Department

Citizen criticisms -

- Forum format too long, 45 min PPT- 'we deserve respect'
- 'this is an emotionally provocative subject you have to understand our pain'
- Come prepared with bottled water plan

Resources from the Hudson Water Forun



HUDSON HEALTH DEPARTMENT

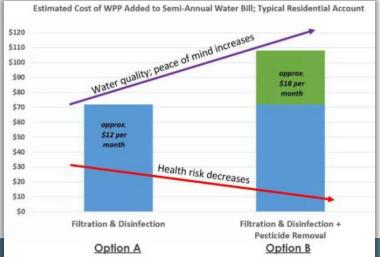
HOME / PROGRAMS / FORMS / NEWS / CONTACT



Wareham, MA

- 7 wells with cranberry bogs in watershed
- Wellhead Protection Program since 2001
- Unregulated pesticide monitoring; presented annually at public meeting
- 2015 filtration for Fe, Mn designed; potential GAC upgrade for pesticide removal
- In advance of funding vote:
- Public Outreach Plan; workshop with Commissioners
- Engagement via community events; survey, newsletter; new logo; establish social media presence, video segment, press interviews
- Warrant Outreach Brochure on GAC







Mashpee Water District, Mashpee MA

- 3/6/19 Boston Globe: in Mashpee chemicals found in concentrations 'that exceed what the EPA considers safe'
- 3/7/19 Mashpee Enterprise: Water District: "Mashpee Water is still safe"
- 4/17/19, Cape Cod Times: Well taken offline immediately after testing at 35 ppt
 - "We decided to take the pumping station offline because we thought it was the best thing to do" "We know that the water is safe to drink ...

Discussion points – How would you respond when asked "Is the water safe to drink?"



Communication 'Case Studies'

- Group Discussion –
- Other Examples? Experiences?





Questions?

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617-498-4778



THANK YOU!

How do I treat for it? What are the cost implications?

PFAS Water Treatment "PFAS Facts" Workshop for Public Water Suppliers

DingFang Liu - Kleinfelder, Rocky Hill, CT, August 13, 2019

