THE Water Research FOUNDATION

Effective cyanotoxin risk communication preparation

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American Water Works Association

Four Steps to Effective Cyanotoxin Communications: A Risk Communications Toolkit

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Four Steps to Effective Cyanotoxin Communication

Step 1: Understand the cyanotoxin communication challenge and communication best practices

Step 2: Address Internal Management Questions

Step 3: Communicate Proactively with the Community

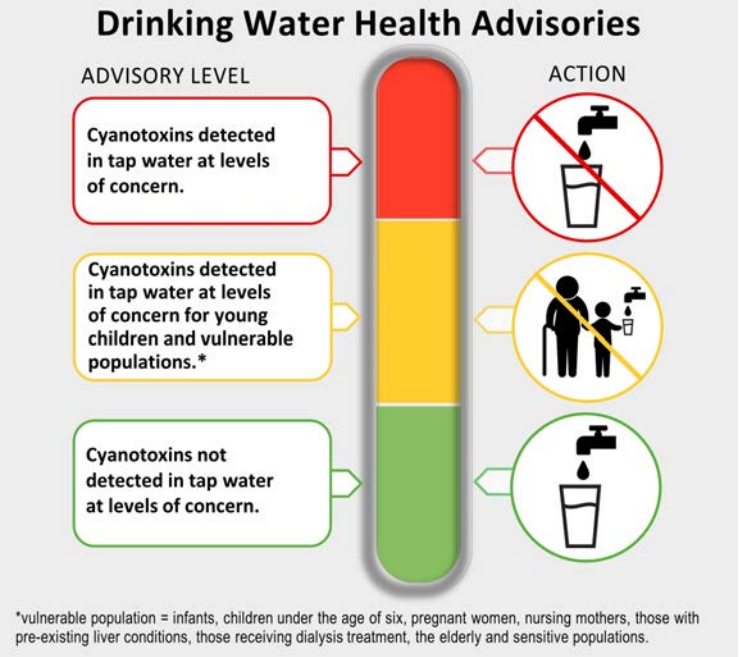
Step 4: Select, Modify, and Deliver Effective Message Products

Why are Cyanotoxin Risks so Hard to Talk About?

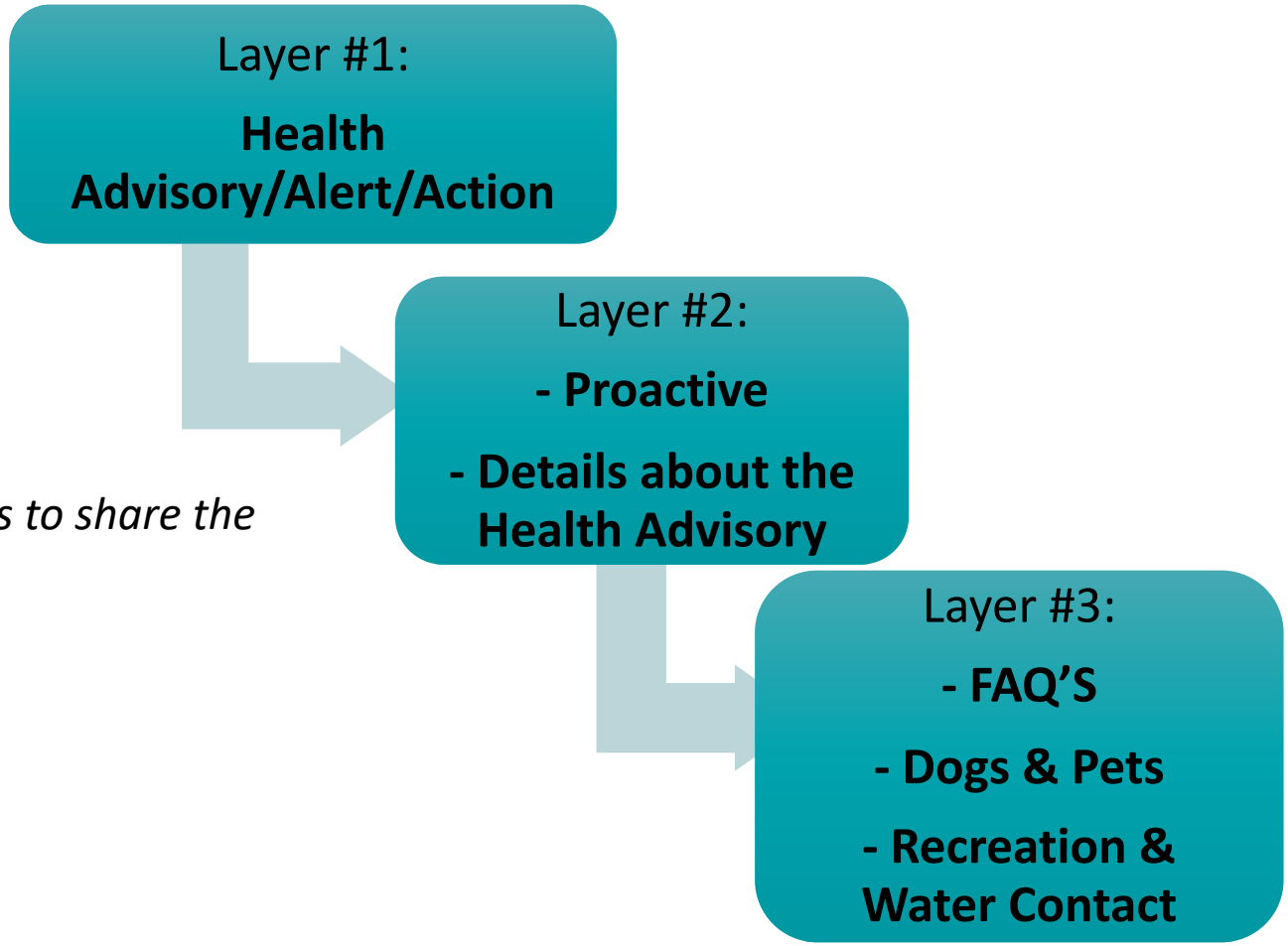
- The complexity of the EPA risk management framework
- The uncertainty regarding when to communicate the need for internal utility actions
- The uncertainty regarding the information that will be used to trigger a Health Advisory/Alert

The Complexity of the EPA Framework

- Two different populations – young children and vulnerable and general
- A 10-day exposure period
- Health Advisory (HA) not a Maximum Contaminant Level (MCL)



Overcoming the Complexity Challenge



- *Use layers to share the complexity*

Overcoming the Complexity Challenge

> *"Someone will always find the lowest number and berate you if you aren't using it, so you might as well use the lowest number and build a reputation as a health risk conservative."*
>
> *-Utility Participant*

- Share only the most protective level in a health advisory in the health advisory level

Uncertainty Regarding When to Communicate

Internal Decisions Prior to Detection

- What is required in your state?
- Does your utility want to be more proactive?
- What are your raw water monitoring protocols?
- Where will you sample?
- Which analytical method do you plan to use for raw water testing?
- What raw water conditions will trigger finished water testing?
- Which analytical method do you plan to use for finished water testing?
- How will you handle the gaps in test result timing?
- What is the complete set of testing results that will trigger a health alert or advisory and end of advisory?
- Which communication products will you use?
- For recreational waters what activities will be restricted?

Develop an External Communication Plan

- Communication Objective
- Collaborators
- Audiences
- Audience Content Needs Over Time
- Delivery Modes

Headlines about Salem

From bloom to ban: How toxic algae fouled Salem's water for the first time

Zach Urness, Statesman Journal Published 6:35 p.m. PT May 30, 2018 | Updated 11:12 a.m. PT June 2, 2018

Salem water advisory lifted as toxins remain below EPA safe levels

Connor Radnovich, Salem Statesman Journal Published 4:28 p.m. PT July 3, 2018 | Updated 8:10 p.m. PT July 3, 2018

Risk Communication: All This And No More…

- Tell them who you are
- Establish that you care
- State the action they need to take
- Share the potential consequences
- Provide the date and time
- Point to more information

Apply Communication Best Practices

Best Practice	Application in water advisory notice
1. Tell them who you are.	the community drinking water provider, [UTILITY NAME}
2. Establish that you care	To protect your health,
3. State the action they need to take	The tap water is currently only safe for external use. Do not swallow the water. Do not boil the water, because boiling makes it worse.
4. Share the potential consequences.	If you swallow the water, you may experience nausea, diarrhea or vomiting.
5. Provide the date	FROM [DATE]
6. Point to more information	For more information and advice, please [CONTACT MEANS].

Linguistic Research

- Do Not Boil Water - needs to be included
- Sensitive Populations - none of us identify as sensitive

Language Developed in this Project

DO NOT INGEST TAP WATER – FROM [DATE] UNTIL FURTHER NOTICE
To protect your health, the community drinking water provider, [**UTILITY NAME**], has issued this [**HEALTH ADVISORY**]. The tap water is only safe for external use. **Do not swallow the water. Do not boil the water, because boiling makes the water worse**. Showering, bathing and brushing teeth are fine as long as you and your child do not swallow the water. You can wash fruit and vegetables and wash dishes with tap water, however we recommend you let them dry before using. If you swallow the water, you may experience nausea, diarrhea or vomiting as well as liver and kidney damage . You should seek medical attention if you become ill. For more information and advice, please [**CONTACT MEANS**]. We will keep you updated and let you know when you can ingest your drinking water again by [**CONTACT MEANS**].

Products: Health Advisory/Alert/Action

- Proactive message
- Multipurpose health advisory/alert message
- Reverse 911 Message
- Text message
- Press release
- Print sample for door hangers, flyers, etc.
- Web sample
- At-risk population message
- Lifting message
- Health advisory/action notice in 10 languages

Proactive Message

Place on website, share:

- Build understanding
- Cover bases when people say – why didn't you tell me? – you did
- First one in leads the message
- Reduces fear

What you need to know about *Cyanobacteria* and Drinking Water

- First, you need to know that your drinking water is safe, and meets all state and federal standards. If at any time there is an issue with your drinking water we will notify you immediately.
- Second, it is interesting to know that cyanobacteria--although they look like algae, bloom like algae and occur naturally like algae – are not really algae at all!
- However, when cyanobacteria bloom they can produce cyano*toxins,* which may pose health risks to humans and animals.

Proactive Outline

- **What are cyanobacteria?**
- What are cyanotoxins?
- **How are cyanobacteria blooms formed?**
- What does a cyanobacteria bloom look like?
- **Are some cyanobacteria blooms harmful?**
- How do people and animals come in contact with cyanobacteria or cyanotoxins?
- **How do I protect myself, my family, and my pets from cyanobacteria water contact risks?**
- How is the drinking water utility protecting me, my family and our pets from the risk of cyanotoxins in our drinking water?
- **Can I help?**
- More Information

Safe Message

Water professionals often face impossible to answer questions regarding public health safety

What about other kinds of toxins from algae, are you testing for them? Are we safe from them?

Safe Message

Because we are always learning more, safety is never a given, it is an on-going moving target that we must continuously strive for. At this time, we are reviewing emerging guidance produced by EPA, the CDC and universities on monitoring and testing for a wide range of potentially harmful algae blooms and evaluating the protocols that are necessary and viable for our community. If you have information you would like to share with me please send me links. If you would like to learn more and stay updated on our algae management program please visit [insert link]

Questions or comments?

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