Build It and They Will Come
Cultivating Expert Presence on Social Media Before the Boom

National Radiological Emergency Preparedness Conference, April 2018

Lauren Matakas
Radiation Protection Division
US Environmental Protection Agency
This photo shows some of the magnets for the Super Proton Synchrotron collider (SPS), ready to be installed in the 7 km tunnel. The construction of the thousand magnets for the SPS began in the huge assembly hall at CERN’s Prevesin site.

The SPS is still the second largest machine in the CERN accelerator complex. Measuring almost 7 kilometres in circumference, it takes particles from the Proton Synchrotron and accelerates them before sending them to the Large Hadron Collider (LHC).
Is Instagram Ruining the Croissant?

Some bakers think birthday cake and piña colada flavors are going too far

by Whitney Filloon | @whitneyfilloon | Feb 22, 2018, 9:42am EST

Why Instagram Is the Worst Social Media for Mental Health

Why newspapers are much better at news than social media
Just ignore it. It's click-bait.
News Acquisition via Social Media

Source: Pew Research Center, “News Use Across Social Media Platforms 2017”
News Acquisition via Social Media

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## News Acquisition via Social Media

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</tbody>
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Source: Pew Research Center, “News Use Across Social Media Platforms 2017”
News Acquisition via Social Media

Social media news use increases among older, nonwhite and less educated Americans

% of U.S. adults who get news from social media sites...

Note: Nonwhite includes all race and ethnic groups other than non-Hispanic whites.
Source: Survey conducted Aug. 8-21, 2017.

Source: Pew Research Center, “News Use Across Social Media Platforms 2017”
FEMA @fema 3 Sep 2017
To apply for Harvey assistance:
- Go online to disasterassistance.gov
- Go in person to a recovery center and fema.gov/myfema/cr/...
Saturday, January 13

Emergency Alert
BALLISTIC MISSILE THREAT INBOUND TO HAWAII. SEEK IMMEDIATE SHELTER. THIS IS NOT A DRILL.

Slide for more
Hawaii's governor couldn't correct the false missile alert sooner because he forgot his Twitter password

Story highlights

A false alert about a ballistic missile threat went out January 13 in Hawaii.

It took 15 minutes to relay news of false alert on social media.

(CNN) — When Hawaii pushed out a ballistic missile alert earlier this month, Gov. David Ige knew within two minutes it was a false alarm. But he couldn’t hop on Twitter and tell everybody -- because he didn’t know his password.

"I have to confess that I don’t know my Twitter account login and passwords," Ige told reporters Monday after giving his State of the State address. "I will be putting that on my phone."
In the event of a nuclear attack

Today at 2:25 PM

In light of concerns about North Korea missile tests, state and federal agencies are providing information about nuclear threats and what to do in the unlikely event of a nuclear attack and radiation emergency.

For this type of event, the ten campuses of the University of Hawaii will rely on the Hawaii Emergency Management Agency siren system and follow agency instructions on "sheltering-in-place."

Hawaii alert went off 807 saying ballistic missile on from North Korea, this is a drill. Nothing on news.
Well, I don’t live in Hawaii, but as someone who’s planned for some of this stuff, I’d caution against just resigning yourself to die. Depending on a lot of different factors, you could easily survive. A woman survived Hiroshima 300 meters from the hypocenter of the blast because she was in a sturdy building. The man sitting on the steps outside became a shadow on the pavement.

The typical yield you can expect to hit a countervalue target like a city is below 1 megaton. Probably closer to the range of 150 to 300 kilotons. If you don’t live downtown (the likely center of target), and are at least 2 miles from the hypocenter, then you stand at least a 50% chance of surviving, which goes up exponentially if you take even basic steps to survive, like hiding in a windowless room.

There are so many different factors to consider. Is the weapon set for ground detonation or airburst? If airburst, what altitude? What direction is the wind blowing? Fission vs Fusion ratio, local geography, and proximity, and so many others.

Point is, don’t give up, you can make it.
Week to Week Comparison (Jan 9 – Jan 17, 2018)

Protecting Yourself From Radiation

https://www.epa.gov/radiation/protecting-yourself-radiation
In the case of a nuclear threat – Go Inside. Stay Inside for 24-48 hours. Stay Tuned for instructions.

Today’s disastrous false alert in Hawaii has left me devastated and thankful. Devastated because, no matter how hard we try, we haven’t done enough to tell the public what to do in the case of a nuclear threat. Thankful because I still have a chance to make it right.

Today, I start with you, my family and friends. Go Inside, Stay Inside, Stay Tuned. Assuming you survive the... See More
Japan marks 7th anniversary of tsunami and Fukushima nuclear disaster

Japan Prime Minister Shinzo Abe has led a somber ceremony in Tokyo to mark the seventh anniversary of the tsunami disaster. The tragedy killed some 18,500 people and triggered the worst nuclear disaster since Chernobyl.

On 72nd Anniversary of Hiroshima Atomic Bomb Attack, Appeals of ‘Never Again’

by ASSOCIATED PRESS

HIROSHIMA, Japan — Hiroshima’s appeal of “never again” on the 72nd anniversary Sunday of the world’s first atomic bomb attack has gained urgency as North Korea accelerates work on its nuclear weapons program, showing its growing prowess with increasingly frequent missile launches.

When the U.S. dropped the bomb on Aug. 6, 1945, Toshiki Fujinori’s mother was carrying him, then just a year old, piggyback to the hospital. The impact of the explosion threw them both to the ground, nearly killing him.

Chernobyl disaster: Ukraine marks 30th anniversary

© 26 April 2016
Evaluation of the impact of Hurricane Maria on the U.S. Virgin Islands following the disaster.

For more information, visit the FEA website at fema.gov/longislanden or call 1-800-358-6988 (TTY 1-800-462-7585).
Facebook, Nextdoor become digital lifelines in hurricanes

Jessica Guynn, USA TODAY  Published 5:23 p.m. ET Sept. 8, 2017 | Updated 4:43 p.m. ET Sept. 10, 2017
Michael Lowry
@MichaelRLowry

This year, we've had 3 hurricanes with over 40 ACE points each. This is the first time we've recorded 3, 40+ ACE earners in a single season.

12:24 PM - 13 Oct 2017
18 Retweets 35 Likes

Michael Lowry
@MichaelRLowry · 13 Oct 2017

The 40+ ACE earners this year were Irma, Jose, and Maria. Last time we had two 40+ ACE earners in a single season was 2004 (Ivan, Frances).
Greg Postel
@GregPostel


Tweet to Greg Postel
Top newspapers lower paywalls for Hurricane Harvey

By CRISTIANO LIMA | 08/26/2017 01:07 PM EDT

The nation's three most storied newspapers — The New York Times, Washington Post and Wall Street Journal — lowered their paywalls this weekend for coverage of Hurricane Harvey.

The rare, concurrent move by the three titles gave non-subscribers unlimited access to their on-the-ground reporting as Harvey continues to inflict damage along the Texan coastline. It also gives readers access to weather and safety coverage.

"During times when safety may be at risk, access to accurate and up-to-date information is crucial," a spokesperson for the New York Times told POLITICO.

The three newspapers join The Houston Chronicle and other local Texas news outlets in reducing barriers to entry for content in the wake of Harvey.
Majority of Americans now use Facebook, YouTube

% of U.S. adults who say they use the following social media sites online or on their cellphone

- YouTube: 73%
- Facebook: 68%
- Instagram: 35%
- Pinterest: 29%
- Snapchat: 27%
- LinkedIn: 25%
- Twitter: 24%
- WhatsApp: 22%

Note: Pre-2018 telephone poll data is not available for YouTube, Snapchat or WhatsApp. Source: Survey conducted Jan. 3-10, 2018. Trend data from previous Pew Research Center surveys.

“Social Media Use in 2018”

Source: Pew Research Center, “Social Media Use in 2018”
Radiation on Twitter

FUKUSHIMA RADIATION SO HIGH, EPA CANCELS RAD NET DIRTY BOMB WARNING SYSTEM youtube.com/watch?feature=...
Hello,

I have an eight year old daughter who loves to learn and explore the world of bugs and insects. She is often teased at school by her peers because she will proudly display her current bug friend on her shoulder.

She has asked me for over a year if this is a job she can do one day, exploring and learning more about bugs and insects. I have told her that of course she could; however, I am at a loss on how to continue to encourage her in this field of science.

I was wondering if a professional entomologist would speak to her over the phone to encourage her love and explain to her how she could make this into a career. I am constantly looking for articles and information on the species and how to recognize them, but find the lack of answers to her questions unhelpful.

If someone could maybe talk to her for even five minutes, or who won’t mind being a pen pal for her, I would appreciate it so much. I want her to know from an expert that she is not weird or strange (what kids call her) for loving bugs and insects.

Entomological Society of Canada
@CanEntomologist

A young girl who loves insects is being bullied & needs our support. DM your email & we'll connect you! #BugsR4Girls
1:06 PM - Aug 25, 2016

Jessica L Ware Lab
@Jessical.WareLab

Replying to @CanEntomologist
she can contact my lab anytime! We are happy to send her papers, nets, whatever will keep her entomology passion going!

Nina Zitani
@papilioorous

Replying to @CanEntomologist
7 insect species named after me I think I can help with this! Happy to show her insect collection @westernuBio #BugsR4Girls
1:38 PM - Aug 25, 2016

Julia Koricheva
@KorichevaLab

Replying to @CanEntomologist
@CanEntomologist I've been that girl, became an entomologist & still proudly wear bugs on my shoulder #BugsR4Girls
THE RADIOACTIVE BOY SCOUT

When a teenager attempts to build a breeder reactor

By Ken Silverstein

There is hardly a boy or a girl alive who is not keenly interested in finding out about things. And that's exactly what chemistry is: FINDING OUT ABOUT THINGS—finding out what things are made of and what changes they undergo. What time? Any time! Everything!

—The Golden Book of Chemistry Experiments

Golf Manor is the kind of place where nothing unusual is supposed to happen, the kind of place where people live precisely because it is more than 15 miles outside of Detroit and all the complications attendant on that very.

The kind of place where money buys a bit more land, perhaps a second bathroom, and a measure of privacy that they're safely in the bosom of the middle-class. Every resident of Golf Manor knows one form or another, beginning with the name of the subdivision itself—taken from the 18-hole course at its entrance—and the community in which it is nestled, Commerce Township. The houses and trees are bold and cut through to make Golf Manor feel more like a neighborhood than a subdivision, and the few features that downplay subdivision—signs at the entrance saying "We have many children but none to spare. Please drive carefully"—have a certain funk kind of place, on a typical day, the only thing happening around the corner is a Mister Softee ice-cream truck.

But June 26, 1997, was not a typical day. At 3:30 PM, as she turned down Park Drive, Pease saw eleven men streaming across her carefully manicured lawn. Their attention seemed to be focused on the back yard of the house next door, specifically on a large wooden potting shed that housed the chemistry lab filled with radioactive materials.

Those of the men had decided to focus on the potting shed, stripping the pieces of wood from its frame and dumping them out, scattering the pieces of wood into large metal drums emblazoned with radioactive warning signs. Pease had never noticed anything out of the ordinary in the house, and the next door, during the summer.

A middle-aged couple, Michael and Patty Halen, lived there. On some weekends, they were joined by Patty's teenage son, David. As they bumbled along with a group of nervous neighbors, though, Pease heard one resident claim that there was a strange glow. "It was pretty disturbing," Pease recalls. "I went inside and called my husband. I said, 'Oh, no—there are men in funny suits walking around our bex-
In a Radiation Emergency:

Get Inside

Stay Inside

Stay Tuned

If I was outside when a radiation emergency happened, what should I do to remove radioactive material from myself?

Radioactive material can fall from the air like dust or sand and land on objects below, like people, buildings, cars, and roads. Radioactive contamination can spread in the same way that dust or mud can be tracked into the home or spread to another person or object. It is important to get radioactive material off your body as soon as possible to lower your risk of harm. Even just removing your outer layer of clothing can remove up to 90% of radioactive material. This is called decontamination.

1. Take off your outer layer of clothing
2. Wash yourself off
3. Put on clean clothes

Learn more >
Learn how to help others decontaminate >
Learn how to decontaminate pets >
“A little bit of knowledge can save a lot of lives. A city could prevent 250,000 deaths.” - Brooke Buddemeier, health physicist & radiation expert @Livermore_Lab. We're excited to be working w/ Kansas City this year to empower them w/ RadResponder. startribune.com/kansas-city-is ...

#NYC DOE is removing “Fallout Shelter” signs from their schools. Why? Because the best “shelter” might be where you’re already sitting. Get inside, Stay inside, Stay Tuned. Via @Reuters #Nuclear #Preparedness
Social Media and Disaster Communications Checklist

BEFORE AN EMERGENCY: Build your voice. Earn trust.

Establish a voice TODAY. No matter the business, everyone can benefit from using social media. Keep your account active and engaging year-round by sharing:

- Company updates, awards and other news
- Industry news and blogs
- Tips and resources related to your industry
- Links to local (non-governmental) entities that offer assistance during a disaster

Plan ahead. Create a content repository to store anticipated FAQ’s and ready-to-post resources and links including information on:

- Local news websites
- Important websites you will need to reference during an emergency (FEMA, Red Cross, weather service organizations, etc.)
- Links to local (non-governmental) entities that offer assistance during a disaster

Keep it up. Don’t neglect your account for days or weeks on end. Share tips and resources mentioned above to keep followers engaged.
Thank you for the chicken hug. Did you know that chickens and other flighted birds have a sternal keel, like a big blade of bone and/or cartilage that allows their very large breast muscles more points of attachment for powered flight? Makes for a good hug.

We’ll be OK.
Morning all! Let's talk about radiation..

What does radiation do to the body anyway? Ionising radiation has energy, when it strikes tissue some or all of the energy is absorbed.

As the name implies, the energy absorbed causes ionisation is tissue, lead can lead to cell damage or cell death.

...sometimes the cell can repair the damage, sometimes the cell is modified. Highly dependent on type of radiation and cells.

There are two classifications for biological effects for this, stochastic (chance or long-term effects) and deterministic (acute effects).
On #WorldRadioDay, remember this guidance from @CDCgov in case of radiological emergency: Get inside. Stay inside. Stay tuned.

emergency.cdc.gov/radiation/scre...

Did you know we at EPA assist during radiological emergencies? In the event of a radiological emergency, you should get inside, stay inside, and stay tuned. Learn how to protect yourself from #radiation.

Protecting Yourself from Radiation | US EPA
The concepts of time, distance, and shielding will help protect you from radiation. In the case of a radiation emergency, get inside, stay inside and stay tuned.

epa.gov
How social media can make history - Clay Shirky
Disasters preparedness saves lives and saves money

Vanuatu: Disaster Preparedness Saved Lives

Disaster preparedness key to saving lives when calamity strikes – Ban
Thank you!

Questions?
Email me: Matakas.Lauren@EPA.gov