

COVID-19 PREPARING YOURSELF AND YOUR FAMILY

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ABOUT SAM

Absolute EHS is owned and operated by New York native, Samantha “Sam” Lushtak. Sam began her career in safety over 10 years ago. Sam has a Masters of Science in Occupational Safety Management (MS). She is a Certified Safety Professional (CSP) and a Certified Instructional Trainer (CIT). She has worked in a variety of industries in New York, Colorado, and California.

Sam’s background is in Chemistry, Psychology, and Safety with an emphasis in chemical safety and emergency management.



WHAT IS COVID-19?

<https://www.cdc.gov/coronavirus/2019-nCoV/summary.html>

<https://www.cdc.gov/coronavirus/types.html>

www.worldometers.info/coronavirus/

[https://www.journalofhospitalinfection.com/article/S0195-6701\(20\)30046-3/fulltext](https://www.journalofhospitalinfection.com/article/S0195-6701(20)30046-3/fulltext)

(in case you are wondering if that animal testing paper you read makes any sense – we share many similarities with mice, rats, pigs, apes.... The list goes on.)

- COVID-19 is an abbreviation for the “SARS-CoV-2” virus, which is also nicknamed “Coronavirus Disease 2019”
- While rare for a virus from the coronavirus family to evolve from infecting animals to infecting humans, it’s not unheard of - All three of these coronaviruses originated in animals (MERS was camels, SARS was civet cats to bats, COVID-19 was bats)
- This contagion is classified as ‘community spread’ meaning we cannot trace where the virus was picked up by certain people anymore – this supports the shared surface contagion claims
- COVID-19 can live on a surface up to 9 days, however it is **expected** that 0.1% sodium hypochlorite solutions (bleach) or 62-71% ethanol will significantly reduce the coronavirus infectivity on surfaces within 1 minute. (Experiment done with Human Coronavirus and expected to be similar for COVID-19)

As of March 12th, there have been 15 recoveries/38 deaths of 1,364 cases in America (68,670 recoveries/4,749 deaths of 129,587 cases worldwide).

WHO reports that 80% of COVID-19 cases are mild or asymptomatic.

SIGNS AND SYMPTOMS

- The CDC reports symptoms range from mild to severe illness and death for confirmed cases
- The primary symptoms to look for are fever, cough, and/or shortness of breath
- Primary symptoms may appear 2-14-day post-exposure
- The 2-14-day post-exposure quarantine guidelines are based on our experience with MERS in 2015

Call your doctor if you:

- Develop symptoms and have been in close contact with a person known to have COVID-19
- OR, have recently traveled from an area with a widespread or ongoing community spread of COVID-19

Additional Medical Care Considerations:

- Leverage telemedicine options through your insurance
- Call your doctor and inform reception of your signs and symptoms to ensure the doctor can prevent additional exposure to compromised patients
- A CDC affiliated lab must perform the diagnostic testing, call your doctor to discuss local options

DEGREES OF SEPARATION EXERCISE

Note: This is a tool for personal use to demonstrate how these diseases spread and how to do a risk analysis. Please reach out if you need assistance or have questions.

How it works:

Write out your routine in one column

Estimate how many people may contact a surface you touch during that step in your day

Evaluate the frequency of this disease in your area

Evaluate your personal and home's age and comorbid factors

Evaluate direct contact's age and comorbidity

Decide what is mandatory, optional, and not necessary

- The CDC has a published risk assessment chart that can be used for guidance as well:
<https://www.cdc.gov/coronavirus/2019-ncov/php/risk-assessment.html>

EXAMPLE EXERCISE (30-YEAR-OLD, HEALTHY, SOME REPORTED CASES IN AREA)

Routine Item	People Who Share surfaces	Mandatory/Optional/Not Necessary
Go to work by subway	Thousands	Mandatory BUT can take bike, walk, or take car to decrease number of contacts
Work in office	50 (work in cubicle but need to take elevator, use restrooms, and break rooms)	Mandatory BUT can talk to HR about potentially working from home or getting more cleaning supplies for around the office. Can take stairs instead of elevator, can bring lunch and coffee to avoid break room
Go to happy hour with colleagues	~100	Not Necessary – suspend this activity
Go to Gym	~150	Optional – Continue with extra precautions. Exercise is good for the immune system and mental health
Visit parent in nursing home	~100	Not Necessary – Given personal activity in public, risk to elder population and likelihood of comorbidity DO NOT go to nursing home. Call parent and/or ask nursing staff if there is an ability to video conference instead.

COVID-19 V. INFLUENZA

Similarities:

- Same countermeasures: Practice good hygiene and social distancing.

COVID-19	Influenza
5-6 days between successive cases	3 days between successive cases (spreads faster)
Virus shedding 24-48 hours prior to symptoms (harder to detect if sick and spreading disease)	Virus transmission in first 3-5 days of illness, possibly pre-symptomatic transmission
Preliminary data suggests children are infected from adults	Children are key factors in the spread
Most severe for the elderly and those with underlying medical conditions/those who are immunocompromised	Most severe for children, pregnant women, elderly, and people with underlying chronic medical conditions/those who are immunocompromised
Vaccines in development	Vaccines and antivirals available (Please get your flu shot if you haven't already)

SEATTLE, THE FIRST AMERICAN CITY AFFECTED

- One young family of 4 in Seattle reports the ability to work from home around the same time that many other companies asked employees to work from home. This led to some chaos in people finding computers, desks, and chairs but there were no shortages reported.
 - This family is still able to get coffee from local shops, go grocery shopping, and have their nanny come daily. They also go on walks locally in order to get fresh air.

“If there’s one thing that will get us the virus it would be politeness” – Clara S. in reference to neighbors sharing food and shaking hands. “Originally the guidance was elbow bumps but now they’re saying try not to make contact when you greet people.”

Note: Washington State has a new program to help employees and businesses affected by COVID-19. <https://esd.wa.gov/newsroom/covid-19>

BREAKDOWN BY AGE, SEX, COMORBIDITY

Age	Death Rate (confirmed)	Death Rate (probability)
80+	21.9%	14.8%
70-79		8.0%
60-69		3.6%
50-59		1.3%
40-49		0.4%
10-39		0.2%
0-9		No fatalities

Sex	Death Rate (confirmed)	Death Rate (probability)
Male	4.7%	2.8%
Female	2.8%	1.7%

Pre-Existing Condition	Death Rate (confirmed)	Death Rate (probability)
Cardiovascular Disease	13.2%	10.5%
Diabetes	9.2%	7.3%
Chronic Respiratory Disease	8.0%	6.3%
Hypertension	8.4%	6.0%
Cancer	7.6%	5.6%
No Pre-Existing Condition		0.9%

Note: this source was last updated February 29, 2020 – also, asthma and allergies do not appear to affect COVID-19 susceptibility

WHAT THIS MEANS FOR CHILDREN (UNDER 9)



- Discuss alternatives to in-person meetings with teachers and clubs
- Limit your excursions that require a lot of surface contact (kids lick things!)
- Remember that children and infants seem to be asymptomatic. There is a higher likelihood that a child can have the virus and not show any symptoms
- Daily bathing (shower is preferable – use soap!) and teaching your kids the importance of washing hands for at least 20 seconds
- Limit the toys that leave the house to those that are easily disinfected (plastic and metal are easier to disinfect than wood or fabric).
- Be sure to regularly clean blankies, stuffies, bottles, backpacks (fragile items can usually be put into a pillowcase, tied off, and washed on a gentle cycle to limit potential damage). Laundry detergent is to clothes, as hand soap is to our hands!

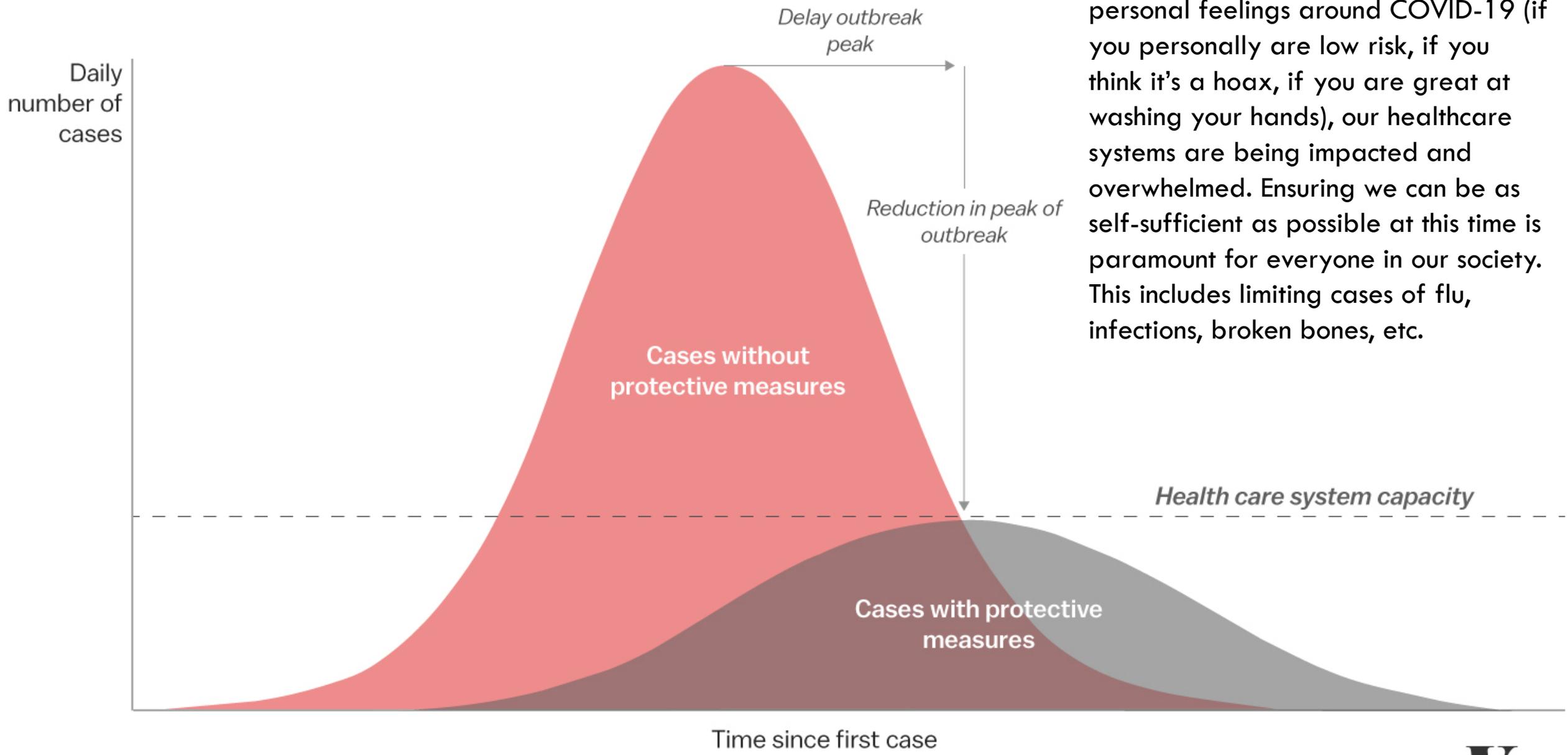
WHAT THIS MEANS FOR COLLEGE STUDENTS AND COLLEGE EMPLOYEES

- Work with your teachers. If you feel sick, speak to your school about a preparedness plan as many schools intend to provide online-only teaching within the next few weeks.
- Limit unnecessary travel. Many colleges are extending their spring breaks and it is inadvisable to use this extra time to travel. Stay local and limit unnecessary excursions and interactions with people.
- If you get sick, self-quarantine and call your doctor for further instructions. If under 60, no comorbidity, and experience mild-to-moderate symptom, there is no need to go to a hospital unless specifically told to do so.
- I'd like to also take this moment to point out that while many students and parents are upset about college closures (such as Cornell), the neighborhood (Tompkins County) is much more comfortable as we are unsure what all of those students would bring back to campus after spring break. This way they are 'self quarantining' and our population, which is largely employed by Cornell and contains many retirees, has a reduced risk of contact with COVID-19

WHAT THIS MEANS FOR EVERYONE

- It is our job to limit our exposure and maintain clean and healthful hygiene
- Do not hoard items. The only way a community can beat this is to do it together. If one person has all the hand soap, that leaves less for everyone else. Only take what you need.
- Even if you are low risk, avoid crowds, sharing drinks, being in close contact with others (especially via shared surfaces). Use wipes before and after using a shopping cart, take items deliberately off the grocery store shelves (meaning, don't handle ALL the boxes of cereal).
 - Leave outside articles (shoes, coats) together by the door or outside if your climate allows for it.
 - Disinfect your phone, glasses, and other indoor/outdoor or frequently handled items regularly.
 - Wash your hands as soon as you get home and as frequently as possible. A good rule: every time you see a sink, take a 20-30 second break to wash your hands.
- If you can work from home, please do so and make sure your home office is ergonomically sound in order to avoid a doctor's office or chiropractor's visit amid these current events.

Flattening the curve



Food for Thought: Regardless of your personal feelings around COVID-19 (if you personally are low risk, if you think it's a hoax, if you are great at washing your hands), our healthcare systems are being impacted and overwhelmed. Ensuring we can be as self-sufficient as possible at this time is paramount for everyone in our society. This includes limiting cases of flu, infections, broken bones, etc.

WHAT THIS MEANS FOR IMMUNO-COMPROMISED AND HIGH-RISK PEOPLE (ALL AGES)

- Be proactive!
- Have medications needed on-hand, ask your doctor if you can get a spare and/or consider mail-order subscriptions for now
- Stay inside as much as possible – avoid unnecessary contact with others and crowded areas
- Clean and disinfect your home – beyond just common surface items - with cleaners that contain bleach, peroxide, or 70% alcohol. Vinegar and vodka will not kill viruses.
- High risk can also mean situations beyond medical to include legal and financial.

IF YOU MUST GO OUTSIDE/INTERACT WITH THE PUBLIC

- Leave shoes at the door or outside, if possible
- Wash your hands immediately when you walk in
- Wipe down your phone immediately when you walk in
- Wipe down any items you must have outside as well as inside (medical supplies, for example)
- Do your best to clean your kids' stuff as often as possible
- Do not allow playdates or visitors over if possible
- Don't forget to wash your hands before handling makeup and/or contact lenses. (Consider forgoing makeup near eyes and mouth as well as contact lenses if you are in an area with high risk of disease transfer)
- Be sure to disinfect your glasses regularly too!

<https://www.livescience.com/hand-sanitizer.html>

<https://www.livescience.com/57044-science-of-soap.html>

<https://www.marketwatch.com/story/deadly-viruses-are-no-match-for-plain-old-soap-heres-the-science-behind-it-2020-03-08>

<https://www.vox.com/science-and-health/2020/3/11/21173187/coronavirus-covid-19-hand-washing-sanitizer-compared-soap-is-dope>

Hand sanitizer comic By Tom Casey and Eitan Sheena.

HAND SANITIZER AND WASHING HANDS

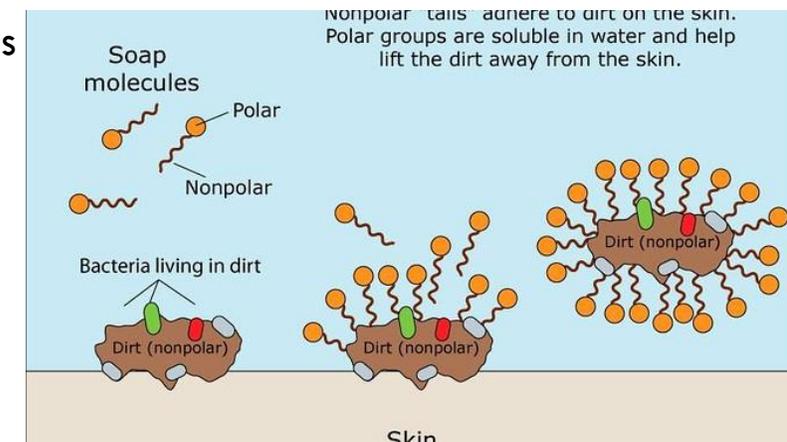
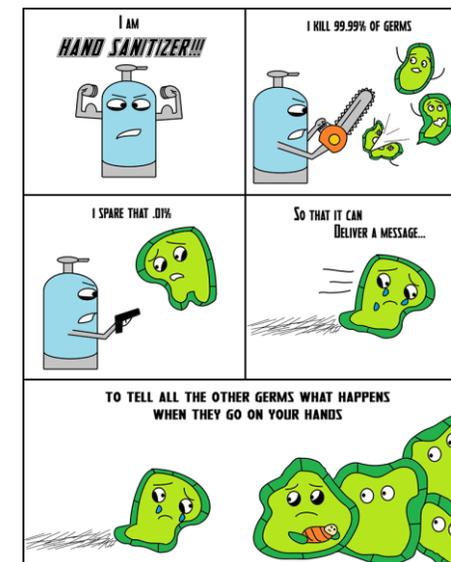
Hand Sanitizer – only use if you have no other options

- Hand sanitizer needs to have 60%+ alcohol content to be effective. Rub it all over your hands until it's dry (do not wipe it off or shake your hands to air dry)
- The alcohol in hand sanitizer will break proteins, split cells, or alter the pathogen's metabolism. At 60% alcohol concentration, hand sanitizer kills a broader array of bacteria and viruses, but this does not mean it's 100% effective. Dead or compromised pathogens remain.

Note: Hand sanitizer will not kill all germs such as norovirus, or certain parasites. If it also ineffective against pesticides and heavy metals and does not work well on dirty or greasy hands.

Soap and Water – Follow these rules year-round and after using hand sanitizer, too

- Germs and pathogens stick to the oils in your hands so water won't wash this oil away. Soap is the mediator that has one end of the molecule binding to oils and germs/pathogens and the other binding to water, which helps the water wash the pathogens away.
- Soap also acts as a chisel or crowbar to destroy viruses and germs before they get washed down the drain.
- Water temperature does not make a difference – as long as it's clean, running (not standing) water
- MINIMALLY Sing 'Happy Birthday' twice or count to 20 with 'Mississippi'



N95+ MASKS

- Must be fit tested
- Must have medical clearance to wear one
- Must remain on at all times to be effective
- Ideally worn by the sick person, far less effective when used by healthy person
- If you are sick, you shouldn't go out anyway

Leave the N95 masks to the people who need them.

- Surgical masks are also more effective if worn by the sick person. They do not require fit testing or medical clearance. However, they need to be worn properly at all times. They primarily prevent people from touching their face and may provide some protection against spreading the disease if a person is coughing. The sick person should stay quarantined/inside anyway.



<https://www.cdc.gov/coronavirus/2019-ncov/hcp/respirator-use-faq.html>

Picture from style-seal.com

WHAT DOES QUARANTINE LOOK LIKE?

- You will likely be checked on by phone or video conference. If someone needs to see you in person, they will don PPE prior to entering your home and ask for a trash can outside your home to dispose of items. Expect to keep a 6-foot distance between yourself and the visitor despite their PPE unless otherwise instructed.
- If you are suspected to have COVID-19 you may be tested in your home, if you display symptoms.
- If one person is quarantined in your home, as of now, it appears that the whole household will be quarantined. Further quarantine inside the home is a good practice where the affected person is confined to their own room/bathroom (if possible) and food is brought to their door. Try to limit interaction with pets as well.
- It is smart to use as few rooms in your home as possible. The less you use, the easier it will be to decontaminate later.

<https://www.bbc.com/news/business-51818492>

Please search the web for “your preferred airline” + Coronavirus to see how various airlines are improving their cleaning regimens.

SHOULD I TRAVEL?

- There are increased cleaning protocols on planes.
- Even if you're 100% covered and did everything right, it doesn't guarantee other passengers are the same – prepared to be stuck at your home airport, at your visiting airport, in the visiting state/area, and/or on the way back.
- Keep all necessary items in your carry-on baggage including at least 2 weeks of medications.
- Make a Business Continuity Plan/Family Plan should you be stuck for 2-6 weeks. (This means, what happens if you get stuck somewhere – how does your business or family fill in your absence for 2-6 weeks?)
- Air travel may stop all together while you are gone– understand that's a real possibility (many airlines are postponing flights or canceling. Some countries aren't allowing planes to come or go).
 - New travel bans in America begin 3/13 and apply for 30 days. These bans suspend all travel from Europe to the States but does not apply to Britain
- Smaller meetings mean less exposure at the actual event – you will still be exposed in hotels, restaurants, and in your chosen mode of transportation.

Upcoming events to think about:

March: Purim, Pi Day, St. Patrick's Day, Veterans Day

April: April Fools Day, Palm Sunday, Passover, Easter, Tax Day (consider an extension or e-filing), Ramadan (health comes first with lent)

May: St. James Day, Cinco de Mayo, Mother's Day, Memorial Day

YOUR QUESTIONS

1. In the event of an emergency where international shipping is impacted, what are the goods that are worth stocking up on?

The major concern here would be to keep your family clean, hydrated, and fed. Your local municipalities and local vendors distribute most of these items. While we might not be able to get avocados as easily (if they come from Mexico) we can still get *insert local produce* easily without putting many people at risk. For example, in Central New York, near Cornell, I am not worried about having access to milk or bread, but I do anticipate a sudden demand on local produce and meat from farmers, so I want to be able to supplement. The trucking industry and train use would be less impacted. Aviation groups have plans for 'rescue flights' as well.

2. What to expect and how to be involved helpfully if a parent (60+ years) gets sick in another state, including if they are or are not hospitalized.

My own mother is 6 hours away (basically feels like another state). She is immunocompromised, married to someone immunocompromised, and up until recently, visited my 93-year-old grandmother in assisted living once a week. If and when my mom gets sick, I intend to call daily and make sure she is eating and drinking. If there are any signs of respiratory issues (wheezing or inability to catch her breath) I would offer to call her doctor or local hospital on her behalf so as not to further aggravate her throat. I have already supplied her with a basic degrees of separation plan, business continuity plan (she's self-employed), and advised her to keep 4-6 weeks of medications and food on hand just in case (more than 2 weeks because she's at greater risk).

YOUR QUESTIONS

3. How do we know if we're overreacting or not?

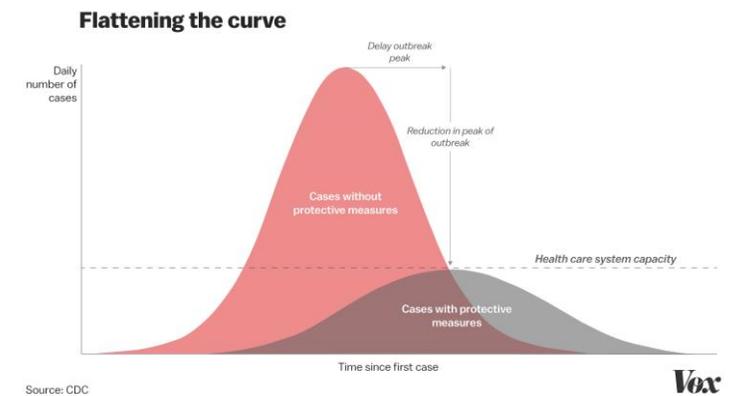
I would rather you ask for help and overreact PROACTIVELY (like taking this webinar and buying an appropriate amount of hand soap for your family) than ignore it all together. That said, 4 cases of toilet paper is an overreaction that is not thought through – react in a way that is logical and act accordingly. Use the worksheets to help facilitate your plans.

4. How to politely implement a policy change even if people within your organization or school don't think it's a big deal when it comes to teaching a small class in person and some do? How to ask for a work from home situation when you are undergoing chemo?

At this stage, everyone is aware of COVID-19 and its implications. Your business or academic institution is working on this and monitoring it closely. If you need a way to start the discussion, ask your HR department about flexible schedules. If you or an immediate family member are sick, discuss taking FMLA benefits (note, you need to qualify for FMLA and your institution is not required to pay you for FMLA, however you may qualify for short-term disability or long-term disability depending on the situation).

- As of 3/11 it appears that there may be additional support from the government to include a payroll tax cut, an infrastructure plan, and paid sick leave for hourly employees.

YOUR QUESTIONS



5. It looks as though an undersupply of hospital beds/ventilators may be a major concern in many areas. Is there anything that we can do at home to prepare for this?

Yes, help alleviate the burden on the hospitals. Have your normal medications and OTC medications at home and ready to go should you get sick. Do not hesitate to call your doctor or hospital if you have a question but refrain from going into a hospital 'just to get checked'. Call your insurance provider to authorize additional medication refills if you are self-quarantined. If we all take responsibility for this and limit exposure to others, the hospitals will be able to catch up with the demand.

6. For families with an immunocompromised family member, how might preparedness look different in your opinion?

I've mentioned my mom a few times. If she lived with us, I would likely remove all hand towels, plates, cups, cutlery and use disposable items instead (I know it's not green, but these things exist for a reason and this would be a great use for one-time use items). Since she is an adult, I would have her help me disinfect all surfaces a few times a day, especially after someone comes in from outside. Boots, shoes, jackets, gloves would all stay near the door in 'shoe quarantine' and, if possible, I would confine her to her own room and her own bathroom to alleviate the burden of disinfecting an entire house constantly. Food can be brought to her door and left for her to eat in her room. We can use video conferencing inside the house, if needed. I would also consider leaving her a box of disposable gloves and surgical masks so if she does leave the room to get something, she won't accidentally touch something and pick up a bug. Wearing gloves is also a reminder not to touch your face so it has a dual purpose. She would still need to wash her hands once she took them off though. I would also wash her sheets (minimally her pillowcase) a few times a week if possible.

TOILET PAPER AND HAND SANITIZER

- Most people have the TP they need for their families already in their homes. (See my personal shopping list for my family)
- Disaster psychology comes into play here – we deal with ‘acts of god’ more often which usually means utilities go out, we can’t get to stores, there’s no gas. We naturally default to this scenario (since we are more familiar with it). We may also see a lack of basic essentials in the store and panic buy. Toilet paper is cheap, large, and acceptable to purchase in bulk.
- When we don’t have a concrete plan, we tend to panic and horde. Hand sanitizer is helpful but it’s not the best solution and it needs to be used properly. However, since this is the easiest concrete fact, people are hoarding it.

WASH YOUR HANDS WITH SOAP AND WATER.

TAKE AWAY THOUGHTS

- Shopping local is important – with all the ecommerce, our local stores have insufficient inventory due to the sudden demand (in addition to panic buying which nobody can plan for). Your neighborhood store is less likely to artificially inflate prices for their community (re: your bodega won't charge \$400 for hand sanitizer).
- If you are low risk, not sick, and have the flexibility, consider volunteering your time at your local community center, school, nursing home, or library to assist in the disinfecting efforts.
- If you know of an underprivileged person or family, a food-poor family, or an elder who lives alone, consider helping them stock up on food and hydration for 2-6 weeks. Many children rely on school-provided meals and schools are closing rapidly. If there is a concern about delivery, leave it by their front door and they can wipe it down before bringing it into the house.
- Understand that everyone has the best intentions but sometimes people make mistakes or overlook something. Do not assign blame, be as proactive as possible and assume you will be affected. If you are affected, you expected it, if you're not affected, that's great!
- Do not panic and don't be quick to judge. For example: If your daycare closes it could mean that the staff are being supported in their precautionary requests to self-quarantine or socially isolate for personal reasons and the student/teacher ratios are not within published guidelines.
- Many of us subscribe to free economies. In addition to looking for bugs and mold, consider disinfecting items before putting them in your car or putting these practices on hold for the time being, if possible.



THANK YOU!

Please feel free to email Samantha.Lushtak@AbsoluteEHS.com with questions

Please check my webpage for website links, downloadable documents, and worksheets.
This presentation will be posted as well.

Please consider supporting my small business by donating to support public services such as this one.

There is a PayPal link on my website or you can Venmo @Samantha-Lushtak. Receipts available upon request.

www.AbsoluteEHS.com