

Emerging Risks: What's Next?



Presented by: _____

Date: _____

Alliant Insurance Services, Inc.

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How We Learn: Japan's Earthquake & Tsunami, March 2011

Sendai Airport is surrounded by waters in Miyagi prefecture (state), Japan, after a ferocious tsunami spawned by one of the largest earthquakes ever recorded slammed Japan's eastern coast Friday, March 11, 2011.

No one expected a 9.0 magnitude earthquake.
Can we learn from the unexpected?



How We Learn (continued)

What We Learned

Supply Chain Risk: Potential loss of tax revenue to local government (car sales, tourism, PNW Ports actually saw an increase in activity in some areas - timber!)

Flood/tidal wave damage can occur thousands of miles away (Cities of Berkeley, San Buenaventura and Crescent City).

Debris clean-up on Oregon and California coast ; 66 foot long, 8 feet tall, 165 ton dock hit Oregon's Agate Beach; and that's just the beginning...

Radioactive contamination : News reports from the US west coast throughout August indicated that government helicopters were seen flying at low altitudes in cities such as Berkeley, Oakland, San Francisco and Seattle measuring radioactivity in the air, the San Francisco Examiner and MSNBC reported.

Emerging Risk Defined

“An issue that is perceived to be potentially significant but which **may not be fully understood** or allowed for in insurance terms and conditions, pricing, reserving or capital setting”.

- Lloyd's of London

The Pharma-Water Disaster

The Associated Press ran a major exposé on the tainted water supplies of 24 U.S. cities in 2008.

By 2010 about eight of every 10 Americans took some kind of pill every day, and that doesn't include people taking illegal drugs.

Only some of the pharmaceuticals and personal care products, or PCPP's ingested by millions on a daily basis are absorbed by the body.

The rest gets flushed out of the body with wastes and other drugs -- illicit and legal, like antibiotics, antidepressants, chemotherapies, pain killers, statins, hormone pills, birth control, caffeine, cologne, mouthwash and deodorant.



Matthew Brodsky, a. f. (2012, April 13). The Pharma-Water Syndrome: A Product Liability Disaster. *Risk & Insurance*, pp. 32-33.

Pharma-Water (continued)

With water in shorter supply, many municipalities are looking for ways to extend their water supplies through recycling and recovery efforts; further concentrating these excess chemicals. We are only now seeing regulatory guidance available to wastewater treatment plant operators.

Pollution Legal Liability Environmental Insurance is available for more traditional pollution scenarios -- a water treatment plant being fined or sued for releasing toxins, for example, or by the drug companies themselves having a spill at one of their facilities.

Where it ALL goes...



Aerial view of a typical wastewater treatment plant

Matthew Brodsky, a. f. (2012, April 13). The Pharma-Water Syndrome: A Product Liability Disaster. *Risk & Insurance*, pp. 32-33.

Pharma-Water (continued)

Pharma-Water and how it's handled is still uncharted territory.

- Should the drug companies put disposal programs in place? (Central Contra Costa Sanitary District has a collection site for unwanted and unused medicines)
- Do we need more governmental oversight of the effects of the residual drugs?

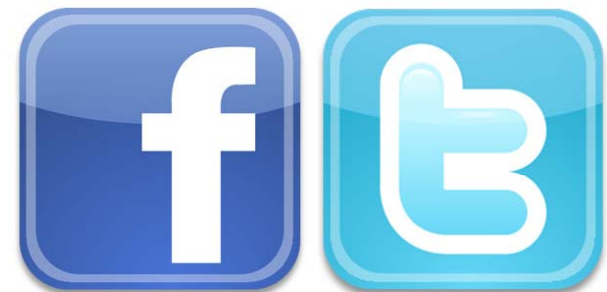
What this means to you - -

- What are the implications to your entity for providing contaminated drinking water (law suits, fines, penalties)?
- What's the increased cost to treat the contaminated water (new technology)?

Social Media: Friend or Foe

THEN: You had a bad customer service experience; you *might* have told your friends and wrote a letter.

NOW: You blast the vendor on Facebook, Twitter or Yelp. Instantly everyone you know knows how the firm performed!



Social Media: Friend or Foe (Continued)

One complaint can go viral in minutes with our rapid-fire communications systems.

More than one company, caught off-guard, has blundered in its attempts to use social media to respond, making the issue even worse.

Others, like Domino's Pizza, have used social media to respond effectively to a crisis. ***And nearly all large companies use it in some way to get their message out to customers.***

Domino's Pizza Reinvents

Domino's Pizza once experienced an epic social media disaster; now those same networks are helping the chain completely revamp its brand.

A pair of employees filmed themselves doing horribly disgusting things to Domino's sandwiches before serving them and posted the video on YouTube in 2009. **It went viral in an instant.**



The incident nearly doomed Domino's Pizza because of its bad initial crisis management, but now it's reinvented itself as wholly transparent through those digital platforms.

Domino's Pizza Reinvents

Domino's changed its ingredients for all its pizzas and worked hard to get the word out on social media that it was a whole new era. Domino's created *PizzaTurnaround.com*, a social micro-site which documents the company's efforts and uses third party endorsements through Twitter to show that it's the real deal.

Has it worked - Social media is now a strength for Domino's, and the **brand seems stronger than ever!**

Social Media: Friend or Foe (Continued)

What is your Social Media policy?

- Can your employees comment on a variety of sites including your own website?
- Who comments & how quickly is it happening?
- Who monitors the posts?
- What happens when the rhetoric becomes too heated?

Typhoons and ARkstorms



Dan Reynolds, M. E. (2012, April 13). Typhoons: Barreling Straight for Taiwan *Risk & Insurance* , pp. 38, 40.

Typhoons - *Not in our Back Yard?*

Over the last 30 years, the Taiwanese government has supported the development of 3 science and industry parks in the north, central and southern sections of the country that supply nearly one-third of the world's integrated circuitry components to upstream manufacturers.

These components are vital to the automobile, truck, airplane, computer, heating and air conditioning, health care and lab equipment industries.

Jeff Beaman, a vice president of all-risk underwriting with FM Global, said it wouldn't take all three of Taiwan's science parks getting hit by a typhoon for there to be substantial disruption in the semiconductor industry.

Should even one of the parks suffer a hit, 5% to 15% of the world's supply of integrated circuits would be interrupted for the time it would take to get the manufacturing facilities running again.

ARkStorms in California (*just our luck!*)

An ARkStorm is a hypothetical, but scientifically realistic "superstorm" scenario developed & published by the U.S.G.S. The name "ARkStorm" means *Atmospheric River (AR) 1000 (k)*. It was created as a way of quantifying the magnitude of West Coast storms. It obviously draws a parallel to the biblical Noah's Ark story.

It describes an extreme storm that may impact much of California causing up to \$725 Billion (\$400B Property Damage, \$325B Business Interruption) in damages and repair (most caused by flooding), and affect a quarter of California's homes.

The event would be similar to intense California storms which occurred in 1861 and 1862. MegaStorms are California's other "big one"; a severe California winter storm could realistically flood thousands of square miles of urban and agricultural land, result in thousands of landslides.

ARkstorms (continued)

What Could Be Affected in California?

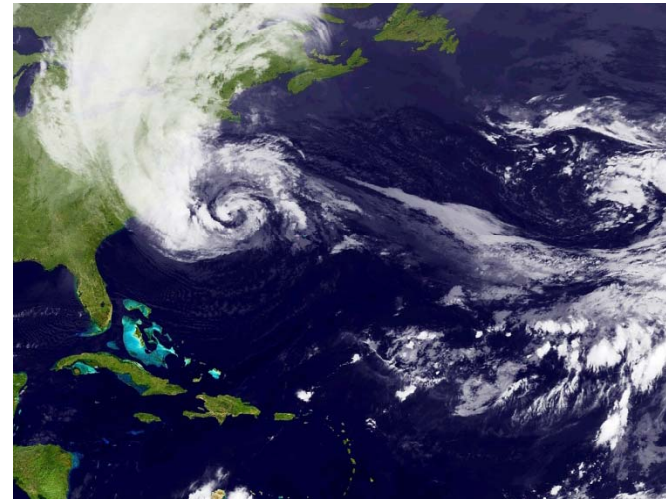
- Insurance Industry
- Buildings & Contents
- Highways
- Wastewater Treatment
- *Supply Chain Risks*
- Power & Water Supply
- Dams & Levees
- Telecommunications
- Agriculture
- Loss of human life

A California ARkstorm could require the evacuation of over 1,500,000

SuperStorm Sandy – When Next?

SS Sandy U.S. death toll to date surpasses 110.

More than 1,000,000 customers remained without power a week after the storm across 7 states with cold weather and more storms approached.



Major Supply Chain Interruptions

- ◆ Gasoline
- ◆ Food & Retail
- ◆ Water & Sewage
- ◆ Transportation - Land, Sea and Air



The Cost of SuperStorm Sandy

The ferocious hurricane that swamped New York City will almost certainly turn out to be one of the costliest storms on record.

Given the scope and severity of the damage, it's difficult to guess the costs from the fires, floods, wind and rain, but initial estimates of **\$50 billion** may turn out to be too low.

By comparison, the most expensive U.S. storm so far, 2005's Hurricane Katrina, caused about \$81.2 billion in damages.

Protests: *It's Not Just Picket Signs*

The Occupy Wall Street movement has showed us how easy it is to organize massive protests using social media like Twitter and Facebook.

Irate citizens *plus* Smart Phones; *add* Time on their hands *equals* **INSTANT PROTEST!**

The U.S. is positioned for serious protests to take place, as an angry citizenry is combined with young, tech-savvy people who are out of work and frustrated.

Can't you just turn it off?

BART Police turned off the cell phone and internet service in parts of the transit system during the August 2011, Occupy Oakland riots as a way to break the communications chain between the rioters and organizers.

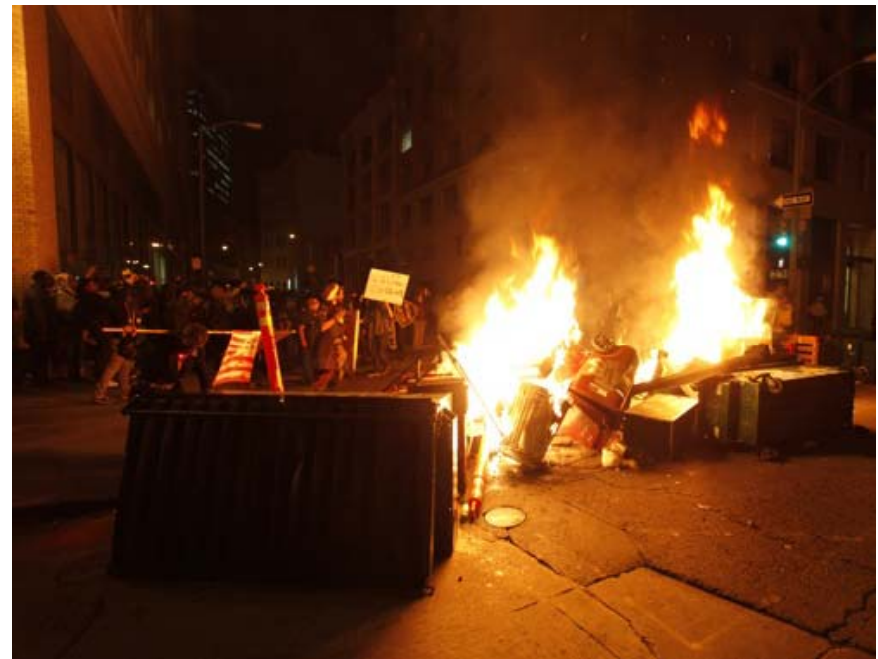
They promised to retaliate. The hacking group "Anonymous" hacked a BART website exposing thousands of usernames, passwords, phone numbers and emails.

Protests (Continued)

As a result, Protestors go the violent route: Consider how violent and destructive some of the Occupy Wall Street movement protests were across the country.

Are policies in place to manage this Risk?

“The University of California has agreed to pay nearly \$1 million to settle a lawsuit filed by demonstrators who were pepper-sprayed in the face during an Occupy protest.” (AP)



Protests (Continued)

A more violent round of protests could financially cripple cities that are already broke. Sending police officers to monitor protests, or to break them up, has a cost.

"Cities don't have the money to deal with that stuff," said Jonathan R. Shull, CEO of California Joint Powers Insurance Authority, a large municipal self-insurance pool.

What insurance *is, or will become available,* to address these exposures? The Exclusion on the following page may likely become standard soon!

Occupy Oakland Exclusion

PROTEST EXCLUSION ENDORSEMENT

This endorsement amends all Coverage Sections.

In consideration of the premium charged, it is hereby understood and agreed that this policy shall not cover **Loss** in connection with a **Claim** alleging, arising out of, based upon or attributable to any protest or other act(s) of civil disobedience by any organization or group of individuals, including without limitation protests or other events organized by or on behalf of Occupy Oakland or any other political, community or social organization or movement.

ALL OTHER TERMS, CONDITIONS AND EXCLUSIONS REMAIN
UNCHANGED.

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Cyber Liability Risks (*as a Protest*)

The Threat: The Pentagon's second-in-command, Deputy Secretary William J. Lynn III asserted that the threat to intellectual property of businesses, universities and the government may be "the most significant cyber-threat" facing the country. *By Ellen Nakashima, Washington Post Staff Writer, 9/16/10.*

Protesting against anti-piracy measures, the hacking group Anonymous shut down a slew of websites in January, 2012 including:

- The Department of Justice,
- Universal Music Group,
- The Motion Picture Association of America,
- The Recording Industry Association of America (RIAA) and;
- The U.S. Copyright Office

Cyber - *Privacy Risks* (continued)

What does this mean to you?

Huge volumes of personal information are nowadays stored electronically, often in small portable devices, creating an easy opportunity for severe privacy breaches.

- If you are collecting information that can be considered personal and confidential, you need to be exercising proper care and control in managing the data.
- What “personally identifiable information” (SS #) or otherwise sensitive data (credit card #s, health records) does your agency “hold”?

Are you prepared to respond to a data breach; what is your plan?

- “Loss Control” resources for PEPIP participants are available via ePlace solutions. Contact Alliant.
- Several recent Webinar recordings on Cyber / Privacy related Topics are available should you be interested. Contact Alliant.

The Grass is Always Greener - *(The Talent Gap)*

In the present economy, most employees are staying where they currently are, if they are lucky enough to continue to have jobs.

At the same time, employee engagement has taken a nose dive since the recession, as those who didn't get fired were forced to work much harder.

The Talent Gap (Continued)

Nearly one in three (32%) U.S. workers is seriously considering leaving his or her job, according to a 2011 survey by HR consultancy Mercer. That's up from 23 percent in 2005.

Meanwhile, another 21% are not looking to leave, but **view their employers unfavorably.**

While Americans are understandably wishing for a sharp increase in hiring and a full-scale economic recovery, companies had better **watch out for the 'Turnover Tsunami'** that could follow.

Workers, it seems, are no longer loyal to their companies, but are instead **loyal to the next rung in their career ladders.**

The Talent Gap (continued)

Employers find themselves in a Catch-22 at both ends of the spectrum.

Boomers: If the economy improves, boomers will stop delaying retirement, that will lead to an epic knowledge drain. If the boomers stick around, as they have during the recession, talented employees in positions underneath them will continue to be frustrated because they can't advance -- *and high-potential employees will leave.*

Generation X: *Caught in the Middle* – born 1965 to 1980 (with an average age right now of 40. Work is just one of many things that value in life!

Millennials: Another demographic shift hurting the talent market is the sheer number of Millennials, people born between 1980 and 2000, entering the workforce. Experts estimate that this group will make up 50% of the workforce by 2020, and while they certainly have potential, they will not have much to offer in the way of experience.

The Talent Gap (continued)

What are YOU doing to manage that “Talent Gap”?

- In Lloyd's Risk Index 2011, senior leaders identified the **Talent Gap as their 2nd highest priority**, while it had been their 22nd highest priority just two years earlier.
- Loss of institutional knowledge is a growing concern for many organizations.
- Additional workload is adding to the stress level of existing employees. This is creating opportunities for increased errors and poor judgment.

Green Building

What can go wrong?

Some \$464 million of construction is registered with Leadership in Energy and Environmental Design (LEED) each day on average, *according to the U.S. Green Building Council.*

Tax credits & energy efficiencies promised are not always successful; this can lead to legal disputes, etc.

Legal, or standard-of-care, issues can arise for architectural and engineering guarantees that are excluded under professional liability coverage, and for which the building owner might have to assume if guarantees go unfulfilled.

Failure to complete a project on time, or to gain LEED certification, is in all likelihood beyond the scope of most policies.

Shapiro, Clifford J. (2010). LEED and litigation: Why promises of green construction should be black and white. *Mountain States Construction, September 1st*

Or This Happens



Fire at Pier 29, San Francisco

This Pier is listed on both the State of California and National Historic Registries.

The City of San Francisco purchased the “Upgrade to Green” option on their property insurance.

- The City feels since they purchased “Upgrade to Green” coverage, the insurer needs to rebuild as such.
- The Insurer argues that since building is deemed as “historic” they cannot rebuild “green”, and they are bound by the historic requirements.

The Obesity Epidemic – *Stop me if you've heard this story!*

A 45 year old single woman working in a retail stores injures her back lifting a box onto a cart (containing merchandise that she was going to stock on a shelf.) What initially was believed to be a strain evolved into a failed back. She claims she is in too much pain to work, exercise, go to physical therapy, etc.

Over the course of five years she gains 100 lbs while staying at home. With the significant increase in her weight, she is now diabetic, has respiratory issues and is so de-conditioned that she is in a wheel chair.

The court tied all of the additional medical conditions to the claim basing it on the cause of injury, leading to the pain, leading to the weight gain, leading to the de-conditioning.

The claim cost was in excess of \$1,000,000



The Obesity Epidemic (continued)

An estimated 67% of U.S. population is overweight; and 33% are considered obese (with a body mass index greater than 30). The average annual medical spending per obese person is \$3,271 compared to \$512 for non-obese. Medical costs associated with obesity are estimated at **\$147 billion** per year, which correlates to 12% of healthcare spending. Costs have doubled in the last 10 years, 4 times greater than inflation. The *Impacts to you, as Employers* include:

Direct Costs: Higher health benefits and workers compensation premiums as the health effects are linked to heart disease, diabetes, cancer, liver disease, anxiety, and depression of those inflicted.

Indirect Costs: Lost Productivity - estimated 40 million lost workdays, \$239 million restricted activity days, and 90 million “sickbed” days are attributed to obesity each year.

Other Impacts: Transit services are beginning to change the size of seats to accommodate patrons; this along with heavier occupancy affects amount of gasoline required that ultimately adds to additional costs.



Pensions – *The Unfunded Liability*

Since 2009, 45 states have enacted measures to address pension liability shortfalls*; the new laws have trimmed **just \$100 billion out of the \$900 billion gap** between what the states and workers put into retirement plans and what the states owe in retirement benefits.*

How does this impact you?

- Could have personal implications in retirement planning;
- Bankruptcy (Cities of Stockton, Vallejo and others)
- Credit Risk & ability to raise Capital in an already fiscally depressed environment.
- Ability to attract talented individuals when compensation packages are under pressure.
- Increased scrutiny by the Public (City of Bell, CA).
- Impaired / reduced City services.

**According to estimates prepared for the Wall Street Journal by researchers at Boston College, 9/21/12.*

Auto Risks

Driverless Cars are billed as potentially safer because they eliminate the human error factor.

However, does that really mean you can sit in your car and play *Angry Birds* and not pay attention to the road?



“They shouldn’t allow humans to drive!”

Driverless Cars (continued)

More questions than answers?

- Who assumes liability in the event of an accident?
- What about Road Design Concerns?
- Could police finally focus on more important issues?
- P.U.I. - Passenger Under the Influence?



Credits:

- Cyril Tuohy, M. E. (2012, April 13). Weaponized Social Media: Logging into Explosive Territory. *Risk & Insurance* , pp. 34, 36.
- Dan Reynolds, M. E. (2012, April 13). Most Dangerous Risks 2012. *Risk & Insurance* , pp. 31-60.
- Dan Reynolds, M. E. (2012, April 13). Typhoons: Barreling Straight for Taiwan *Risk & Insurance* , pp. 38, 40.
- Jared Shelly, S. E. (2012, April 13). Protests 2.0: RISEUP Rises Up. *Risk & Insurance* , pp. 34, 36.
- Jared Shelly, S. E. (2012, April 13). Turnover Tsunami: When the Economy Turns Over. *Risk & Insurance* , pp. 50, 52.
- Matthew Brodsky, a. f. (2012, April 13). The Pharma-Water Syndrome: A Product Liability Disaster. *Risk & Insurance* , pp. 32-33.
- Shapiro, Clifford J. (2010). LEED and litigation: Why promises of green construction should be black and white. *Mountain States Construction*, September 1st

QUESTIONS?