

What's the risk?

Clearly Communicating Health Risks



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What is risk?



Real vs
Perceived



Clearly
communicating



What is risk?

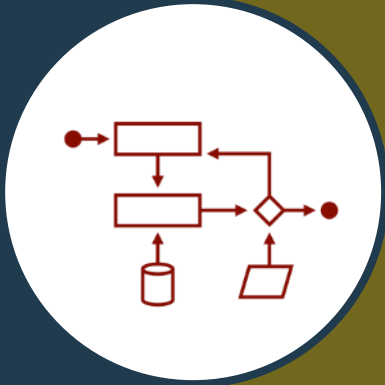
Hazards and Risks

Hazard: Source of potential danger



Risk: The likelihood of the hazard causing harm





Real vs Perceived

Perception Matters

Factors

- Voluntary
- Natural or manmade
- Familiarity
- Treatable or reversible effects
- Scientific evidence and understanding



Perception Matters

HABs

- Recreational exposures are voluntary
- Natural event
- Familiarity varies; can depend on HAB frequency
- No medical treatment available
- Human health effects are known but not well understood





Clearly Communicating

Mental Noise Impacts Processing



It is on us if people do not
understand our message

People focus on
what they hear first
and last

HEALTH

Blue-Green Algae: Iridescent but Deadly

JESSICA MARSHALL

SEP 18, 2012

"A living nightmare:" Woman's 3-year-old dog dies after swimming in Lake Mendota

POSTED 8:00 PM, JULY 31, 2017, BY KATIE DELONG, UPDATED AT 08:03PM, JULY 31, 2017

Toxic Algae Blooms A Concern On Wisconsin Lakes Over July 4 Holiday

DNR Expert Says Blooms Have Come Early This Year

Toxic Algae Blooms Spike In Wisconsin, Nationwide
Current Methods To Curb Blooms Aren't Aggressive Enough, Scientist Says

As summer heats up, UW professor warns of algae hazards in Madison's lakes
Researchers discussed why algae blooms create toxins, what residents can do to combat their proliferation

3 messages

Repeated 3 times

Supported by 3 points

**Most important message
first and last**

The rule of 3s

HABs Message Map

The following is a message map that could be used when addressing the general public regarding harmful algal blooms.

Key Messages	Supporting Information
<i>Three key messages</i>	<i>Three pieces of supporting information for each key message</i>
Message 1 Blue-green algae, also known as cyanobacteria, can cause adverse health effects.	Supporting Info 1 Cyanobacteria, otherwise known as blue-green algae, are photosynthetic (light-using) organisms that are responsible for harmful algal blooms. Supporting Info 2 Not all cyanobacteria can produce harmful toxins, but those that do can cause rashes, diarrheal disease, and respiratory problems. Supporting Info 3 In Wisconsin, harmful algal blooms are most common during the warm-weather months between mid-June and mid-September, but they can occur all year.
Message 2 When in doubt, stay out!	Supporting Info 1 Humans can be exposed to harmful algal blooms through accidental ingestion while swimming, by inhaling aerosols (spray) during water recreation, or just by being in the water where a bloom is occurring. Supporting Info 2 If you are unsure about the water, don't go in! Be sure to check for beach postings and water quality notices before swimming. Supporting Info 3 Rinse yourself off immediately after being in contact with algal-affected waters, and get medical treatment right away if you think you have been poisoned by harmful algal blooms.
Message 3 Animals and livestock can become very ill after exposure to harmful algal blooms.	Supporting Info 1 Do not let your pets or livestock drink, graze, or play near water where there could be harmful algal blooms. Supporting Info 2 If your animal gets into water with a bloom, immediately wash him with clean water, and do not let him lick algae off its fur. Supporting Info 3 If your pet displays symptoms such as seizures, vomiting, or diarrhea after contact with surface water, contact your veterinarian right away.

Wisconsin HAB Toolkit



Go to www.dhs.wisconsin.gov and search “algae”

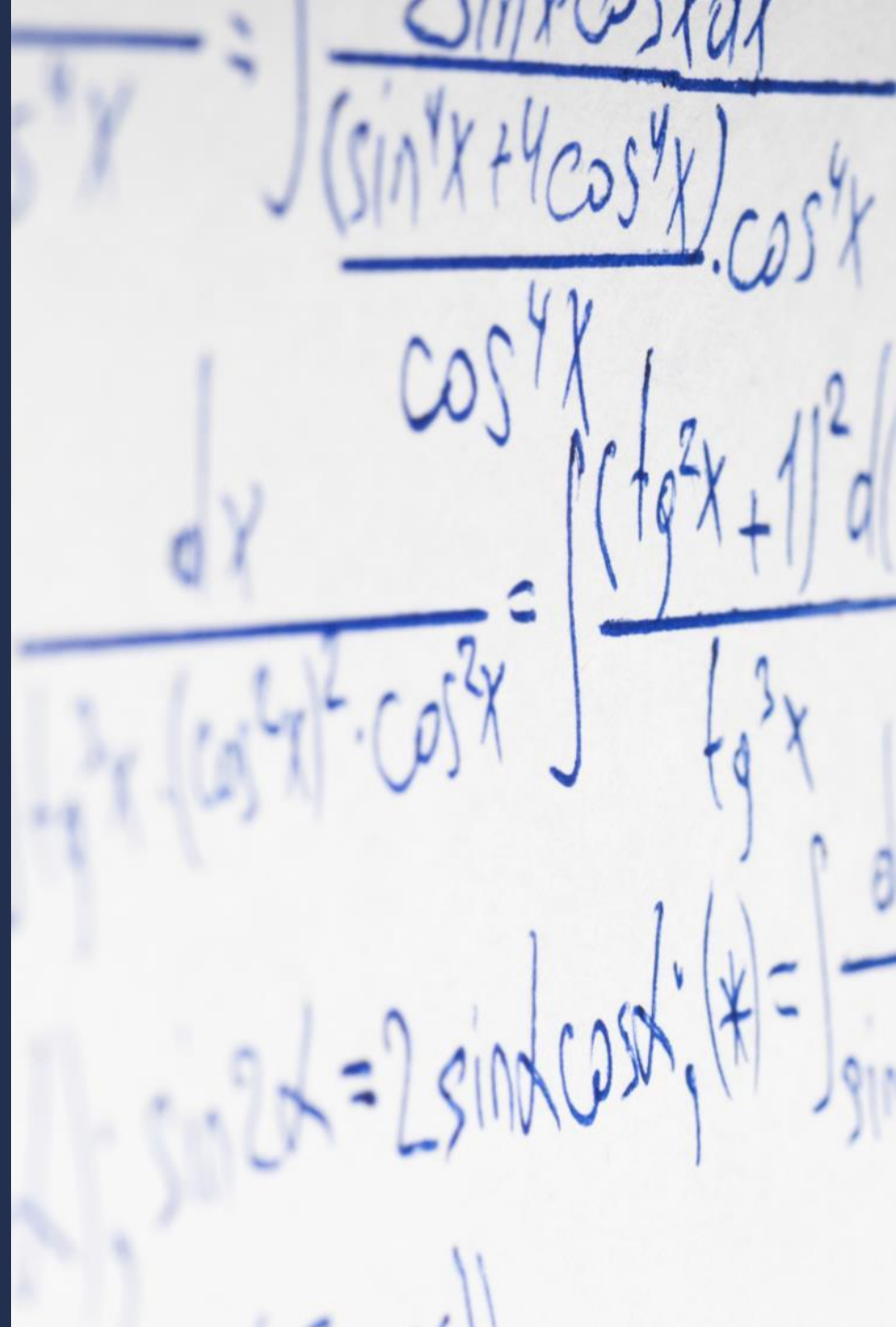


WISCONSIN CLIMATE AND HEALTH PROGRAM
Bureau of Environmental and Occupational Health

dhs.wisconsin.gov/climate | SEPTEMBER 2016 | dhsclimate@wi.gov
State of Wisconsin | Department of Health Services | Division of Public Health | P-00853 (Rev. 09/2016)



People process
information below
their grade level



The image shows a close-up of handwritten mathematical work on a piece of paper. The handwriting is in blue ink. At the top, there is a complex fraction involving trigonometric functions: $\frac{\sin^4 x \cos^4 x}{(\sin^4 x + 4 \cos^4 x) \cdot \cos^4 x}$. Below this, there is another fraction: $\frac{\cos^4 x}{\tan^3 x (\cos^4 x)^2 \cdot \cos^2 x} = \int \frac{(\tan^2 x + 1)^2 dx}{\tan^3 x}$. At the bottom, there is a formula for the double angle of sine: $\sin 2x = 2 \sin x \cos x$, followed by a small note: $(*) = \int \frac{d}{dx} \sin x$.

Identify your audience

Take the average grade
level minus 4 grades

Lower the literacy of
your messaging

cyanobacteria

ingest

inhale

contaminated

blue-green algae

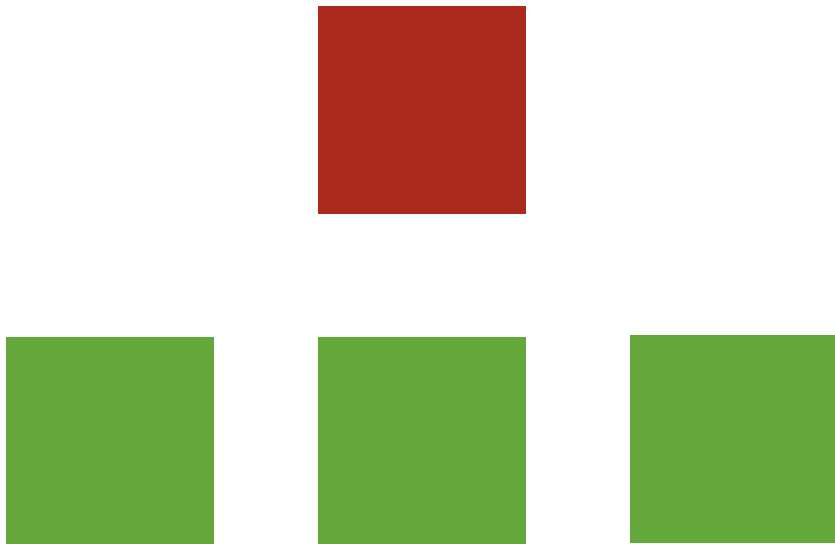
swallow

breathe in

unsafe

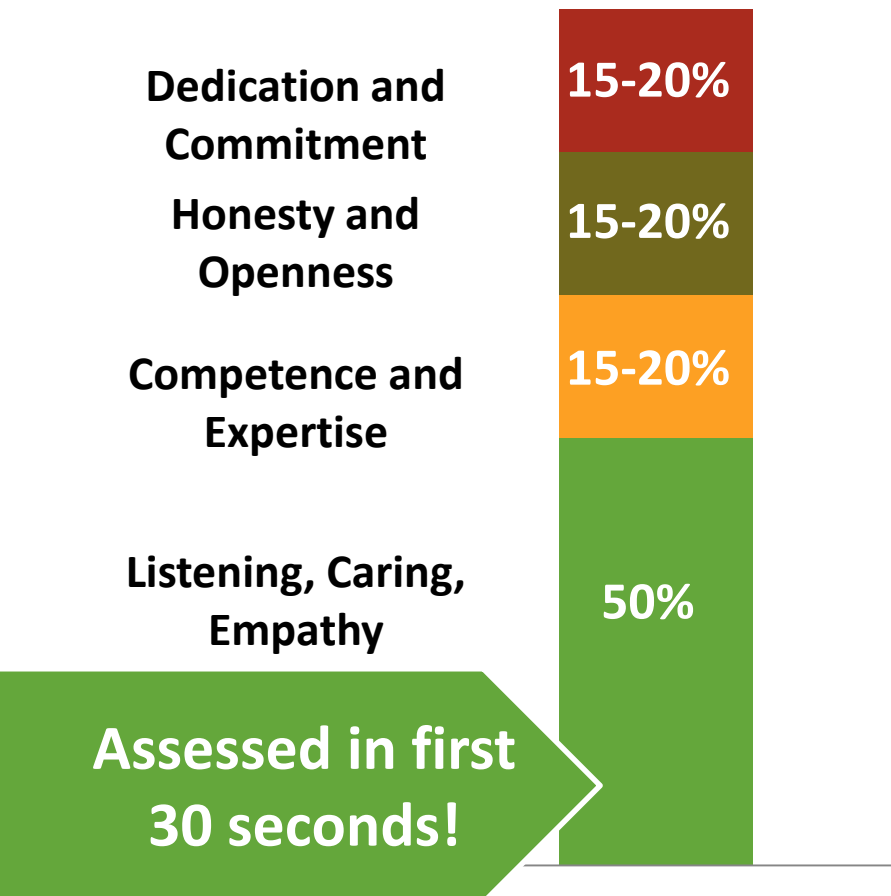
People hear the
negative more than
the positive



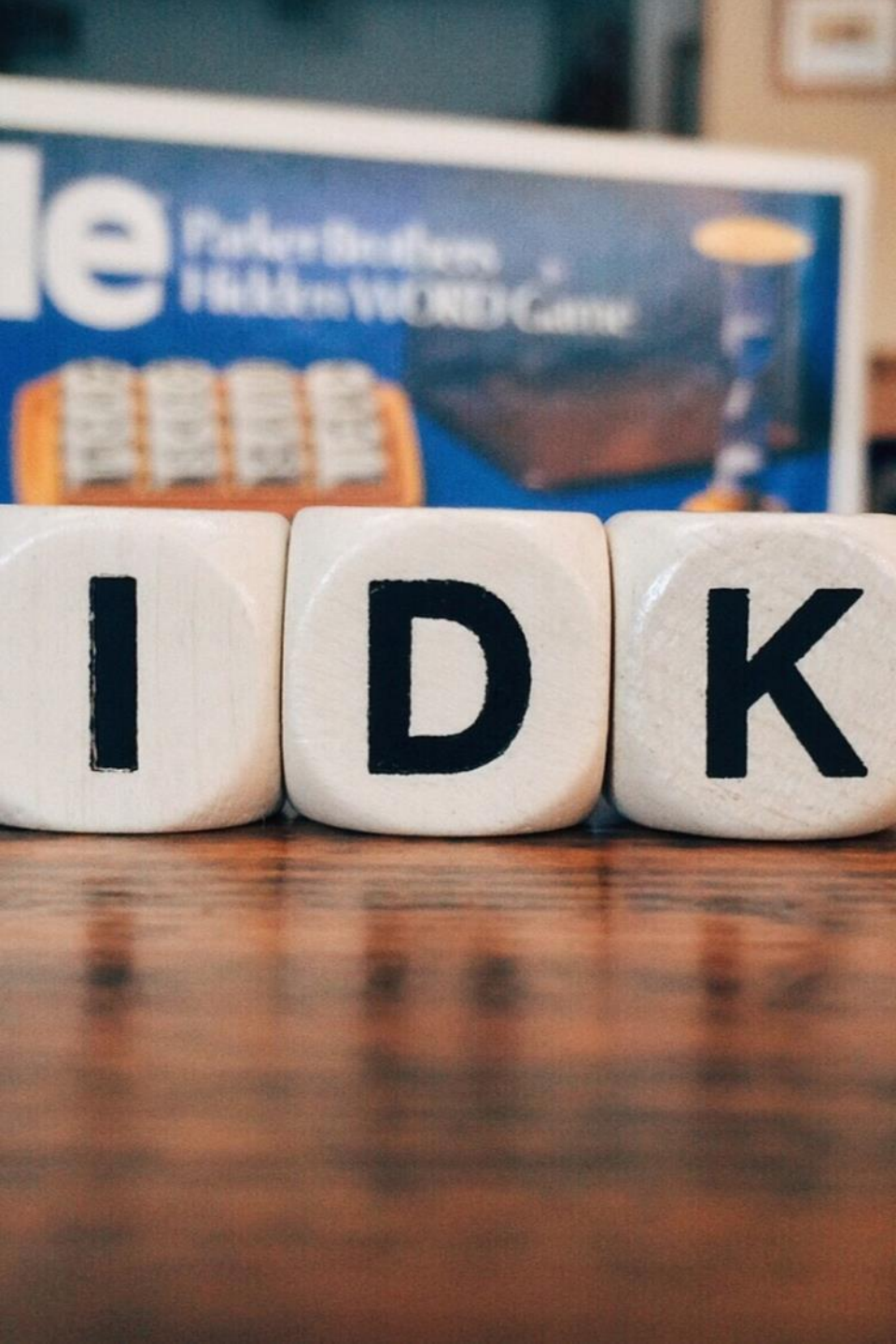


$$1 = 3$$

One negative
message equals three
positive messages



People want to
know you care
before they care
what you know



Say “I don’t know” if
you don’t know

What to Remember

People focus on first and last message

- Rule of threes
 - 3 messages, repeated 3 times (supported by 3 points)
 - First message first, second message last
-

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People process below their grade level

- Identify your audience
- Lower the reading level by four grade levels

What to Remember

People focus on first and last message

- Rule of threes
- 3 messages, repeated 3 times (supported by 3 points)
- First message first, second message last

People process below their grade level

- Identify your audience
- Lower the reading level by four grade levels

People hear the negative message more than the positive messages

- 1 negative message = 3 positive messages
 - Show you care before you show what you know
 - Say “I don’t know” when you don’t know
-

Thanks!

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Case Study



Dog dies after swimming in Lake Mendota



Channel 3000 / News 3 Now

 **Subscribe** 8.5K

186 views

<https://www.youtube.com/watch?v=arQ1MVxuwzY>

Case Study

Discussion

- What were the news story's positive and negative messages?
- Was the story understandable for the general public?
- What did the story state was known vs. unknown?
- Was there a sense of compassion?

Group Discussion

What have your experiences been with communicating about blue-green algae to the general public?

- What went well?
- What was most challenging?
- What would you do differently next time?