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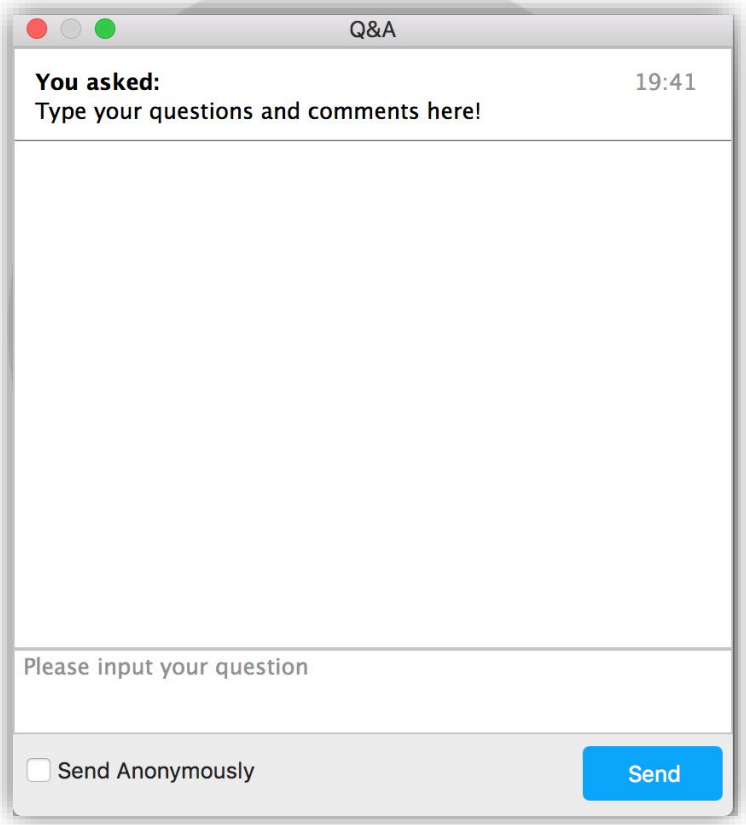
Behavioral Health Concerns

The Consequences of Catastrophe

Coping with the overwhelming stress of pandemics and other disasters

February 9, 2022

Housekeeping Items



1. Today's webinar is 1 hour including Q&A.
2. All participants will be muted during the webinar.
3. Please use the Q&A function. We will monitor questions throughout and answer as many as possible at the end.
4. This webinar is being recorded and will be posted on https://www.beaconhealthoptions.com/providers/beacon/important-tools/webinars/archive/ so you have continued access to the information and resources.

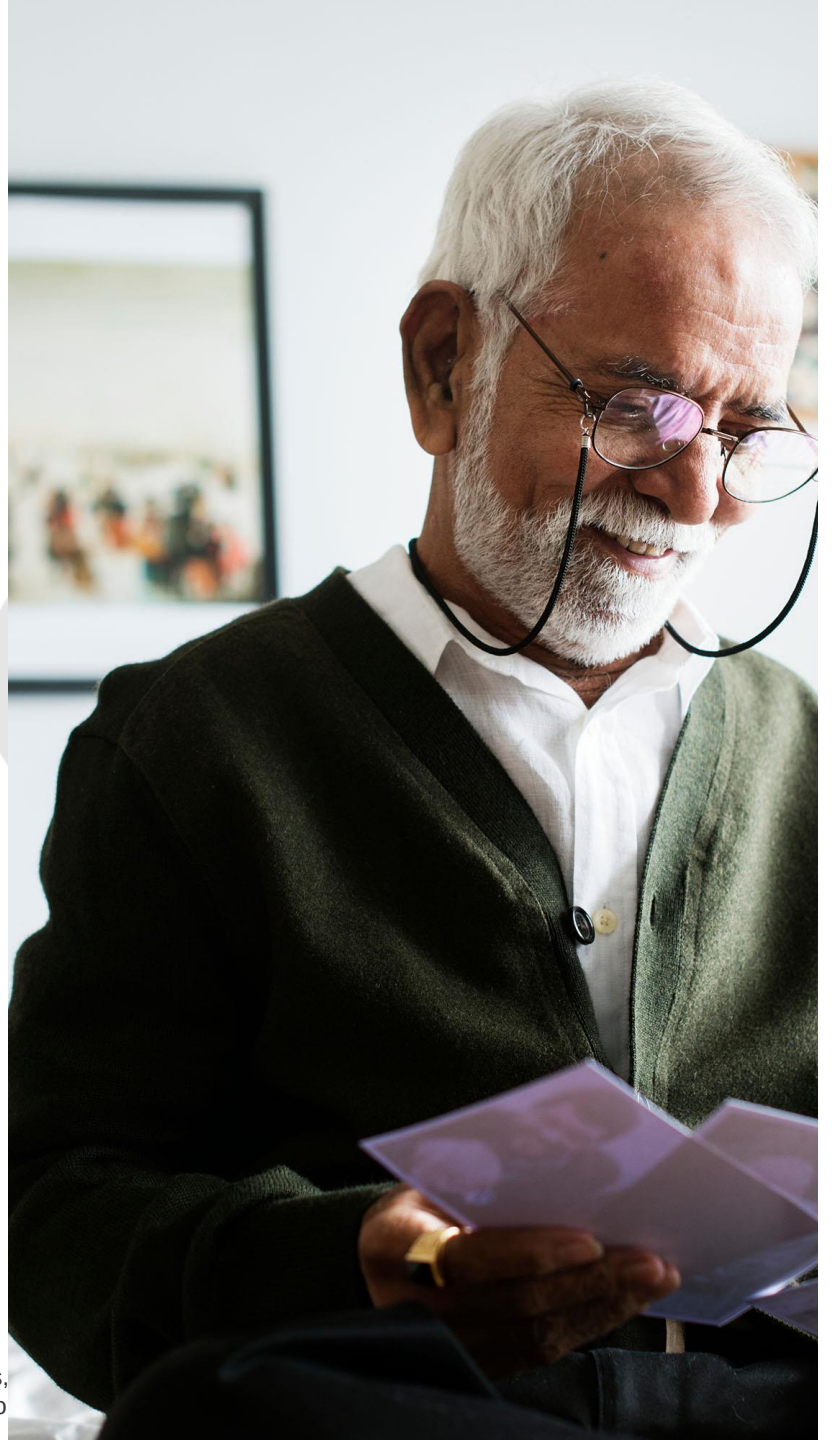
PLEASE NOTE: This presentation provides some general information that is subject to change and updates. It should not be construed as including all information pertinent to your particular situation or providing legal advice or medical advice, diagnosis or treatment of any kind. For legal advice, we encourage you to consult with your legal counsel regarding the topics raised in this presentation. At all times, please use your own independent medical judgment in the diagnosis and treatment of your patients.

Today's speaker

Mahmood A. Usman, MD, MMM
Medical Director
Beacon Health Options of PA

Learning objectives

1	Individuals will be able to identify the impact of pandemics and other disasters on our stress levels
2	Individuals will be able to describe the impact of overwhelming stress on our mental well-being
3	Individuals will be able to list 3 ways that we can deal with the stress of catastrophic events



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SARS-CoV-2 and COVID-19

- First cases of atypical pneumonia in Wuhan, China in Dec. 2019
- SARS-CoV-2 identified and illness labeled COVID-19 (Coronavirus Disease, 2019)
- Spread primarily by inhalation of aerosolized droplets
- Symptoms include fever, cough, fatigue, aches, loss of smell
- Declared a global pandemic on March 11, 2020
- As of 1/21/22, almost 343 millions cases and nearly 6 million deaths, in all but 6 of the 251 countries and territories worldwide
- Overall case fatality rate (CFR) of 2.2%
- Also, as of 1/21/22, nearly 70 million US cases and 860,248 deaths

Feng, Li, Zhang, et al, 2020; del Rio & Malani, 2020; CDC, 2022; Johns Hopkins, 2022

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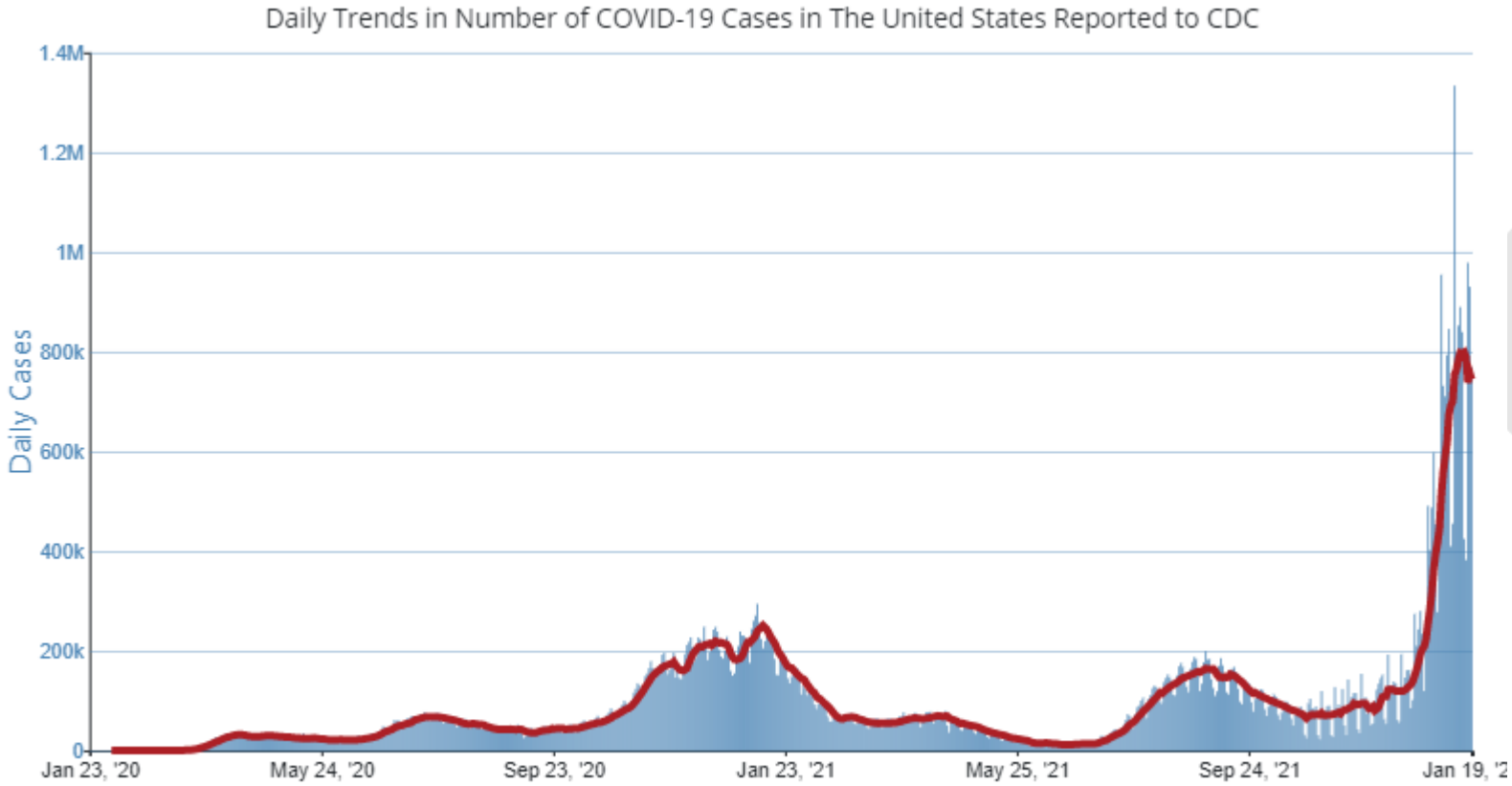
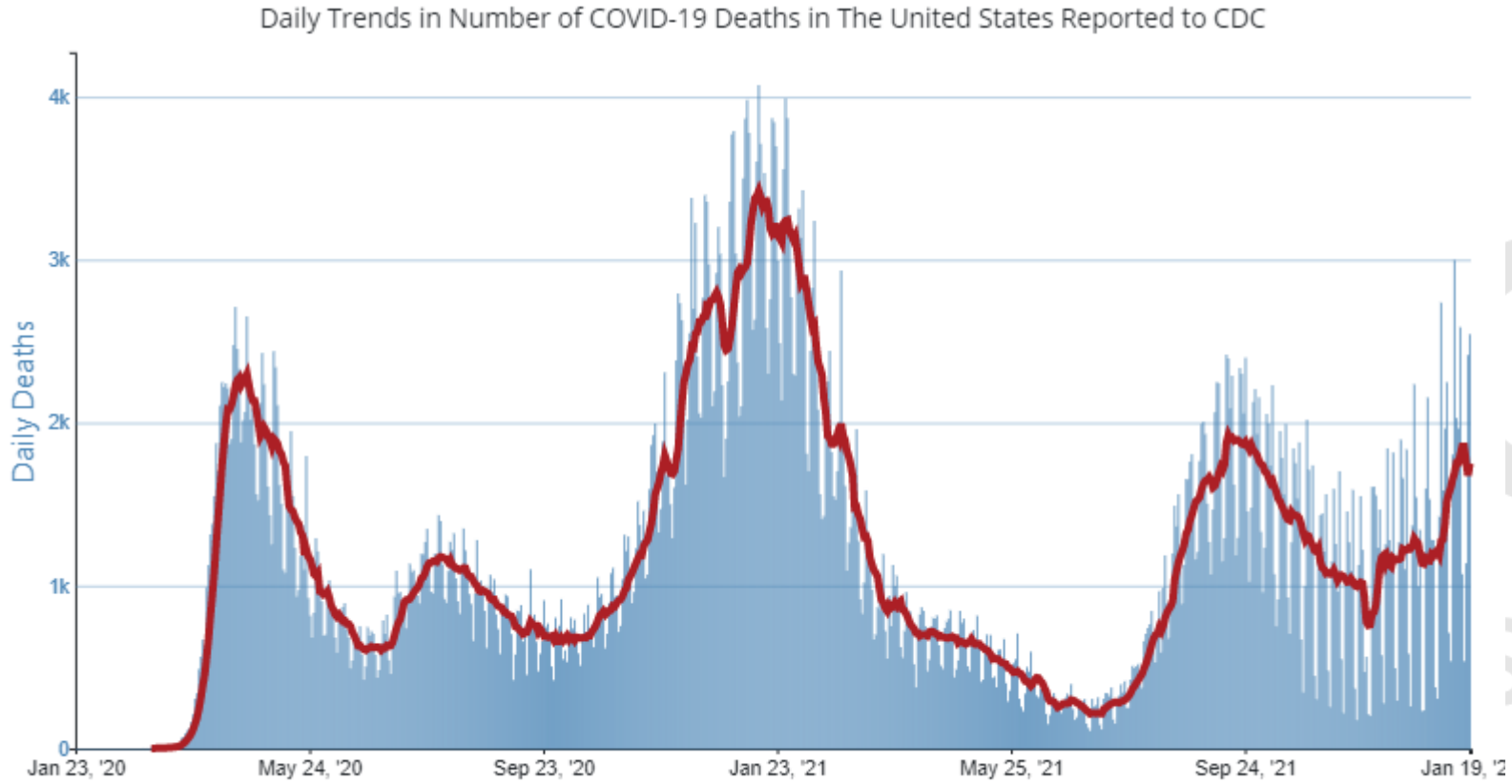
Daily trends in number of COVID-19 cases in the U.S. reported by the CDC



Source: CDC.gov

Daily new Covid-19 deaths in the U.S.



Source: CDC.gov

Impact of COVID-19 mitigation

Personal

- Face coverings, Social distancing, Vaccination

Social

- Stay-at-home orders, Entertainment, Staycations

Educational

- School closures, Hybrid learning, Extracurricular

Business

- Closures, Remote work, Uneven impacts

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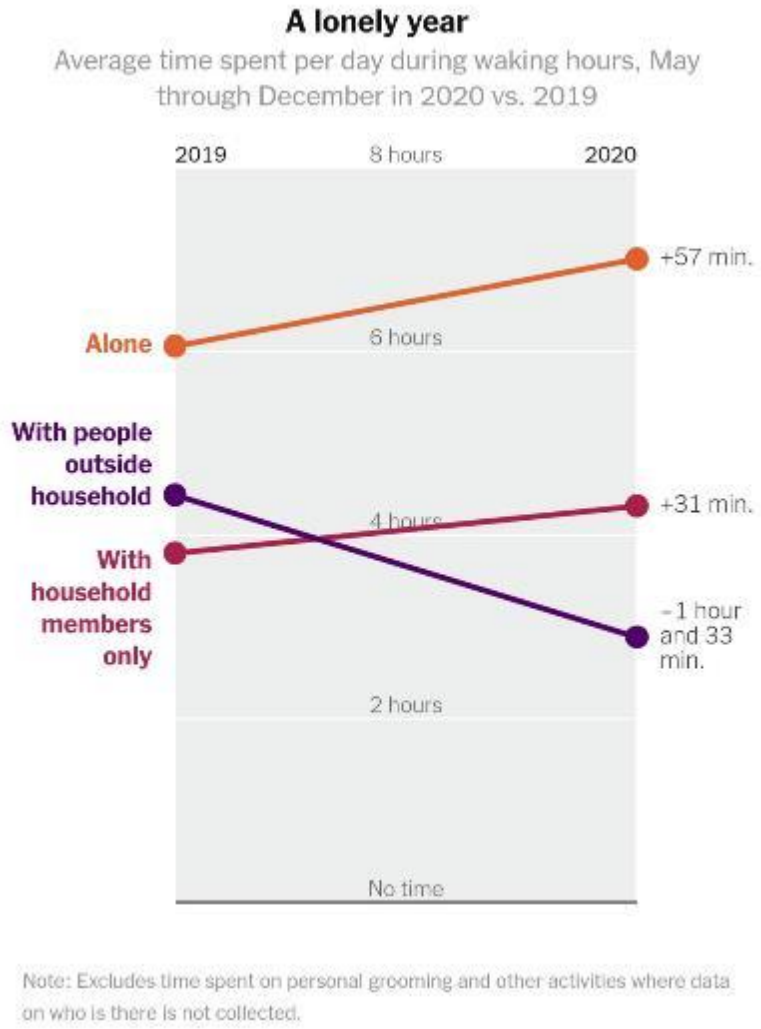
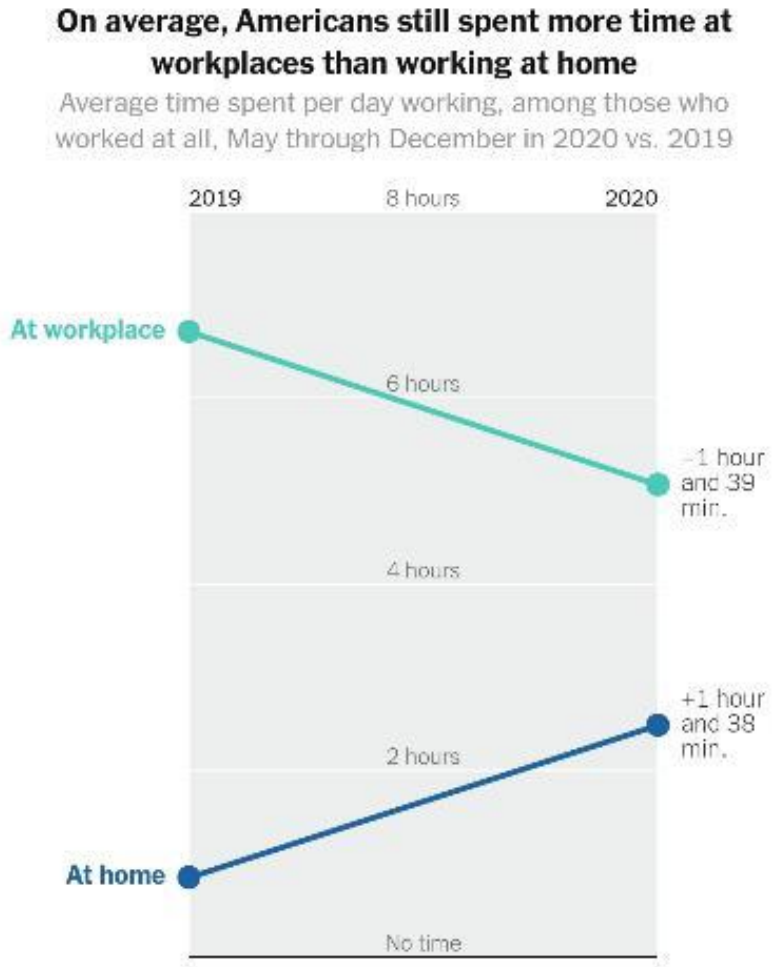
Behavior Change During COVID-19

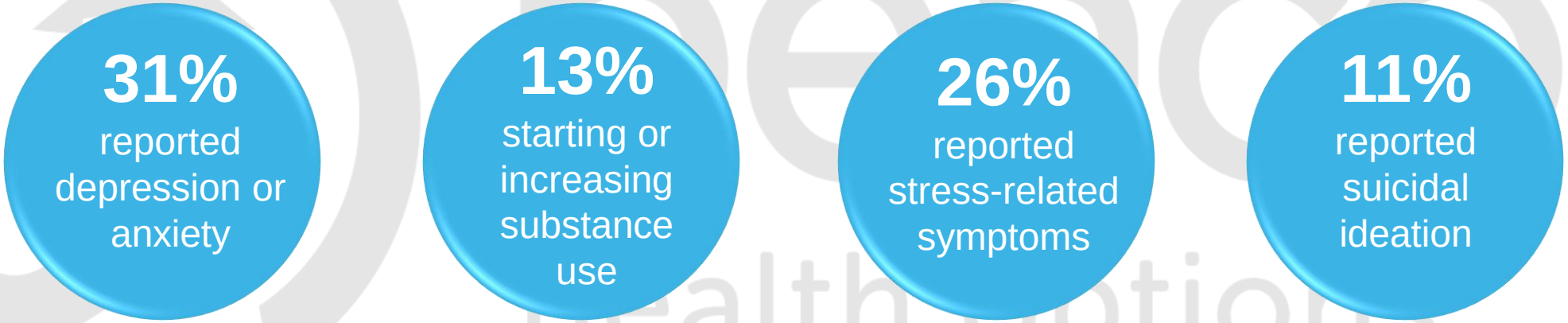




Casselman & Koeza, 2021

Mental health during COVID-19

- People with schizophrenia are 10 times more likely to contract COVID-19 and 3 times more likely to die from it
- Studies have shown that food insufficiency, financial concerns, and loneliness are risk factors for anxiety and suicidal ideation
- In survey conducted in late June, 2020, respondents:

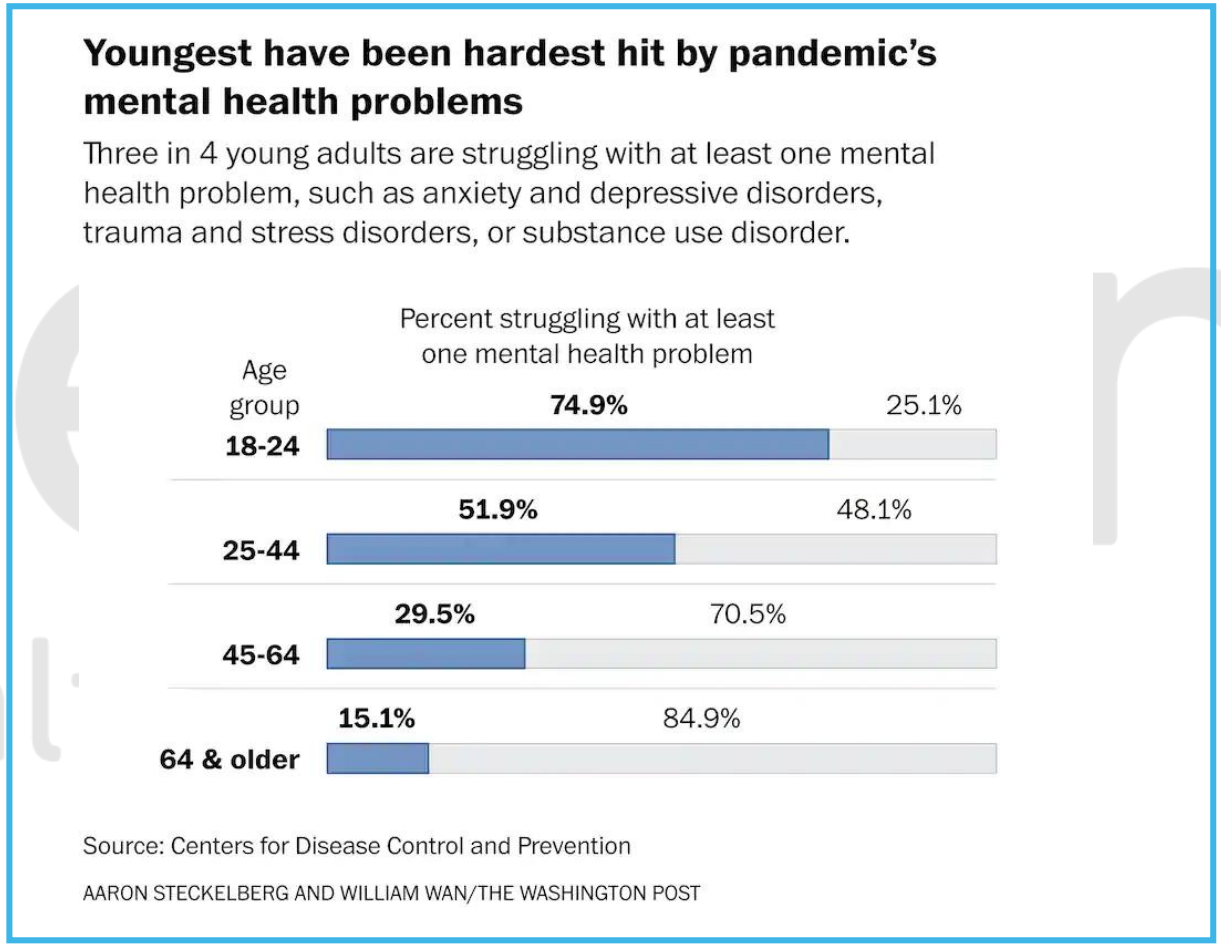


- These results were almost double pre-pandemic figures
- Cognitive impairment complicates 50% of long-haul COVID cases

Gordon, 2021; Fillipi & Canu, 2021

Mental health problems in children and young adults

- 13.2% of adolescents were receiving some type of mental health services in school prior to COVID-19
- Children may have limited access to services provided by telehealth and they may be less effective
- Social isolation and loneliness increased the risk of depression, and possibly anxiety in children and adolescents



Golberstein , et al, 2020; Wan, 2020; Loades, et al, 2020

Early Casualties of the Pandemic

Lorna Breen, DO

- Medical Director, NY-Presbyterian Allen Emergency Department
- Age 49
- No prior psychiatric history
- Recently recovered from COVID-19
- Described “devastating scenes,” appeared “detached”
- Death by suicide April 26, 2020

John Mondello

- EMT, FDNY Tactical Response Group
- Age 23
- No prior psychiatric history
- On the job less than 3 months
- Described “chaos” and “people passing away in front of you.”
- Death by suicide April 24, 2020

https://www.nytimes.com/2020/04/27/nyregion/new-york-city-doctor-suicide-coronavirus.html

https://nypost.com/2020/04/25/nyc-emt-commits-suicide-with-gun-belonging-to-his-dad/

Risks for healthcare providers

The suicide rate for physicians was double that of the general population before COVID-19

Healthcare workers are now showing even more anxiety, depression & suicidality due to COVID-19

In one medical team that responded to an earthquake, 21.4% had clinically significant depression

One study in Germany showed 16.8% of ER docs had PTSD at baseline (pre-COVID)

https://www.washingtonpost.com/outlook/2020/05/11/mental-health-doctors-covid/
https://suicidology.org/2020/05/05/ai-healthcare-professionals-mental-health/
https://www.samhsa.gov/sites/default/files/dtac/supplementalresearchbulletin-firstresponders-may2018.pdf

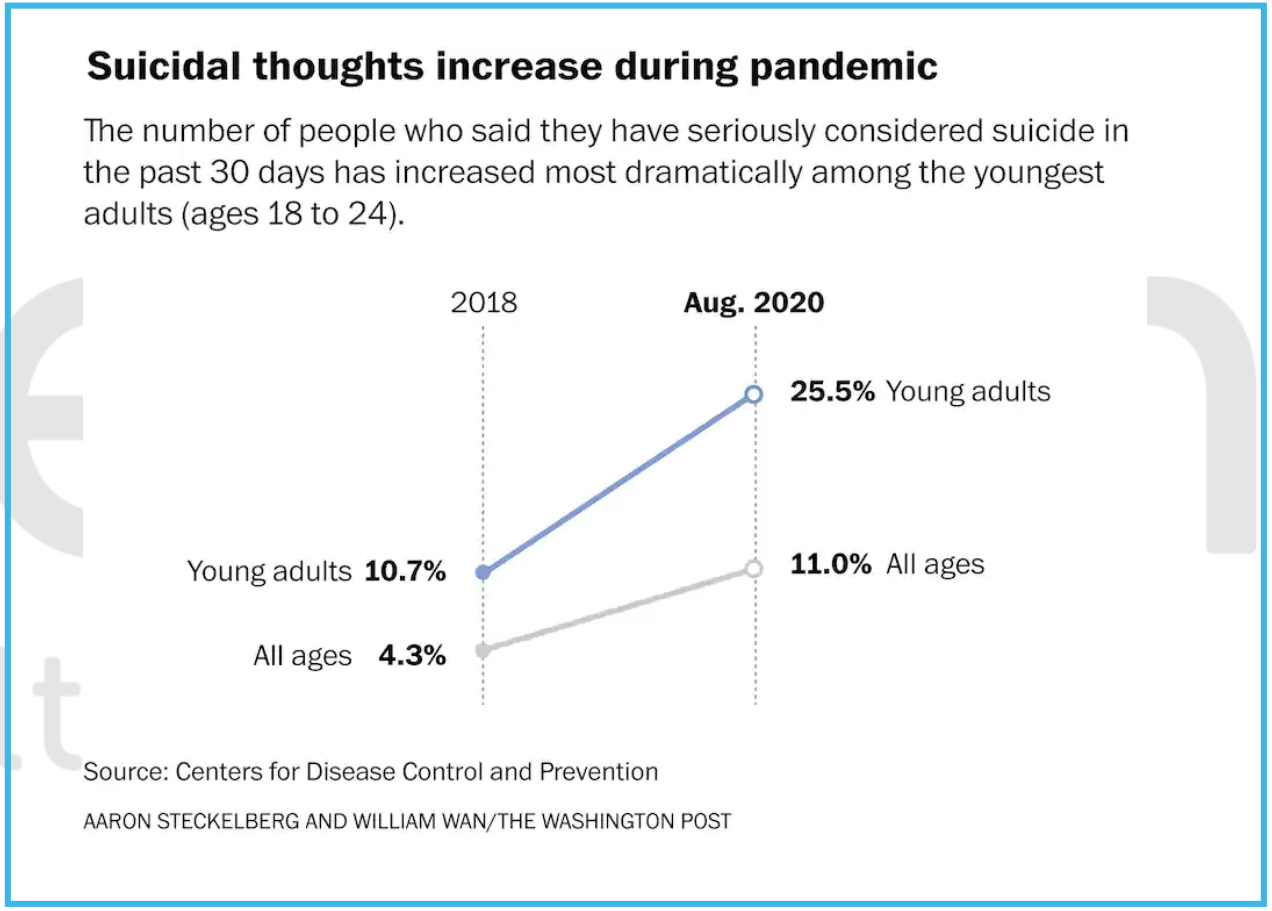
Risks to healthcare workers and first responders

"We're used to dealing with sick people and seeing terrible things but what's devastating with COVID is the sheer volume. It's like drinking from a poisonous fire hydrant."

– Flavia Nobay, Emergency Medicine

Suicidal ideation increased

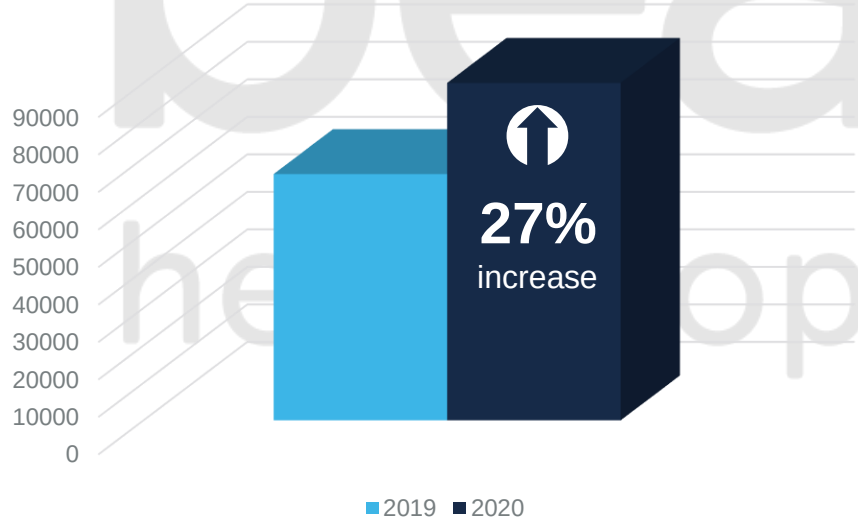
- ED visits for suicidal ideation declined early in the pandemic, jumped significantly by winter, especially in girls
- Most studies have shown the rate of completed suicides to be unchanged
- One study showed a modest increase in suicide among Blacks in Maryland
- Some studies have suggested that specific groups, such as nurses, sexual minorities and adolescents may be at higher risk



Yard, et al, 2021; Wan, 2020; Fuast, et al, 2020;, Bray, et al, 2020

Overdoses and SUD during COVID-19

- Overdose deaths appear to have increased sharply early in the pandemic.
- Social isolation seems to increase SUD and decrease engagement in treatment
- SUD is a risk factor for hospitalization, complications & death from COVID-19
- Over 90,000 Americans died from overdoses in 2020:



Wan, 2020; Fuast, et al, 2020;, Bray, et al, 2020; Winflied Cunningham, 2021; Baillargeon, et al, 2020

Persisting effects of COVID-19

- Masking wearing, social distancing, isolation persisting
- Most report negative effects on relationships, leisure time, physical & mental health, society & politics, employment and finances but some note positives
- Long-term economic problems in states dependent on tourism
- Of workers who can work remotely, 71% are doing so.
- Increasing divide between college-educated, white collar and blue collar workers
- More women with children left workforce due to a lack of childcare/school

Maciag, et al,, 2021; Van Kessel, et al, 2020

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Disasters in the 21st Century









"A perceived tragedy, being either a natural calamity or man-made catastrophe."

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The potential for post-traumatic growth

A lot of research has looked at what occurs to the individuals and community after a disaster occurs.

- With the pandemic, the timeline may not be as clear as with a specific event (such as a tornado or flood). Not having an end point increases anxiety.
- The process can be different for different people dependent on life circumstances.
- Throughout this process, there is a process of grieving.

Typical emotional response during the phases of a disaster

SAMHSA
https://www.nytimes.com/2020/05/16/health/coronavirus-ptsd-medical-workers.html

Behavioral Health Consequences of Disasters

- Acute and Post-Traumatic Stress Disorders
- Mood and Anxiety disorders (esp. in women)
- Psychosis/Dissociative states
- Substance Abuse (esp. in men)
- Somatization
- Exacerbation of Chronic Illnesses
- Delirium and Neurobehavioral Disorders
- Grief/Bereavement

Prevalence of Post-Trauma Conditions

Various studies estimate that 50-70% of the U.S. population are exposed to significant trauma.

Between 40 and 45% of those exposed to a significant trauma will meet criteria for one or more post-disaster psychiatric disorder.

The lifetime prevalence of PTSD is between 5% and 13% of the population.

Acute and Post-Traumatic Stress Disorders

- A person exposed to a traumatic event involving threat of death, injury or sexual violence to self or others.
- Exposure can include direct experience or witnessing an event and may also learning of a traumatic event occurring to a parent or caregiver.
- Acute Stress Disorder seen in 15-20% of survivors of civilian trauma.
- Up to 80% will go on to develop PTSD within 6 months.

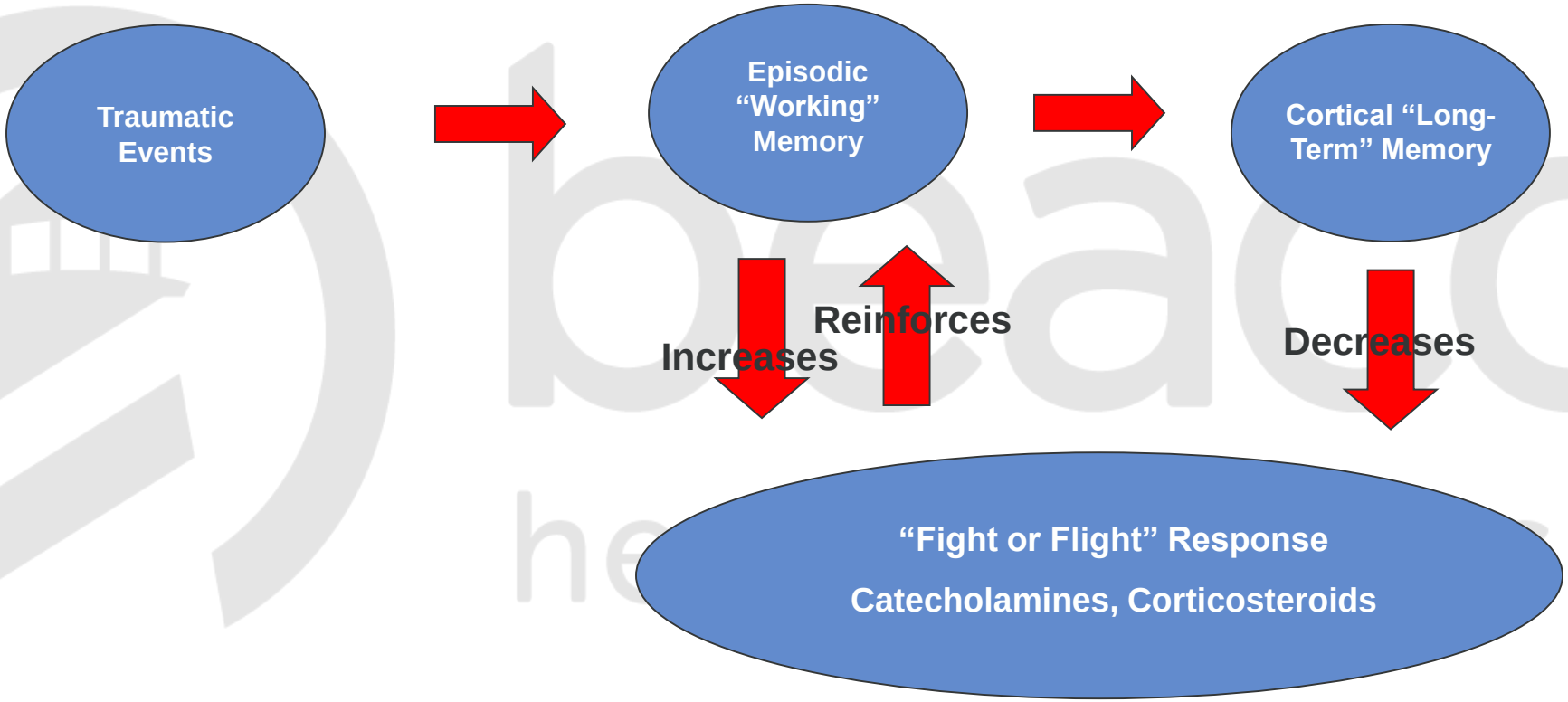
DSM-5; Berwin, et al., 1999

Acute Stress Disorder and PTSD

- **Intrusion Symptoms -** Intrusive memories, flashbacks, recurrent nightmares, triggers
- **Negative Mood**
- **Dissociative Symptoms** - Derealization, depersonalization, amnesia, distorted sense of time
- **Avoidance Symptoms** - Avoiding memories/thoughts/feelings, avoiding triggers
- **Arousal Symptoms** - Insomnia, irritability, anger, hypervigilance/startle response, poor concentration
- **Duration** < 1 month (Acute Stress Disorder) or > 1 month (PTSD)

DSM-5; Berwin, et al., 1999

Simplified Neurobiology of Post-Trauma Symptoms



Risk for Post-Trauma Disorders

- Direct exposure to event
- Physically injured in event
- First Responders
- Women (in civilian disasters)
- Single Parents
- Children
- Elderly
- Prior history of PTSD
- Prior exposure to trauma
- Prior medical or psychiatric illness
- Lack of supportive relationships
- Lower socioeconomic status (?)

The emotional toll on US first responders

69% of EMS staff never have enough time between traumatic events

10% lifetime prevalence of serious SI in EMS staff

10-16% of police had PTSD after 9/11

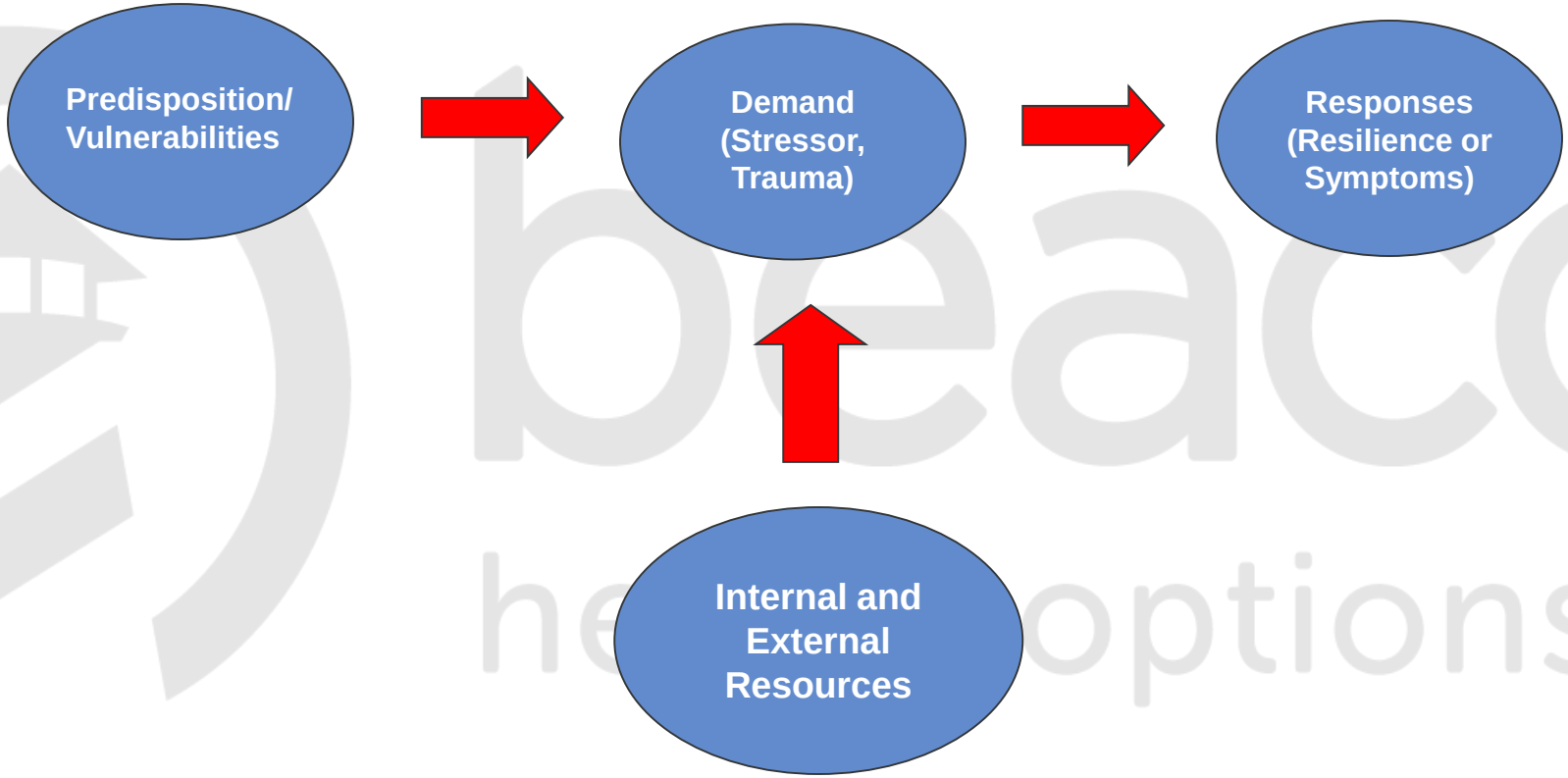
25% of police had depression after 9/11

23-25% lifetime prevalence of serious SI in police

50% of male firefighters have recent heavy or binge drinking

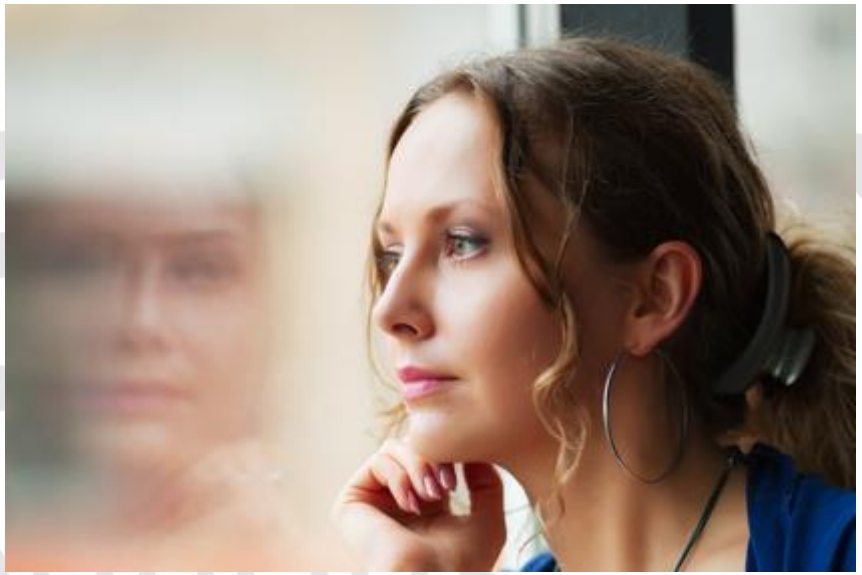
https://www.samhsa.gov/sites/default/files/dtac/supplementalresearchbulletin-firstresponders-may2018.pdf
https://www.nytimes.com/2020/05/16/health/coronavirus-ptsd-medical-workers.html

Model of Stress Response



Resilience in Trauma

- Defined as having one PTSD symptom or none.
- “The ability to maintain stable, healthy levels of psychological and physical functioning…as well as the capacity for generative experiences and positive emotions.”
- A pattern of stabile low symptom levels, not meeting criteria for either depression of PTSD.
- Distinguished from “recovering” individuals who may have subthreshold symptoms



“Positive Effects” of Trauma

Survivors of the 1974 tornado in Xenia, OH

- 84% felt they could handle crises more effectively
- 69% felt they were better off for having met the challenge

USAF POWs in Vietnam

- About 1/3 reported benefiting from their experiences
- Those with the most trauma reported the most benefit

Those impacted by Hurricane Katrina in 2005

- 88.5% developed a deeper sense of meaning or purpose
- 89.3% of survivors (81% in city of New Orleans) felt that they would be better able to cope with future life stressors.

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Early Intervention in Trauma

Psychological First Aid (PFA)

- Actions at scene and immediate aftermath
- Reduce stress and adaptive functioning
- Meeting basic needs (food, shelter, etc.)
- Orienting and guiding survivors

Critical Incident Stress Debriefing (CISD)

- Structured Group Model
- Randomized trials have been largely negative
- Current APA guidelines do not recommend debriefing

Short-term (4-5 session) cognitive-behavioral interventions

- Decreases rates of PTSD and depression
- Benefits are maintained 9 mos. to 4 yrs, later

Non-pharmacological interventions

- Use a Psychological First Aid approach
- Point out that dealing with symptoms now will prevent bad outcomes and make them more effective over the long run.
- Encourage a Personal Crisis Management Plan (PCMP)
- Emphasize connectedness – personal relationships; three people you can call.
- Calling/Purpose –“sunshine file” of cases, thank you notes, pictures.
- Compassion – mindfulness and self-compassion, curiosity, creativity, generosity, thankfulness, gratitude, and wonder.

https://suicidology.org/2020/05/05/ai-healthcare-professionals-mental-health/
https://www.nytimes.com/2020/05/16/health/coronavirus-ptsd-medical-workers.html

Psychopharmacology in Acute Trauma

One study of propranolol in ASD, given within 6 hours of traumatic event (Pittman, et al. 2002)

- Decreased physiological reactivity at 6 mos.
- No effect on rate of PTSD.

Most experts recommend psychiatric meds only for symptomatic relief of disabling symptoms (insomnia, suicidality, psychosis, anxiety, etc.)

Psychopharmacology of PTSD

- **Serotonin-specific Reuptake Inhibitors (SSRIs)**, such as fluoxetine, citalopram and sertraline, are considered first-line treatment for PTSD.
- A number of studies have shown **prazosin** is helpful for nightmares and sleep disturbance in PTSD.
- **Benzodiazepines (clonazepam, lorazepam)** may be used for only for short-term symptomatic relief of anxiety.
- **Atypical antipsychotics (olanzapine, risperidone)** and some **anticonvulsants (divalproate, carbamazepine, lamotrigine)** may be particularly helpful for flashbacks and other re-experiencing symptoms.

Eye Movement Desensitization & Reprocessing (EMDR)

- Developed in late 1980's.
- Tracking visual stimuli from side to side
- Other forms of bilateral stimulation (tones, tapping) also effective.
- Numerous controlled studies show efficacy similar to SSRIs.
- Unlike medications, benefits persist after discontinuation.

TIPS FOR COPING WITH LIFE DURING A PANDEMIC

#1 TAKE A BREAK

Yes, staying informed is valuable but seeing and hearing about a crisis 24/7 on cable news and social media will just make you freak out. Figure out how much and how often works for you and try to stick with it.

#2 DISTRACT YOURSELF

Constantly thinking about and talking about a crisis is just as bad as hearing about it continuously. Go for a walk outside, work in a garden, read a book, listen to music or clean out the garage. Meditation is also great for decreasing anxiety and depression (and can produce better outcomes in physical illnesses).

#3 GAIN CONTROL IN SMALL STEPS

Feeling like you have no control over events can lead to "learned helplessness" and depression. Try to think of small, incremental ways that you can decrease the risks you face.

#4 VARY YOUR ROUTINE

Doing just one or two things constantly to pass the time is a bad strategy. Make a list of things you might do and rotate between them. Have a picnic in your backyard or on your deck. Try your hand at drawing or painting. Take an online course. Pull that musical instrument out of the closet and practice a little. The possibilities are endless. Just use your imagination.

#5 HELP OTHERS

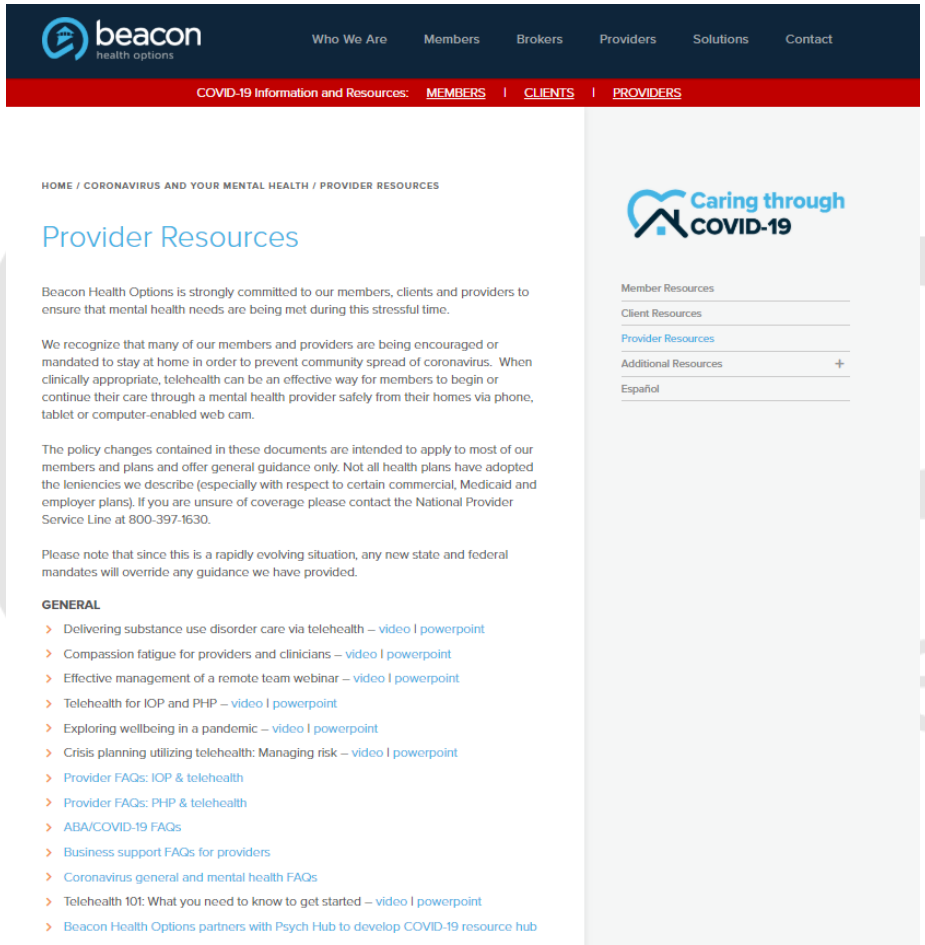
Doing things to help other people makes you feel better. Volunteer virtually for something. Donate money to a good cause. Call someone who might be lonely and bored. Provide food for someone who is homeless or can't cook for themselves. Share some of your toilet paper stockpile. It doesn't even have to be related to the current crisis. Just pick up trash from a public place or sweep the sidewalk. There are a million things you can do and they will all help you deal with the stress.

#6 PRACTICE GRATITUDE

Think about all the things you have and are grateful for. Write them down and update the list regularly. There are so many things we have and take for granted. Realizing just how much you really have helps put your current hardships in perspective.

Questions & Answers

Refer to Beacon's COVID-19 webpage for the most up-to-date information



[Beacon COVID-19 provider resources & webinars LINK]

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