# Principles of Risk Communication
# Tu-D1 10:15-12:00

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# Outline

1. Risk Communication
2. Communication with your target audience
3. Public participation
4. Crisis and emergency communication
5. Outrage factors
6. The media and risk communication
7. Seven cardinal rules
8. Risk Perception
9. Message Mapping
10. Messaging and social media

# Risk Communication

# What It Is and Why We Do It

# What Is Risk Communication?

- Informing people about potential hazards to their person, home or community
- Goals of risk communication:
  - To help develop an accurate understanding of a situation and possible actions to take
    - Alert people – action is needed
    - Reassure people – action is not needed
  - To enable participation in decision-making

# Risk Communication: Key Concepts

When people are stressed and concerned, typically:

- They want to know that you care before they care what you know
- It's difficult to listen, understand and remember information
- Your audience will trust you more if you acknowledge uncertainty or what you don't know.

(Covello 2016)

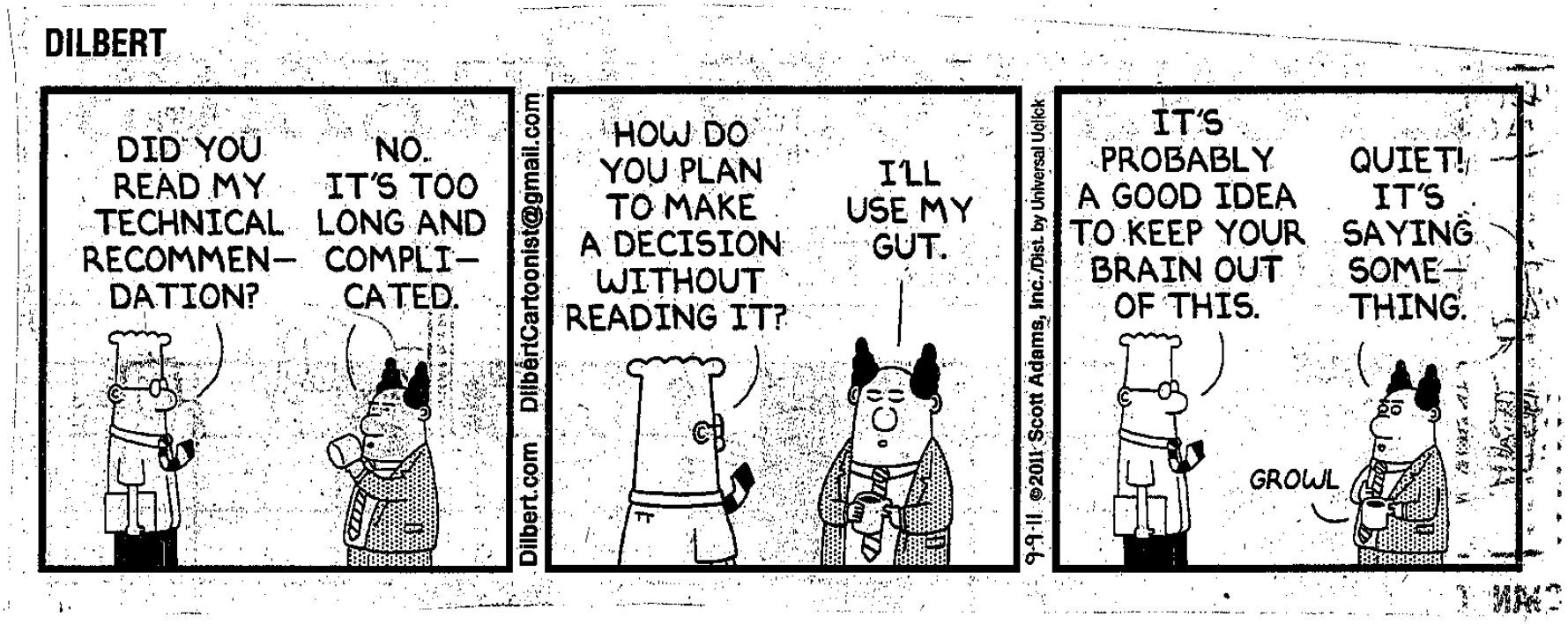
# Risk Communication as a Tool

Risk communication tools assist in making the findings of technical information more accessible to the public

- Risk information is usually written in highly technical language that the general public may not understand
  - Ex. information on hazmat, public health, risk assessment
- Be sure to present technical language in a way the public can understand

- Keep it short and simple!

# Long and Complicated vs. Short and Simple



# Reasons for Risk Communication

- To alert someone of an existing risk or problem
  - When you don't tell the public something, they assume there isn't a problem
- To listen to the concerns of people and offer solutions
  - Partner with your audience in solving the problem.

If your message is not seen or heard,
it cannot inform decision-making

(Sandman, 2016)

# Communication with Your Target Audience

# Target Audience – Who Do You Want To Reach?

- General public
  - Students
  - Neighbors
  - Parents
  - Employees
- Decision makers
  - Elected officials
  - Regulators
- The Media/Journalists
  - News organizations
  - Bloggers
- Interest groups
  - Environmental
  - Human rights
  - Health concern
- Business groups
  - Local Chamber of Commerce
  - Specific industry organization

Social media

- Facebook
- Twitter

# Communication Challenges

- Three main challenges in communicating with a target audience:
- Cultural Diversity
- Message Timeliness, Coordination, and Consistency
- Social Media

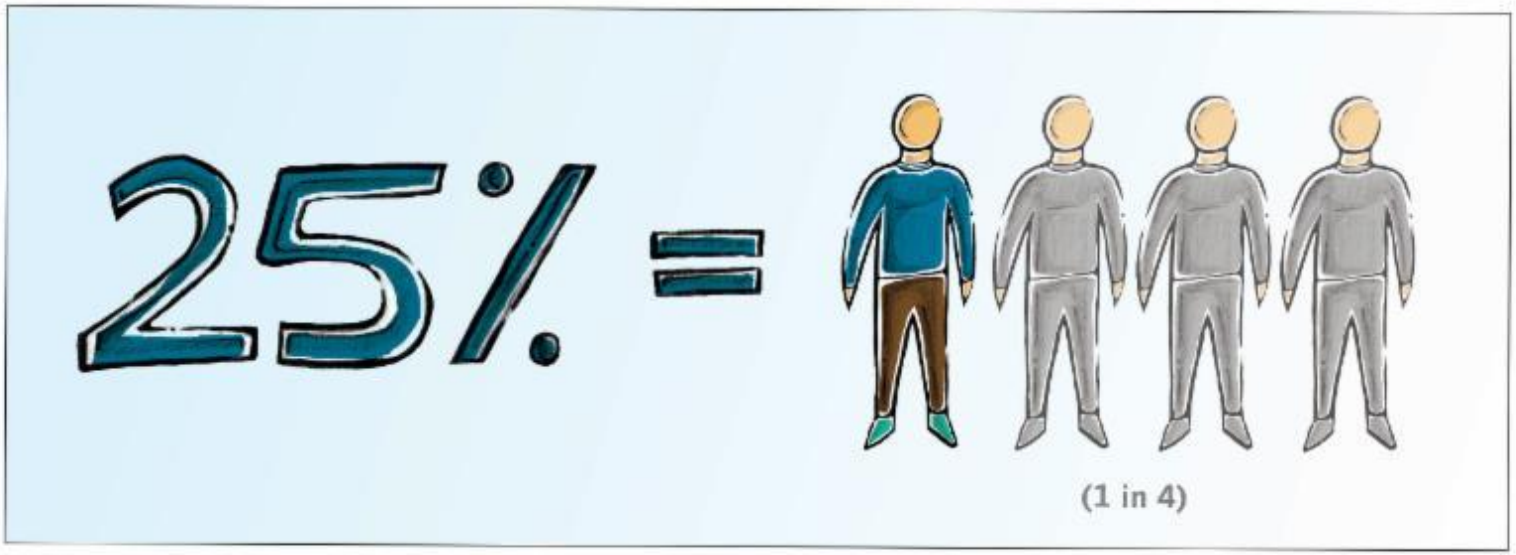
# Target Audience - Specifics

Consider aspects of the group(s) you may need to take into account to be effective

Examples

- Language: fluency in English; reading level; sensitivity to use of certain terms
- Familiarity with scientific terminology or "technical jargon"
- Types of pictures or comparisons likely to be understood

# Use Creative Approaches To Convey Quantitative Details



# Target Audience - Focus

- What they currently know about the risk
- What you want them to know, and why
- What they most likely want to know

# Need to Balance Information and Influence

- Information
  - Provides the audience with an understanding of the topic based on facts and data
    - Ex. Source of the hazard, what the risk is, action to take
    - However, information can hinder and help
  - The goal of information is to make sure the public has enough information to make decisions that are in their best interest.

# Influence

The emotional factors and tactics used to convey the information

- Forms of influence:
  - Highlighting relevant and effective facts
    - Avoid Persuasive Use of Facts
  - Framing information and decisions
    - The way you present info influences interpretation
  - Risk comparison
    - Known versus unknown
  - Appeals
    - Authority figures (e.g. Doctor)
    - Emotions (e.g. sad story)

# Acceptability of Influence

- Who does the audience trust?
  - Government officials
  - Doctors or other experts
  - Politicians
  - Public representatives/Locals
  - Non-governmental organizations (NGOs) and community groups
- What does the audience care about?
  - Pets
  - Children
  - Self or someone you know affected

# Example: Facility sends a notice to nearby community about toxic air emissions

Target Audience – Neighbors (includes parents, teachers)

Regulators address concerns about the facility

- What the audience currently knows
  - Facility releases air pollutants
- What regulators may want to convey
  - Efforts have successfully reduced air toxics
  - Certain risks remain
- What the audience wants to know
  - How they can protect children's health
  - Steps regulators are taking to reduce risks

# Example: Facility sends a notice to nearby community about toxic air emissions

Target Audience – Trade organization for industry

Regulators address concerns about the facility

- What the trade organization currently knows
  - Facility has air pollution controls in place
- What regulators may want to convey
  - Risks have increased due to new regulation or methodology change
  - Additional measures may be needed
- What the trade organization wants to know
  - How to control costs
  - What steps to take to keep good public image

# Target Audience - How

- Partner with organizations that know the people you want to reach, or others who the people trust and consider credible
  - Clinic, church
  - Parent / Teacher Association
  - Local non-profit organization
- Ways to reach target audience
  - Social media, websites, radio
  - Community organizations, events

# Ideas of How to Keep Your Audience on Track

Use of introductions, conclusions, outlines or transition slides can be useful.

Repeat key or difficult points

- People remember that something is important when it's repeated
- Organize by key topics
- People remember that something is important when it's repeated

# Public Participation

# Public Participation "Spectrum"

Consider the goal of your effort to communicate risk. Choose appropriate tools and messages.

- Inform
- Consult
- Involve
- Collaborate
- Empower

More detail on following slides for each of these…

# Public Participation Goals

- Inform
  - To provide the public with objective information so they can make their own decisions
- Consult
  - Obtain public feedback
- Involve
  - Work directly with the public to make sure their concerns are understood and considered

# Public Participation Goals

- Collaborate
  - Involve public in decision making
- Empower
  - Allow public to make final decisions

# Crisis and Emergency Communication

# The STARCC Principle

One method to follow for developing public messages in a crisis:

**S**imple
**T**imely
**A**ccurate
**R**elevant
**C**redible
**C**onsistent

(CDC, 2016)

# Risk Communication for Emergencies (Crisis)

- Give people things to do
- Anxiety is reduced by action
- This restores a sense of control

# Crisis and Emergency communication

Accuracy of Information + Speed of Release

Credibility

+

=

Successful Communication

Empathy and Openness

Trust

# Outrage Factors

# Outrage Factors

- What are they?
  - Factors that impact the amount of emotion created by the message
- Acknowledgment:
  - When developing a message, acknowledge outrage factors to increase understanding

# Outrage Factors – What To Do

When outrage factors are present:

- Be aware
  - They will impact the amount of negative emotion created by the message
- Acknowledge them
  - Convey your understanding and respect for concerns of the audience
  - This will increase the likelihood that the audience will listen to your message
- Do NOT attempt to refute
- Keep in mind risk perception in different communities

# Outrage Factors

| "Safe" | "Risky" |
|---|---|
| Voluntary | Coerced |
| Natural | Industrial |
| Familiar | Exotic |
| Not memorable | Memorable |
| Not dreaded | Dreaded |
| Chronic | Catastrophic |
| Knowable | Unknowable |
| Individually controlled | Controlled by others |
| Fair | Unfair |
| Morally irrelevant | Morally relevant |
| Trustworthy sources | Untrustworthy sources |
| Responsive process | Unresponsive process |

# Group Discussion #1: Target Audiences and Outrage Factors

- Break into groups.
- Discuss potential target audiences in your work.
- Discuss outrage factors you have encountered in your work.
- Share stories with one another.
- Take notes and be prepared to share with larger group.

# The Media and Risk Communication

# The Media and Risk Communication

- Journalists are interested in:
- Human interest stories
  - As opposed to statistics
- Bad news
  - As opposed to good news
- Personal perspectives
  - Such as an "eyewitness account"
- Yes or no (safe or unsafe) answers
  - As opposed to nuanced, ambiguous answers
- Front-page headline news stories
- Quick, digestible sound-bites

# Journalists Are Interested In:

- High outrage situations make "better" news stories
  - Expect the press to play up outrage angles
  - Anticipate their questions by considering outrage factors in advance
- Few journalists have a science background
  - They need help to understand the complex and often contradictory opinions of risk "experts"
  - Be well prepared and well organized

Journalists and reporters always want answers NOW.

# Some commonly asked questions by journalists

1. What happened? How/Why did it happen?
2. What caused it?
3. How many people were harmed? Are they being helped?
4. Is the situation under control?
5. Could this have been prevented?
6. Are people out of danger?
7. What aren't you telling us?
8. How much will this all cost? Are you willing and able to pay the costs?

# Things to Avoid When Dealing With The Media

- Technical jargon
- Filler information that is not pertinent to the main message
- Condescending or judgmental language
- Promises, guarantees or speculation
- Humor, as it gives an impression of flippancy

# Things to Remember When Dealing With The Media

- Present a short, concise, and focused message
- Make the most important points immediately
- Give action steps in positives, not negatives
- Repeat the message
- Create action steps in threes
- Use personal pronouns for the organization
- Make sure your comments reflect organization policy and viewpoint
- Avoid personal opinions

(US EPA, 2007)

# The Seven Cardinal Rules of Risk Communication

# Seven Cardinal Rules

Rule 1: Accept and involve the public as a legitimate partner

Rule 2: Listen to the audience

Rule 3: Be honest, frank, open

Rule 4: Coordinate and collaborate with other credible sources

# Seven Cardinal Rules

Rule 5: Meet the needs of the media

Rule 6: Speak clearly and with compassion

Rule 7: Plan carefully and evaluate performance

# Message Maps

# Message Maps

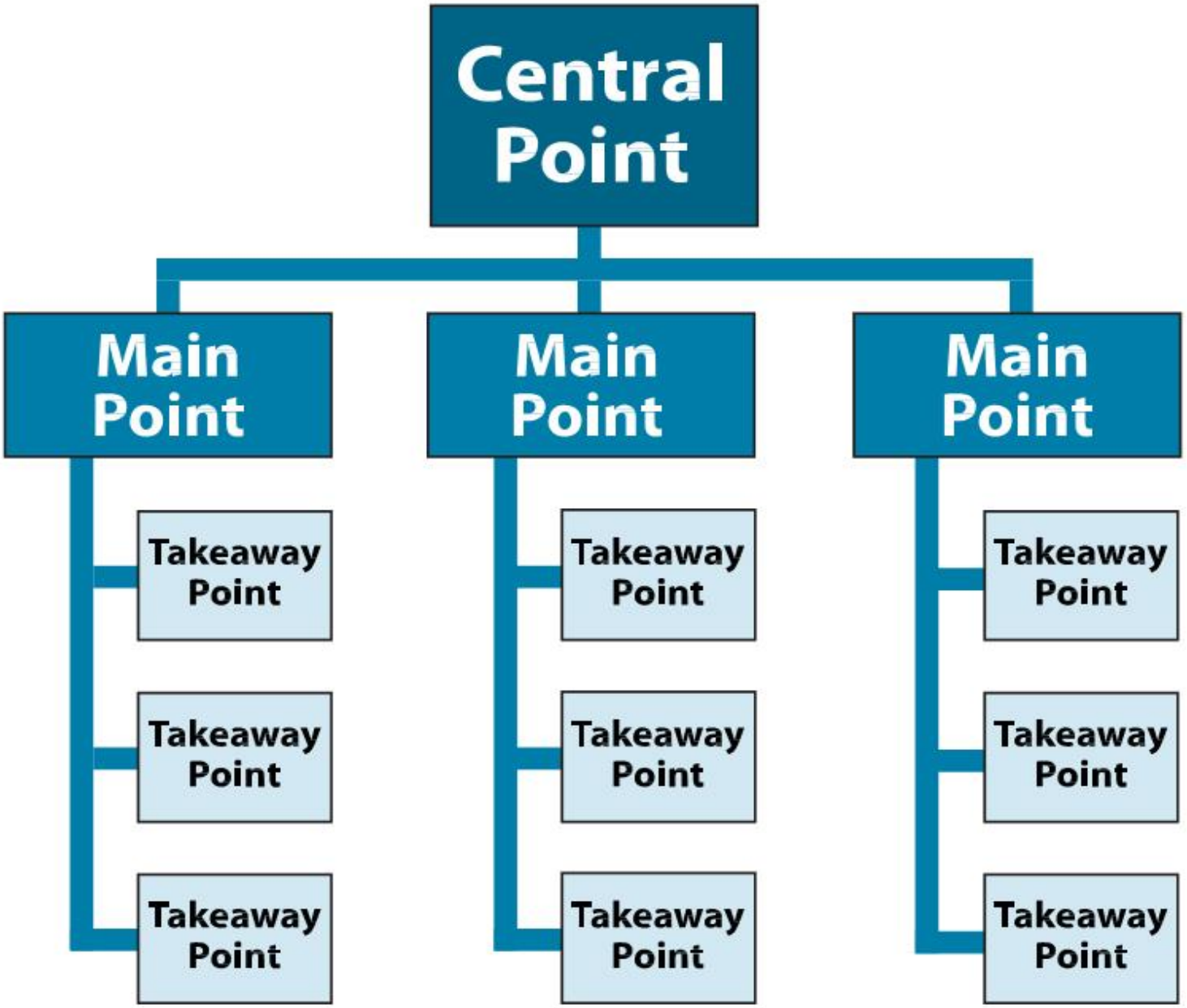
- An approach for developing clear, concise communications about risks
  - Allows multiple partners responding to a crisis situation to speak with one voice
  - Can also be useful as planning tools for less urgent communications

# Goals of a Message Map

1. Identify the stakeholders
2. Help anticipate stakeholder questions and concerns
3. Help organize thinking
4. Help develop messages within a clear, concise framework
5. Provide guidance for spokespersons
6. Create consistent messages
7. Encourage speaking in one voice

# Message Map Components

- Identify
  - The audience
  - The question or concern to address specific to that audience
- Develop up to 3 key messages responsive to the concern – be brief!
  - Should have 3 supporting takeaway points for every key point


Central Point
Main Point
Main Point
Main Point
Takeaway Point
Takeaway Point
Takeaway Point
Takeaway Point
Takeaway Point
Takeaway Point
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Takeaway Point
Takeaway Point

# Message Map
# Circa 47 BC

**Area of Concern**

**How goes the war?**

| Key Message 1 | Key Message 2 | Key Message 3 |
|---|---|---|
| I came | I saw | I conquered |
| **SF1** The journey was long and hard | ➢We traveled many days<br>➢Mountains were high<br>➢Valleys were deep | **SF1** The enemy's armies were large | ➢There were more troops than reported<br>➢Their numbers stretched to the horizon<br>➢More were arriving every day | **SF1** We engaged the enemy forthwith | ➢We attacked at dawn<br>➢We had the element of surprise<br>➢We found them in disarray |
| **SF2** We suffered heavy loses along the way | ➢Many troops fell ill<br>➢Many were injured<br>➢Food and water grew scarce | **SF2** They were well armed and equipped | ➢They had the newest weapons<br>➢Every man was fully armed<br>➢They were re-supplied daily | **SF2** Our legions fought bravely | ➢Our troops advanced steadily<br>➢They were fearless in battle<br>➢They were undaunted by greater numbers |
| **SF3** Despite the difficulties we arrived in force | ➢We had the necessary legions<br>➢We had the necessary weapons<br>➢Morale was high | **SF3** They were well positioned | ➢They occupied the high ground<br>➢They were fully fortified<br>➢They deployed advance observers | **SF3** The enemy is destroyed | ➢Their troops have deserted<br>➢They have abandoned their weapons<br>➢The victory is ours |

Contact: CenterforRiskCommunication.org

# Example Of Message Map

- **Concern**: Why should I care about Winter Spare the Air alerts?
- **Key messages**
  - Why an alert is issued
    - Higher levels of very small particulates are present in the air
  - Why this matters
    - These particulates travel deep into the lung, and can make asthma worse
  - Who is at risk
    - People with heart and lung disease, especially the elderly, are more vulnerable

# Message Map – Outrage Factors

## Possible outrage factors related to Particulate matter exposure

- Lack of control – It is in ambient air
- Unfair – Some areas have higher levels of particulate matter than others

- Outrage factors may influence how people respond to your message

# Message Map: West Nile Virus

| **Stakeholder:** Public/Media<br>**Question or Concern:** What does the public most need to know? | | |
|---|---|---|
| **Key Message 1** | **Key Message 2** | **Key Message 3** |
| *West Nile Virus transmitted by infected mosquitoes* | *Health effects of West Nile Virus are:* | *There are simple steps people can take to avoid infection* |
| **Supporting Information 1-1** | **Supporting Information 2-1** | **Supporting Information 3-1** |
| Mosquitoes become infected from biting infected birds | 80% of all infections are asymptomatic | Spray with DEET |
| **Supporting Information 1-2** | **Supporting Information 2-2** | **Supporting Information 3-2** |
| Blood-blood transmission also possible | Uncomplicated West Nile Virus fever: 20% | Wear long-sleeved clothing |
| **Supporting Information 1-3** | **Supporting Information 2-3** | **Supporting Information 3-3** |
| Human-to-human contact not believed to be a mode of transmission | Encephalitis, Meningitis, Meningoencephalitis: 1 out of 150 cases, usually in elderly (<1%) | Remove any standing water |

# Message Map: Chemical Plant Explosion

| Stakeholder: Surrounding Community | | |
|---|---|---|
| Question or Concern: What does the public most need to know | | |
| Key Message 1 | Key Message 2 | Key Message 3 |
| The incident is stabilized and the threat has been removed | Everything is being done to find out why and what will prevent it from happening again | There is no further threat |
| Supporting Information 1 | Supporting Information 1 | Supporting Information 1 |
| Plant operations and First responders followed established procedures to shut down and prevent further explosions | Outside specialists hired to investigate the explosion and preventative measures | All evacuations cancelled. Residents and businesses advised to return to normal |
| Supporting Information 2 | Supporting Information 2 | Supporting Information 2 |
| No further plant operations will be done until the cause is found | Plant owners ensure that no expense will be spared to ensure that this never happens again | Plant employees allowed back into the plant and briefed on the situation |
| Supporting Information 3 | Supporting Information 3 | Supporting Information 3 |
| All areas secured pending investigation | Employees asked to assist in the investigation | Local officials confirm that the threat has been removed. |

# Group Discussion #2: Message Mapping

- Break up into groups.
- Create your own message map based on your work. Come up with three key points from the work that you've done and the supporting information.
- Or come up with one idea in your group and develop the three key points.
- Be prepared to share with the class!

# Messaging Using Social Media

# Creating Messages for Social Media

- Recently, many people and organizations have begun communicating via social media
- Use different sites for different purposes
  - Twitter: quick simple messages
  - Facebook: Longer announcements, topics, sharing fact sheets, sharing reports, etc.. (general public)
  - LinkedIn: Professional networking site, communicating with colleagues

With social media, multiple audiences will see the message

- Expect comments

Keep it simple

Reflect organization's policies and not personal opinions.

# Outrage Management and Social Media

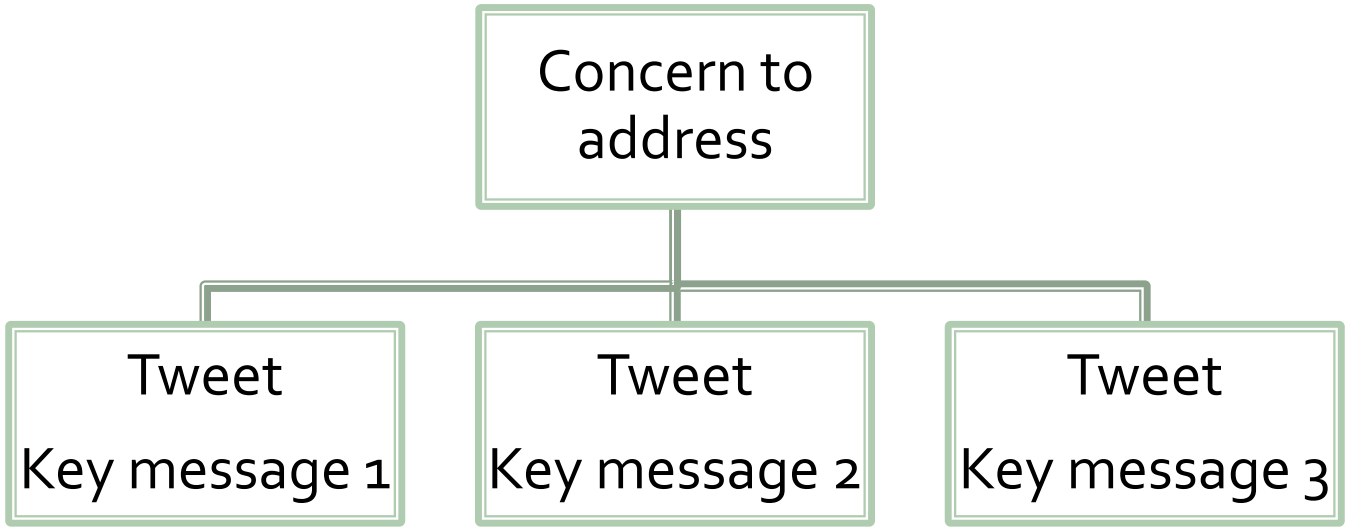
- Outrage is most commonly expressed on social media, so that's where it needs to be managed
- Social media is a timely, fast, cheap, mobile, emotionally appealing, searchable and permanent way for people to express their outrage.
  - Dangerous to ignore stakeholders
- Social media is a way for risk managers to validate valid grievances
  - Respectfully respond to their issues and, if possible, offer a reason or solution
- When responding to outrage via social media, respond fast.

# Example Tweets

- Scripps researchers find 327 halogenated chemicals in dolphins http://www.sandiego06.com/news/local/Hundreds-of-chemicals-in-dolphin-blubber-351451801.html
- Germ-killing bathroom sprays appear to harm male fertility, according to new study http://www.environmentalhealthnews.org/ehs/news/2015/nov/cleaning-products-fertility-hormones-cleaners-health-1

# Possible concerns to address in tweets

- Why should I care about flame retardants?
- What do the new regulations mean for me or my group?
- Is somebody doing something about it?
- What can I do?



# Message In A Tweet

Flame retardants in the news

- Break into four groups who represent:
  1. Risk assessment agency
  2. Nonprofit organization for parents
  3. Furniture manufacturers association
  4. Fire fighters union
- Develop a tweet to send to your group's followers
- Report back to class
  - What would you tweet and why
  - Outrage factors you considered

# Thank you!

- Karen Riveles
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