



# Intro to Risk Communication

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Session Code

**March 20-23, 2023**



25th California Unified Program  
Annual Training Conference

March 20 – 23, 2023

*“Nobody cares how much you know until they know how much you care.”*

- Teddy Roosevelt



# Organizational Perspectives

- In California we have several laws that require us to engage our communities in our decision-making processes.
- As civil servants or contractors that work on behalf of government agencies, Risk Communication is crucial to a productive public engagement process.



# The “Great Communicator”



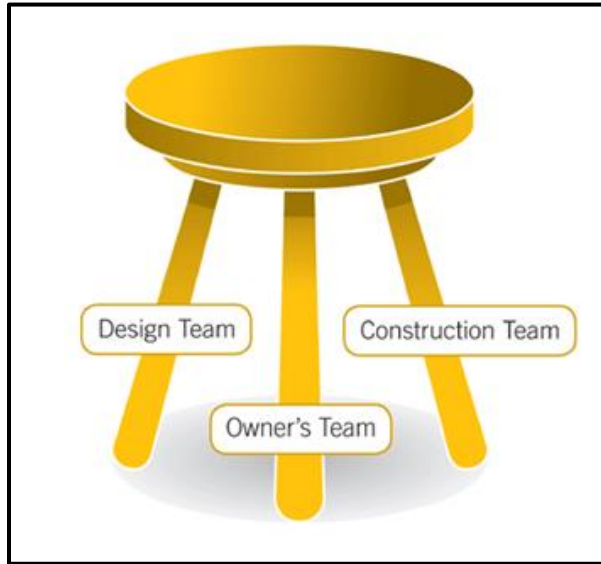
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# Workshop Overview:

- **Introduce** the Science of Risk Communication
- **Share** concepts, tools, and templates
- **Practice** using some of these templates to see their application in our work



# What is Risk Communication?



“A science-based approach for communicating effectively in high concern, emotionally charged environments.”

- National Academy of Science

**What do you think is the thing people in the U.S. fear the most?**



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# Why Risk Communication is Important

Chapman University Top 10 Fears 2020/2021	% Very Afraid or Afraid
1. Corrupt Government Officials (#1 every year)	79.6%
2. People I love dying (#5 in 2019)	58.5%
3. A loved one contracting the coronavirus (COVID-19)	58%
4. People I love becoming seriously ill (#3 in 2019)	57.3%
5. Widespread civil unrest	56.5%
6. A pandemic or a major epidemic	55.8
7. Economic/financial collapse	54.8%
8. Cyber-terrorism (#7 in 2019)	51%
9. Pollution of oceans, rivers and lakes (#2 in 2019)	50.8%
10. Biological Warfare	49.3%



# Risk Communication Science

- National Academy of Sciences (\*1989)
- Sub-field of Risk Management
- Well Researched
  - 2000 books/8000 articles
- Dr. Vincent Covello, and Dr. Peter Sandman



# Learning Objectives Today

- Active listening techniques
- Develop key messages
- Write and speak in plain language
- Improve verbal and non-verbal public speaking techniques
- Improve trust and credibility with stakeholders



# Introductions

27 words

9 seconds

3 key messages:

- Name
- Job title or what you do
- Training/experience in Risk Communication





# BREAK TIME!



# Topic #1

## Risk Communication Science



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# Key Messages

- Science-based
- High concern/emotionally charged situations
- Keys to Success:

(A)nticipate

(P)repare

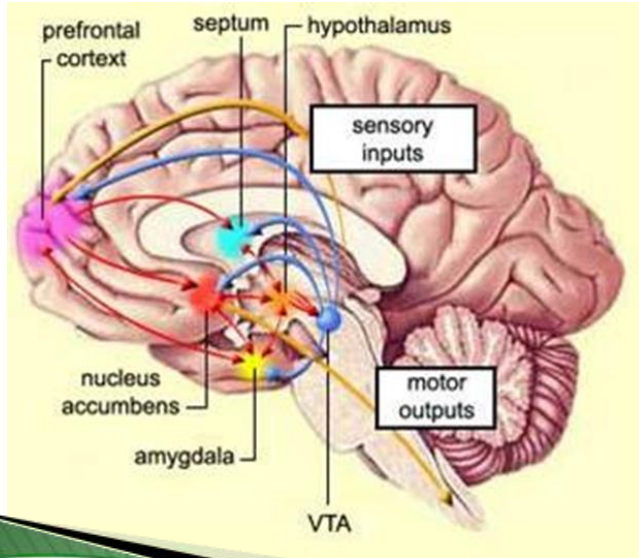
(P)ractice

(A)dapt



# Risk Communication Science

## “Mental Models”



- Mental Noise
- Negative Dominance
- Trust Determination
- Risk Perception

# Mental Models

- **Mental Noise:** difficulty hearing, processing, and remembering information
- Remember first and last messages
- **Trust Determination:** focus on non-verbal cues (body language)
- **Negative Dominance:** emphasis on negative information
- **Risk Perception:** What people perceive to be real is real in consequence



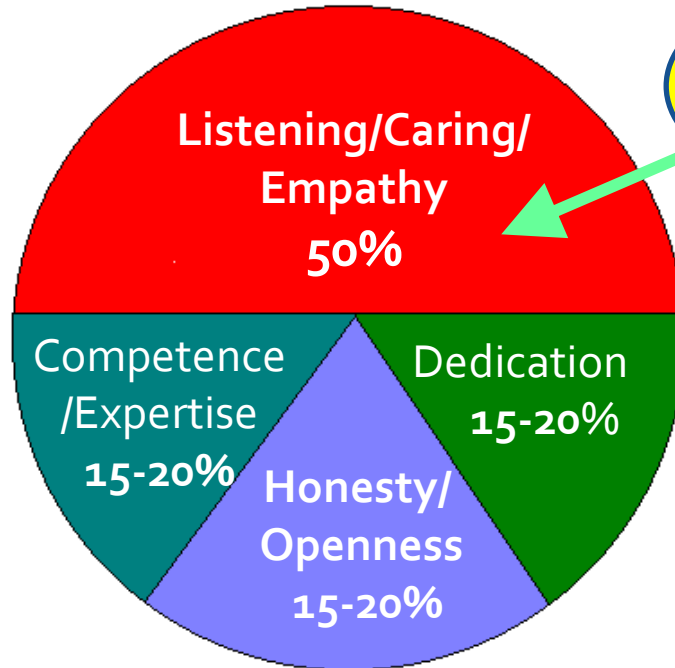


**In a Risk Communication setting, how long do you think we have to establish trust with someone we're speaking with?**



# Trust & Credibility

## The Cornerstone of Effective Risk Communication



**\*Established in the first 9-30 seconds**

# Empathy

- Is putting yourself in someone else's shoes
- Cannot be artificial or fake
- Body language and tone of voice reveal sincerity



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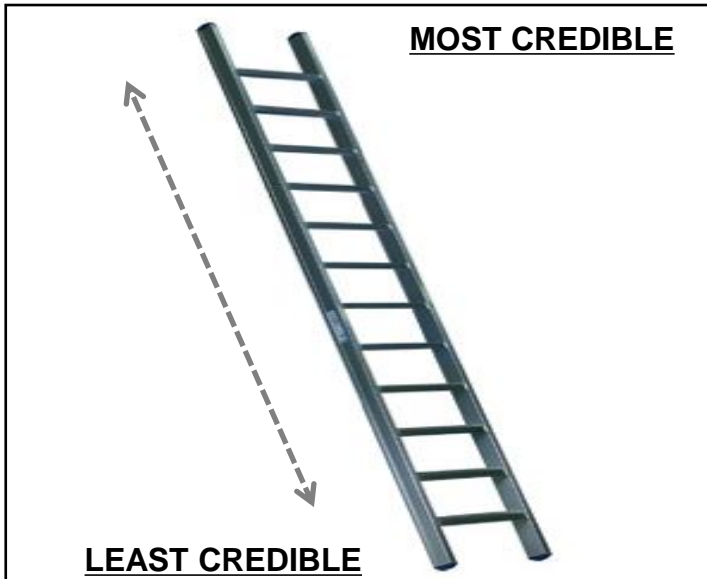
# Video Case Study

BP Oil Spill



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# The Credibility Ladder



## High:

- Health and Safety Professionals
- University Professors
- ***Scientists***

## Medium:

- Media
- NGOs/Activist Groups
- Law enforcement

## Low:

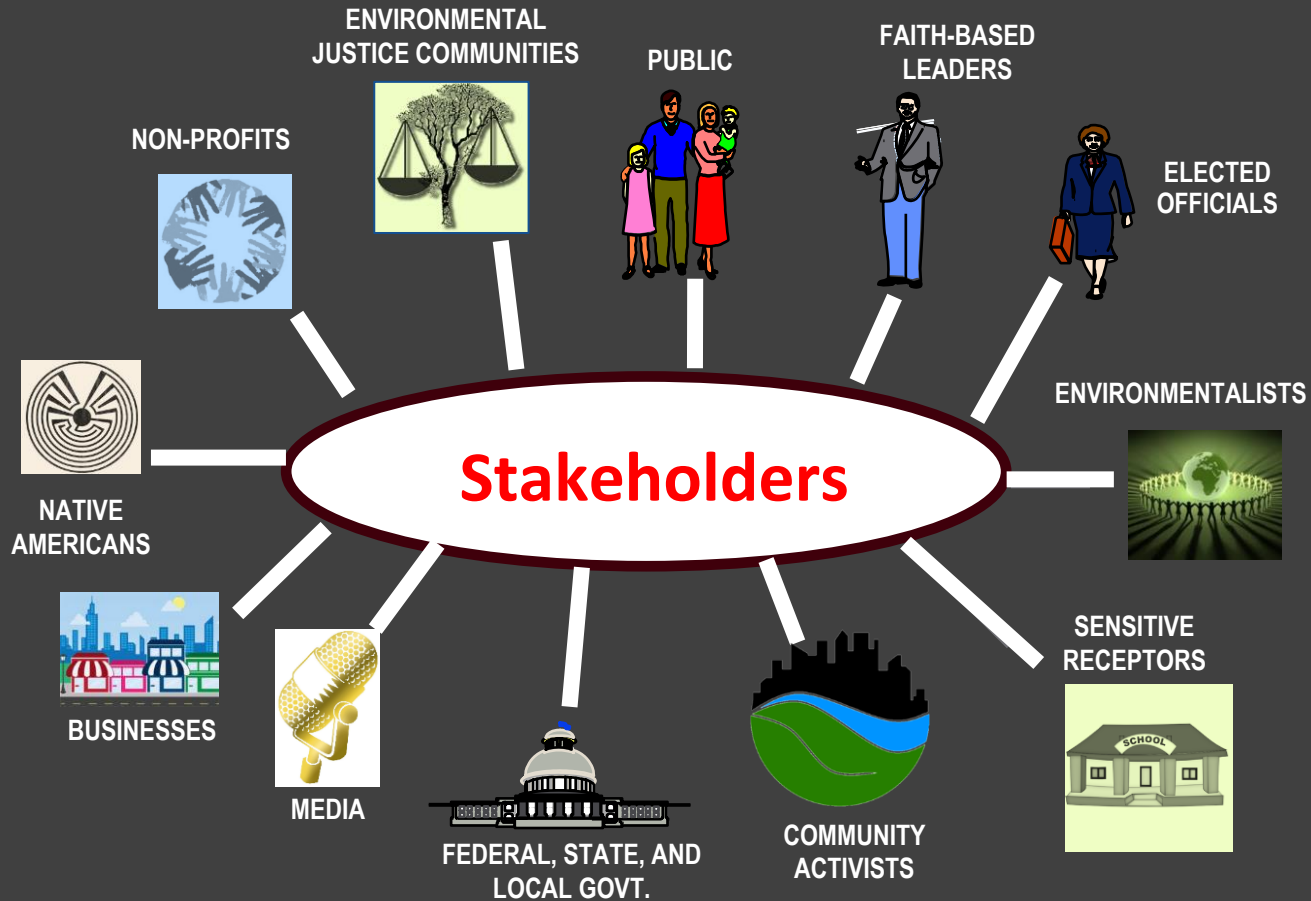
- Industry
- **Government**
- Paid External Consultants

# Topic #2

## Risk Communication Strategy



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# Environmental Justice

*"...ensures fair protection and treatment of all Californians regardless of race, age, culture, income, education, or geographic locations."*

- California passed first EJ law in the US in 1999
- CalEPA developed an EJ strategy for BDOs in 2004
- CalEnviroScreen identifies impacted communities to prioritize cleanup projects and for grants





# CalEnviroScreen 4.0

CalEnviroScreen Results   [ENVIROSTOR HOME](#) | [MANAGE PROJECTS](#) | [REPORTS](#) | [SEARCH](#) | [LOGOUT](#)

**FORMER WESTINGHOUSE FACILITY (60000354)** - [VIEW MAP](#) - [PUBLIC PROFILE REPORT](#) VOLUNTARY CLEANUP PROJECT - ACTIVE

18020 SOUTH SANTA FE AVENUE  
RANCHO DOMINGUEZ, CA 90221  
LOS ANGELES COUNTY  
CALENVIROSCREEN SCORE: 96-100% (highest scores)

[GANIT CHART](#)  
[ACTIVITIES REPORT](#)  
[MILESTONES REPORT](#)

**OFFICE**  
CLEANUP CHATSWORTH  
**PROJECT MANAGER**  
[DON INDERMILL](#)  
**ADMIN PROJECT MANAGER**  
[CECILIA DAGHER](#)

THIS PROJECT WAS LAST MODIFIED BY [DON INDERMILL](#) ON 3/16/2018 12:00:32 PM - [VIEW UPDATE HISTORY](#)

CalEnviroScreen data is provided by the Office of Environmental Health Hazard Assessment (OEHA). To learn more about CalEnviroScreen please go to [www.oehha.ca.gov](http://www.oehha.ca.gov).

Dataset Version	Update Date	Fact Sheet
3.0	4/4/2017	<a href="https://oehha.ca.gov/media/downloads/calenviroscreen/fact-sheet/ces30factsheetfinal.pdf">https://oehha.ca.gov/media/downloads/calenviroscreen/fact-sheet/ces30factsheetfinal.pdf</a>

CalEnviroScreen Score	
Census Tract:	6037543305
Population:	2666
	96-100%
	(highest scores)
<a href="#">CalEnviroScreen Percentile Score</a>	
	100%
<a href="#">Pollution Burden Percentile</a>	
	88%

Pollution Burden		
Exposure Indicators	Raw Value	Percentile
<a href="#">Air Quality: Ozone:</a>	0.042	32%
<a href="#">Air Quality: PM 2.5:</a>	11.63	69%
<a href="#">Diesel Particulate Matter:</a>	31.2	87%

Population Characteristics			
Sensitive Population Indicators		Raw Value	Percentile
<a href="#">Asthma:</a>		106.87	94%
<a href="#">Low Birth Weight:</a>		10	100%
<a href="#">Cardiovascular Rate:</a>		91%	
Socioeconomic Factor Indicators		Raw Value	Percentile
<a href="#">Education:</a>		19.7	61%
<a href="#">Linguistic Isolation:</a>		1.9	13%
<a href="#">Poverty:</a>		34.1	51%
<a href="#">Unemployment:</a>		12.1	71%
<a href="#">Housing Burden:</a>		89%	



# Risk Communication Templates

## CCO

- Compassion/Conviction/Optimism

## 27/9/3

- 27 words/9 seconds/3 key messages

## Primacy/Recency

- Most important message first and last



# Message Map Circa 47 BC

## Area of Concern

How goes the war?

## Risk Communication Message Map

### Key Message 1

I came

### Key Message 2

I saw

### Key Message 3

I conquered

#### SF1

The journey was long and hard

- > We traveled many days
- > Mountains were high
- > Valleys were deep

#### SF1

The enemy's armies were large

- > There were more troops than reported
- > Their numbers stretched to the horizon
- > More were arriving every day

#### SF1

We engaged the enemy forthwith

- > We attacked at dawn
- > We had the element of surprise
- > We found them in disarray

#### SF2

We suffered heavy losses along the way

- > Many troops fell ill
- > Many were injured
- > Food and water grew scarce

#### SF2

They were well armed and equipped

- > They had the newest weapons
- > Every man was fully armed
- > They were re-supplied daily

#### SF2

Our legions fought bravely

- > Our troops advanced steadily
- > They were fearless in battle
- > They were undaunted by greater numbers

#### SF3

Despite the difficulties we arrived in force

- > We had the necessary legions
- > We had the necessary weapons
- > Morale was high

#### SF3

They were well positioned

- > They occupied the high ground
- > They were fully fortified
- > They deployed advance observers

#### SF3

The enemy is destroyed

- > Their troops have deserted
- > They have abandoned their weapons
- > The victory is ours

# Topic #3

## Plain Language

“...Don’t underestimate your readers’ intelligence, but don’t overestimate their knowledge of a particular field. When writing about science, don’t simplify the science; simplify the writing.”



# Plain Language Is The Law

## Plain Writing Act of 2010

"Clear Government communication that the public can understand and use."

## 2011 Executive Order 13563

"[Our regulatory system] must ensure that regulations are accessible, consistent, written in plain language, and easy to understand."

## 1982 California Government Code Section 6215 (a)(b)

Requires all California state government agencies to use "plain, straightforward language."



What does this symbol mean?



# Plain Language Guidelines

- Use easy-to-read words with less syllables
- Write shorter sentences with important details first
- Explain why information is important
- Use bullets or numbers
- Use visuals that help explain the text
- Leave lots of white space



## Wash Your Hands

After a disaster, staying clean can be hard to do. You may not have running water. But staying clean helps you stay healthy.

### Things you can do to stay clean and healthy

- Wash your hands with soap and clean water. If you don't have soap and water, you can use hand cleaners with alcohol in them.
- Wash your hands many times each day.



### Times to wash your hands are

#### BEFORE

- making food
- eating
- touching a sick person
- touching a cut, sore, or wound.

#### AFTER

- using the bathroom
- blowing your nose, coughing, or sneezing
- touching things that may carry germs, like
  - diapers or a child who has used the toilet
  - food that is not cooked (raw food)
  - animals or animal waste
  - trash
  - things touched by flood water
  - a sick person
  - cuts, sores, and wounds.







# BREAK TIME!





# Topic # 4

## Key Messaging



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# Body Language (Non-Verbal)



# Body Language Tips

**Eyes:** Maintain appropriate eye contact.

**Hands:** Keep hands visible and open and at waist level, use slow movements.

**Posture:** Tilt head, sit on edge of chair and lean slightly forward.

**Avoid repetitive motions:** Frequent nodding, rubbing of hands, pencil tapping.



# Anticipating Questions



What do people want to know?

5% of fears and concerns are based on **FACTS**

**95%** of fears and concerns are based on **RISK PERCEPTIONS**

What misinformation can be corrected?



# What to Avoid

- Humor
- Acronyms and Jargon
- Negatives and Absolutes





# “I want my life back.”



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# Video Case Study

## Ohio Train Derailment



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# *Message Map*

## 1Key Message

**Keywords:**

**Keywords:**

**Keywords:**

## 2Key Message

**Keywords:**

**Keywords:**

**Keywords:**

## 3Key Message

**Keywords:**

**Keywords:**

**Keywords:**



# Active Listening

*ACTIVE LISTENING* is a way of reflecting back what someone has expressed. It lets them know you're listening. It also checks your understanding of what they intended to say.





# Closing Messages

- Under stress, people have difficulty hearing, processing and remembering information.
- Most questions/concerns can be predicted and prepared for in advance.
- Effective risk communication can foster productive engagement with your stakeholders.





# Any Questions?

Session Code: MF-3

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