# Social Media Monitoring for Radiation/Nuclear Incidents

**Tamer Hadi**
*Director of Strategic Technology*
Office of Emergency Preparedness and Response
**NYC Department of Health and Mental Hygiene**

@tamer_hadi

# OVERVIEW

- Brief background

    – *Why should Public Health be monitoring?*

- Key topics to anticipate

    – *Immediately after announcement of registry*

    – *Mid- to Long-term*

- Leveraging external resources

*NOT COVERED TODAY*

- Tools, tips and monitoring strategies to find relevant info
    o e.g., building multiple Boolean queries, free/subscription search tools
- Risk communication strategies
- Verification / authentication of online information

Public Health Emergency Preparedness and Response Capabilities
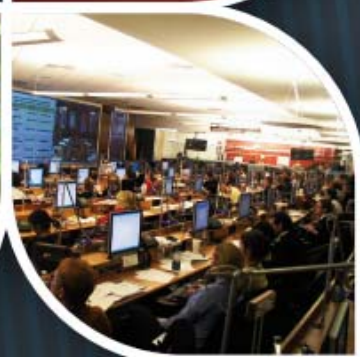
National Standards for State, Local, Tribal, and Territorial Public Health

October 2018
Updated January 2019

- "Social Media" mentioned 24 times in 2018 update

- Only mentioned 5 times in 2011 version

- All focused on pushing out information only

## Purpose of Monitoring Social Media

Provide <u>relevant</u>, <u>verifiable</u> and <u>actionable</u> information to Incident Command System (ICS) leadership

## Social Media Monitoring Team

Trained agency or external staff mobilized during emergencies to monitor social media in support of incident objectives.

# Operationalizing SM Monitoring / Listening

**Input User-Defined Search Parameters**
*(Topics, hashtags, people, events)*

⬇

**Analysis / Visualization Tools**
*(Filter, analyze for relevant info using variety of software)*

⬇

**\*Human Analysis\***
*(Validate and determine if info requires leadership attention)*

⬇

**Reporting**
*(Provide ICS Leadership reports in easily consumable format)*

**NYC**
**Health**

# Government Use of Social Media has to be Bidirectional

*While outbound risk communication is critical…Listening is just as important!*

## OUTBOUND Social Media
*(aka pushing out messages)*

1. **Provide Public Situational Awareness**
   - What you know and do not know
   - Take control of the story quickly
   - Minimize opportunity for rumors

2. **Build Public Credibility/Trust**
   - Establish audience before emergency

3. **Direct Engagement with the Community**

## INBOUND Social Media
*(aka monitoring/consuming)*

1. **Situational Awareness**
   - Latest developments, pics, videos, public and media commentary

2. **Assess How Well or Poorly Messages are Getting Across**
   - Instant feedback
   - Unanswered questions or confusion
   - Reach of public messaging

3. **Rumor, Misinformation and Reputation Control**
   - Identify and dispel rumors and misinformation
     - *Not just public, but media outlets*
   - Respond to questions and mentions
   - Opinions on agency response operations or services offered

NYC Health

# Initial Announcement of Health Registry
## Unified Command and Communications

- Single agency should be responsible for all messaging regarding the registry (online and off).
- Other agencies/partners should support by retweeting/reposting and not trying to create unique language.
- Partnering with non-government experts/organizations will help credibility
  - Have doctors speak, not government officials
  - Encourage community and faith partners (who are more trusted) to amplify official messaging



nycHealthy ✔
@nycHealthy    Following

If you're #pregnant & recently traveled to an area affected by #Zika, consult your doctor: on.nyc.gov/zika

9:05 PM - 1 Feb 2016

7 Retweets  2 Likes



nycHealthy ✔
@nycHealthy    Following

Women in NYC: Do NOT travel to a #Zika-affected area while pregnant or trying to conceive. on.nyc.gov/zika

ZIKA CAUSES BIRTH DEFECTS

9:05 AM - 12 Jul 2016

10 Retweets  4 Likes



nycHealthy ✔
@nycHealthy    Following

#Zika causes birth defects. Pregnant women should avoid travel to Zika-affected areas. #ZikaActionNYC

9:05 AM - 22 Jun 2016

13 Retweets  7 Likes

# Social Media Expectations After Health Registry Announcement

Even with most thorough announcements and FAQs, there will be continued need for clarity on:

- *General understanding of radiation risks and how contamination works.*
- *What kind of diseases are people at risk for?*
- *Who is eligible?*
- *Free healthcare? Insurance needed?*
- *Financial compensation?*

*NOTE: all communication should be coordinated with news media and healthcare system partners*

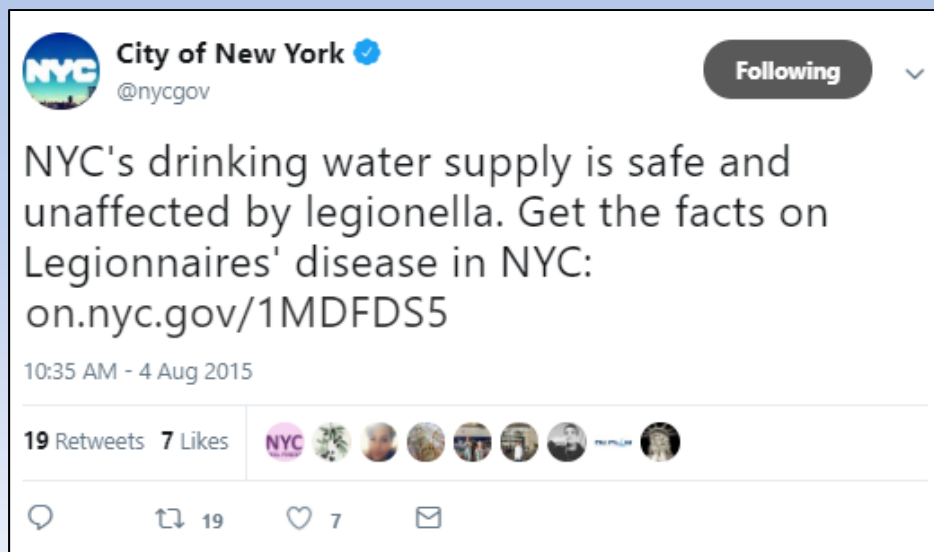## Anticipated Communication Challenges***

- Difficulty understanding radiation dose units
- Radiation-related cancer risk is dependent on so many other factors:
  - *age / remaining life span*
  - *exposure to other cancer-causing agents (like smoking)*
  - *comorbid conditions*

**\*\*\* CREDIT: SP001-1 Radiation and Risk: Expert Perspectives.  Health Physics Society.**

**NYC**
Health

# Responding to Public Inquiries About Registry

- Large volume of agency/registry mentions make it very difficult to reply directly to every individual.

- Monitoring for trends of questions, concerns or misinformation will inform what key points need to be clarified and/or repeated.

- Repetition of messages on social media is required, but careful not to overcommunicate.

- Do consider replying or addressing major "influencers" whose content gets significant attention

NYC
Health

# Counter Dangerous Rumors / Misinformation

Reply directly to influencers (individuals and news media) that may be promoting intentional or unintentional misinformation with facts and links.



City of New York ✔
@nycgov
Following ⌄

NYC's drinking water supply is safe and unaffected by legionella. Get the facts on Legionnaires' disease in NYC: on.nyc.gov/1MDFDS5

10:35 AM - 4 Aug 2015

19 Retweets  7 Likes

🔄 19    ♡ 7    ✉

NYC Mayor's Office ✔ @NYCMayorsOffice · 12 Aug 2015    ⌄
It is completely safe to drink @nycwater. Legionnaire's CANNOT be passed from person to person. Stay informed: nyc.gov/le

💬 1    🔄 11    ♡ 3    ✉

nycHealthy ✔
@nycHealthy
⚙ Following

It's safe to drink & wash with the tap water in the #SouthBronx and throughout the city. Read the FAQ: on.nyc.gov/1KBI5Kx #Legionnaires

RETWEETS  LIKES
8        6

2:15 PM - 13 Aug 2015

# Fake Radiation "Cures" or "Prevention"

- Scammers taking advantage of fear trying to sell fake remedies
- Others just push myths

NYC
Health

# Examples of Misinformation During NYC Legionnaires' Outbreak



Don't worry. We kept our distance. Don't want to get Legionnaires' disease.



🎈 **Im Mich** 🎈
@Uncle_Michie

That Legionnaires Disease That Passing Around In The Bronx Is Spreading Through The Air

🤍 3:38 PM - Aug 12, 2015    ⓘ

👤 See 🎈 Im Mich 🎈 's other Tweets    〉

**Dan DeFrancesco**
@dandefrancesco

Drop of water from an AC unit landed on my head today walking to work...so basically I'm dead. #Legionnaires

🤍 10:11 AM - Aug 4, 2015    ⓘ

👤 See Dan DeFrancesco's other Tweets    〉

**Dreadlock Rasta**
@Ras_Lon

this is air born. we're ▮▮▮▮. New York legionnaires' disease outbreak leaves seven dead, officials say gu.com/p/4b8aj/stw

🤍 10:27 AM - Aug 4, 2015    ⓘ

👤 See Dreadlock Rasta's other Tweets    〉

# Expect Mistrust of Government

- Particularly with health data
- Conspiracy theories
- No need to respond to every one - just awareness



NYC Health

# Protecting Agency Reputation

- Similar to rumors / misinformation about the scenario, individuals and media may have negative things to say about how the agency is handling a situation.

**POLITICO New York** ✓
@politicony

"Rather than working with us, @nycHealthy officials have refused to provide us with any information" politi.co/1MmtMZN #Legionnaires

# Mental Health

**Mental health issues are always a concern in the aftermath of an emergency:**

- Examples will be evident on social media…but no need to search for them.

- Acknowledging that it is okay to be scared or concerned is important to show compassion.

- Mental health resources (support/call center) should be dedicated and announced as quickly as possible.

- Healthcare utilization is low after disaster and needs lots of pushing. Integrated care of physical and mental health is ideal.

**NYC**
Health

# Community Outreach About Registry Will Generate Online Activity Too
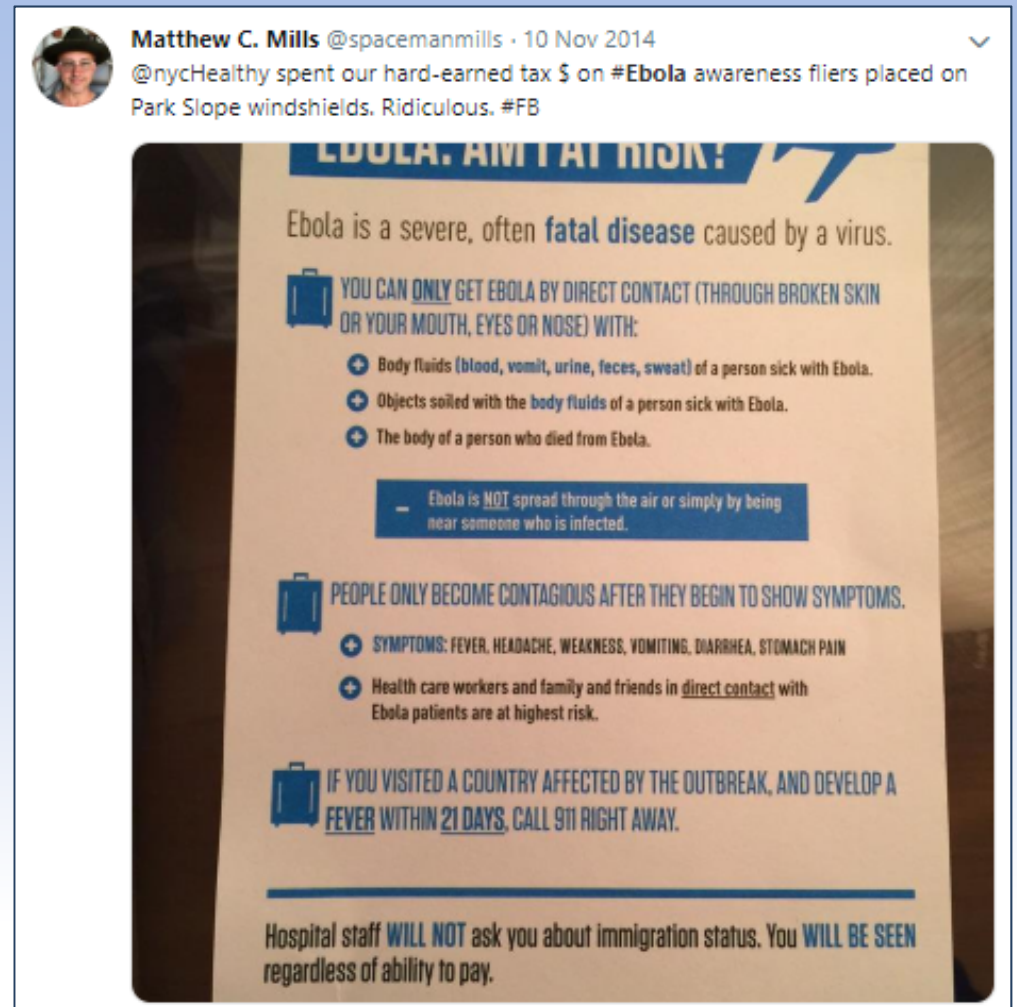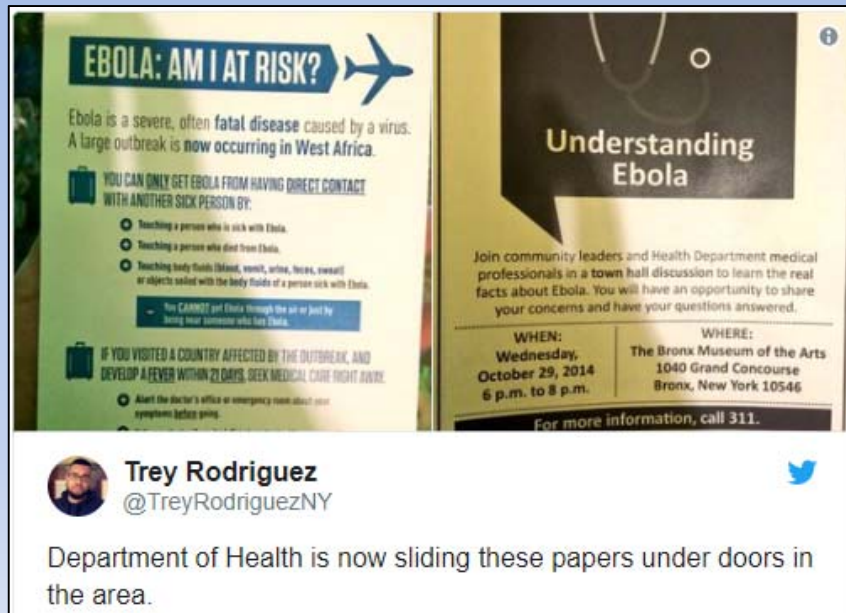
# Leveraging External Online Support

## Virtual Operations Support Team (VOST)

- Team of volunteers activated to perform specific functions using social media and online technologies to support an organization and/or jurisdiction

- VOST Team Leader reports directly to the agency

    - *Example: DOHMH has trained a group of NYC Medical Reserve Corp (MRC) volunteers to assist w/ monitoring and provide technical assistance such as:*

        - Official message disseminators

        - Using language skills for content other than English

        - Providing general awareness of sentiment and commentary by public

**NYC**
Health

Source: https://vosg.us/active-vosts/

# In Summary

Even with best social media analytical tools, monitoring still requires a human touch (e.g. verification, interpretation, reporting to leadership, detecting sarcasm, etc).

Must have staff dedicated to this function.  It is just as important as other public health operational activities.

Combination of online tools needed.

Picking up on new keywords / trends and modifying queries as situation evolves.

Preparation can be done in advance.

Build VOST relationships.

# Questions ???

## CONTACT INFO:

Tamer Hadi
thadi@health.nyc.gov
347.396.2769
@tamer_hadi (opinions my own!)
http://www.linkedin.com/in/tamerhadi