



Family Survive & Thrive Guide:TM The Latest Best Practices

July 02, 2020
CareUniversity Webinar #141

For resource downloads go to:
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Welcome

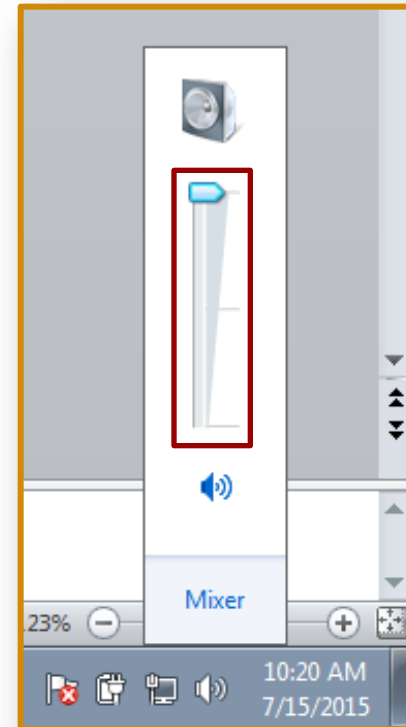
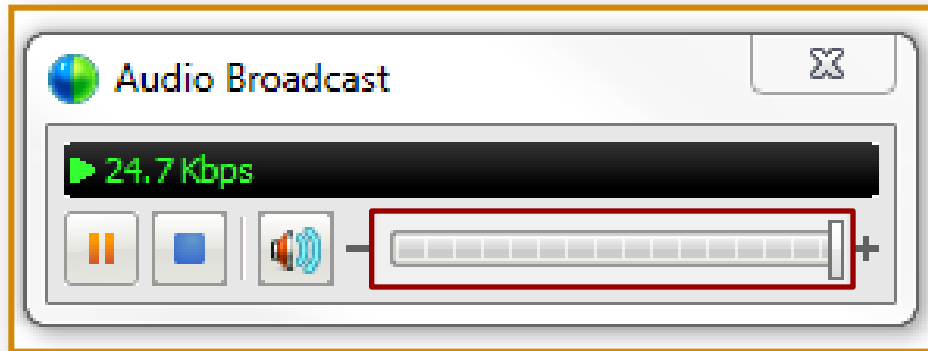


Charles Denham, MD

Chairman, TMIT Global
Founder Med Tac Bystander Rescue Care

**Med Tac Bystander Rescue Care
July 02, 2020**

CareUniversity Webinar #141

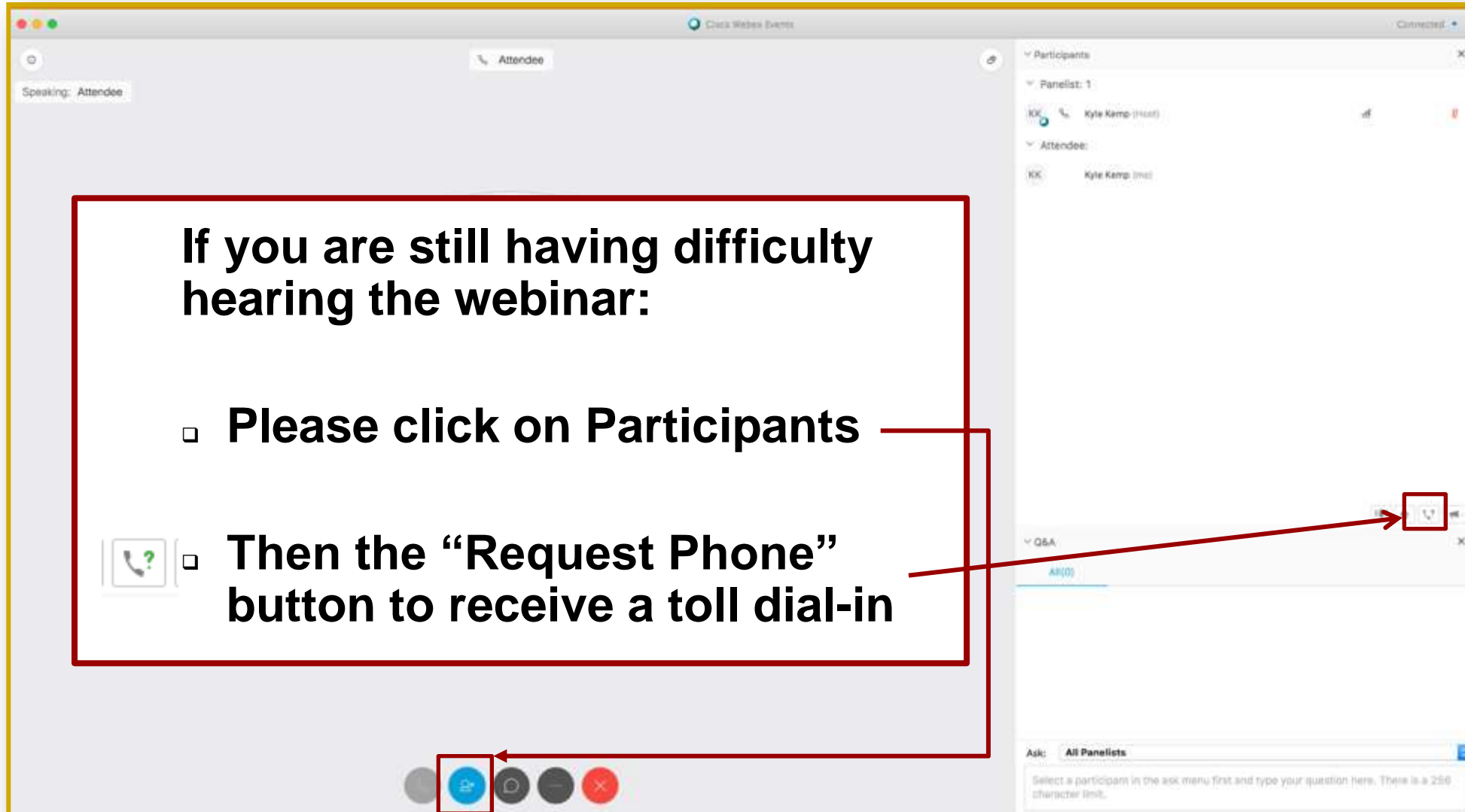


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Our Purpose Statement



**EMERGING THREATS
COMMUNITY OF PRACTICE**

CAREUNIVERSITY[®]

Our Purpose:

We will measure our success by how **we protect and enrich the lives of families...patients AND caregivers.**

Our Mission:

To accelerate performance solutions that **save lives, save money, and create value** in the communities we serve and ventures we undertake.



Disclosure Statement

The following panelists certify that unless otherwise noted below, each presenter provided full disclosure information; does not intend to discuss an unapproved/investigative use of a commercial product/device; and has no significant financial relationship(s) to disclose. If unapproved uses of products are discussed, presenters are expected to disclose this to participants. None of the participants have any relationship medication or device companies discussed in their presentations.

- Casey Clements, MD, PhD, describes himself as a 'recovering researcher' who now works on evidence based practice change and implementation. As Associate Practice Chair of Emergency Medicine at Mayo Clinic, he focuses on multidisciplinary and interdepartmental improvement projects in Rochester and across the Midwest. His first love and academic focus remains sepsis, emergency infection, and critical care. As director of the Mayo Clinic ED Sepsis Program and primary investigator of the Mayo ED Sepsis Biobank, Dr. Clements has led and participated in the last five improvement projects surrounding sepsis at Mayo. Currently, he is working on diffusion and advocacy with national organizations to improve systems surrounding sepsis outcomes and metrics. He has nothing to disclose.
- Gregory H. Botz, MD, FCCM, is a professor in the Department of Critical Care at the UT MD Anderson Cancer Center. He received his medical degree from George Washington University School of Medicine in Washington, DC. He completed an internship in internal medicine at Huntington Memorial Hospital and then completed a residency in anesthesiology and a fellowship in critical care medicine at Stanford University in California. He also completed a medical simulation fellowship at Stanford with Dr. David Gaba and the Laboratory for Human Performance in Healthcare. Dr. Botz is board-certified in anesthesiology and critical care medicine. He is a Fellow of the American College of Critical Care Medicine. He has nothing to disclose.
- Christopher R. Peabody, MD, MPH is a practicing Emergency Physician in California and Clinical Instructor at the University of California, San Francisco. He is also the Director of the UCSF Acute Care Innovation Center, an initiative of the UCSF Department of Emergency Medicine, which develops novel ways to deliver Emergency and Acute Care reliably and safely by developing new technology and validating best practices. He has nothing to disclose.
- David Beshk is an award-winning educator and developer of many powerful and impactful programs in STEM and other areas such as 3D printing and international collaboration of students. He is the lead educator in development of the Med Tac After School and Summer School program and a key advisor regarding design of child appropriate training of lifeline behaviors for high impact care hazards. He has led, taught, and refined multiple school programs and was responsible for the first life saved through Med Tac before the first class graduated. He has nothing to disclose.
- Jennifer Dingman has nothing to disclose.
- Heather Foster has nothing to disclose.
- Charles Denham, MD, is the Chairman of TMIT; a former TMIT education grantee of CareFusion and AORN with co-production by Discovery Channel for *Chasing Zero* documentary and Toolbox including models; and an education grantee of GE with co-production by Discovery Channel for *Surfing the Healthcare Tsunami* documentary and Toolbox, including models. HCC is a former contractor for GE and CareFusion, and a former contractor with Siemens and Nanosonics, which produces a sterilization device, Trophon. HCC is a former contractor with Senior Care Centers. HCC is a former contractor for ByoPlanet, a producer of sanitation devices for multiple industries. He does not currently work with any pharmaceutical or device company. His current area of research is in threat management to institutions including conflict of interest, healthcare fraud, and continuing professional education and consumer education including bystander care.

Speakers & Reactors



Dr. Gregory Botz



Casey Clements



Christopher Peabody



Heather Foster RN



David Beshk



Jennifer Dingman



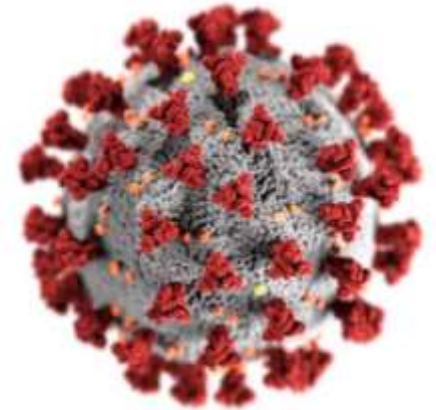
Dr. Charles Denham

Voice of the Patient



Jennifer Dingman

**Founder, Persons United Limiting
Substandard and Errors in Healthcare
(PULSE), Colorado Division
Co-founder, PULSE American Division
TMIT Patient Advocate Team Member
Pueblo, CO**



Survive & Thrive Guide™ Series

MED+TAC GLOBAL

Survive & Thrive Guide

Coronavirus Response
CareUniversity Series

Back to Work

MED+TAC GLOBAL

Survive & Thrive Guide

Coronavirus Response
CareUniversity Series

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Survive & Thrive Guide

Coronavirus Response
CareUniversity Series

Back to the Pool

MED+TAC GLOBAL

Survive & Thrive Guide

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CareUniversity Series

MED+TAC GLOBAL

Survive & Thrive Guide

Coronavirus Response
CareUniversity Series

Back to Worship

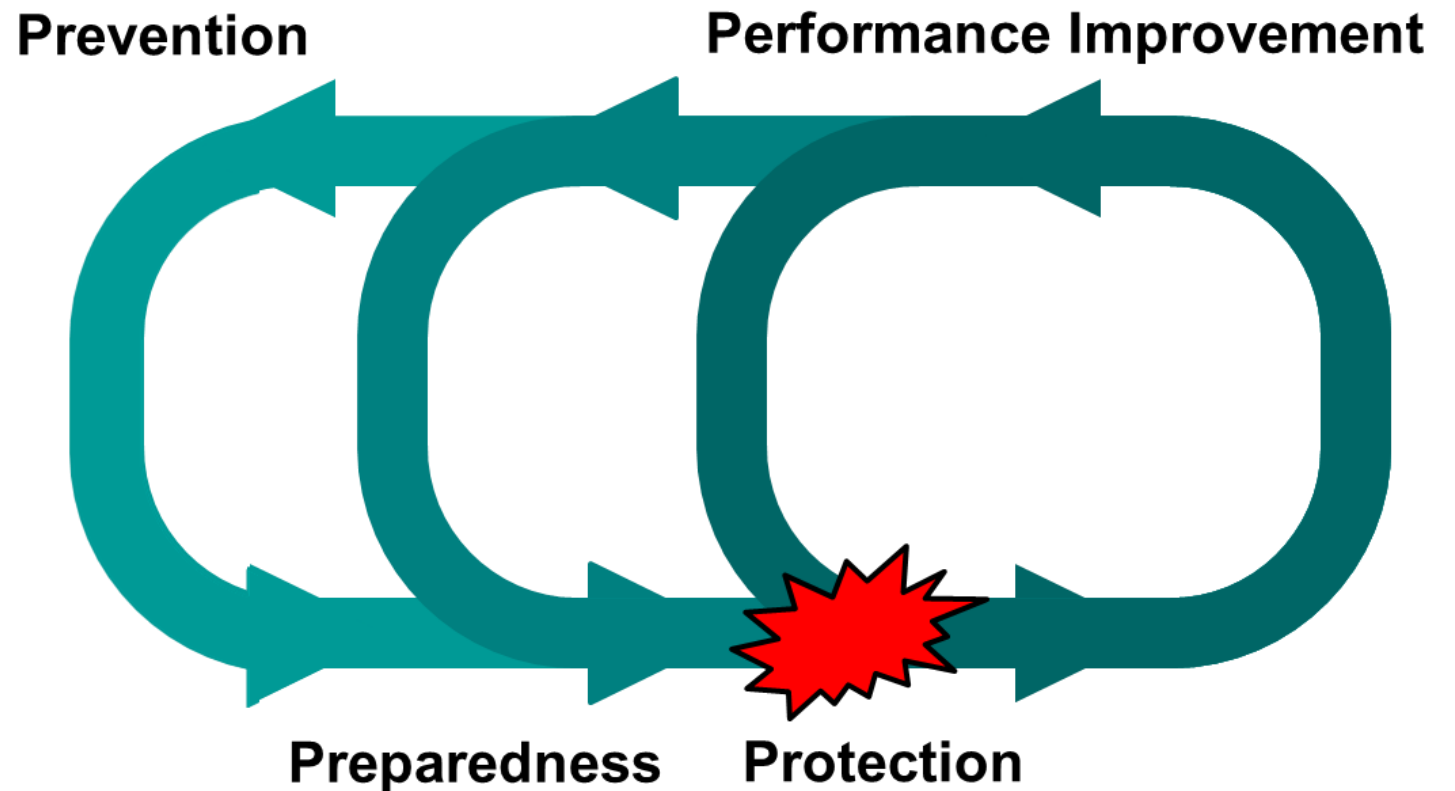
MED+TAC GLOBAL

Survive & Thrive Guide

Coronavirus Response
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The 4 P's: Prevention, Preparedness, Protection, and Performance Improvement



High Impact Care Hazards to Patients, Students, and Employees



Cardiac Arrest

Choking & Drowning

Opioid Overdose

Anaphylaxis

Major Trauma

Infections

Transportation Accidents

Bullying

Med Tac
Story Article



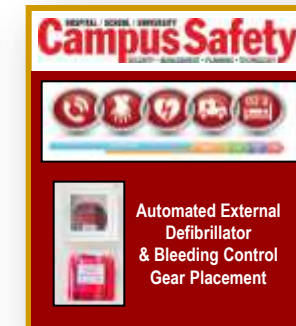
Active Shooter
Healthcare Article



Rapid Response
Teams Article



AED & Bleeding
Control Gear Article



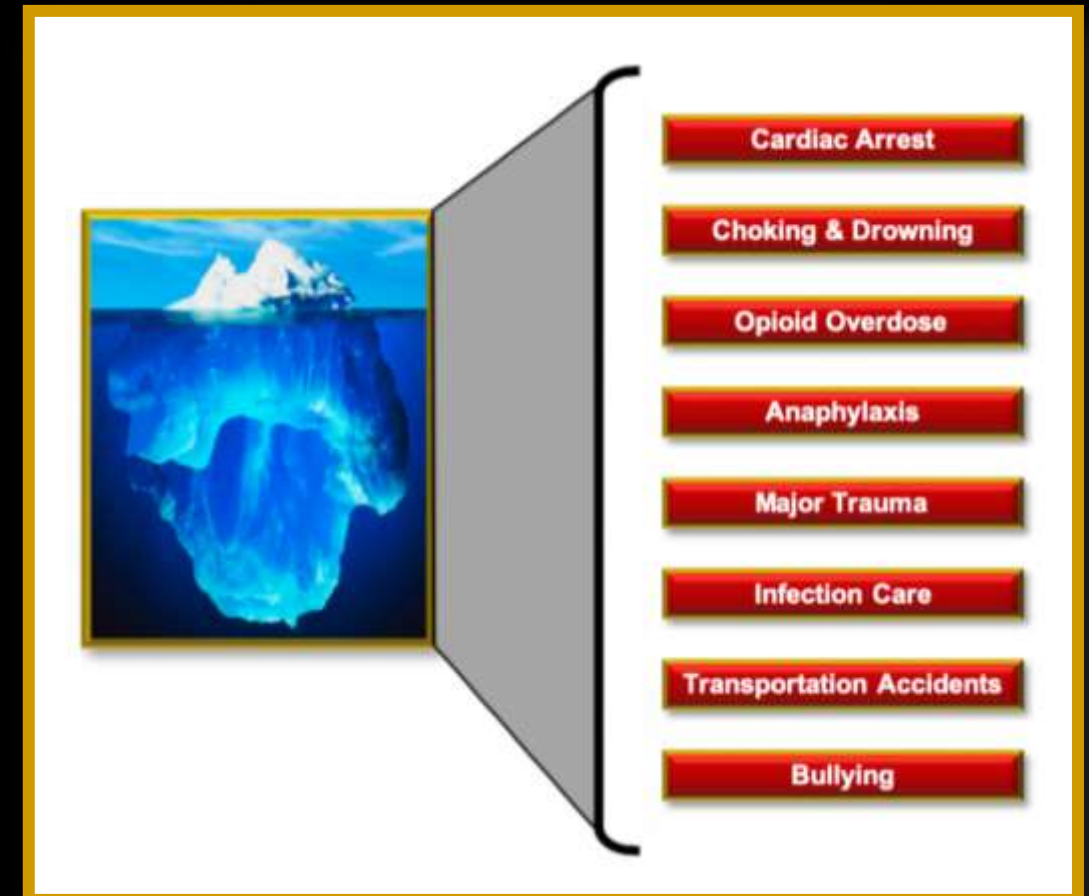
A **Medical-Tactical Approach** undertaken by clinical and non-clinical people can have enormous impact on loss of life and harm from very common hazards:

- **High Impact Care Hazards** are frequent, severe, preventable, and measurable.
- **Lifeline Behaviors** undertaken by anyone can save lives.

Med Tac Bystander Rescue Care Program

- *Founded in 2015* in Orange County CA.
- *Early Pilots in 5 States* with leaders.
- *Failure to Rescue* is targeted prior to EMS arrival training of the public in evidence-based methods.
- **Focus on 8 Leading Causes** of Preventable Death
- **Collaborate with Leading Medical Centers**

www.MedTacGlobal.org





Nov/Dec 2018 Issue



Supply kits/care packs like the ones pictured here continue to be developed for any bystander care emergency, in addition to packs for specific use in the lifeguard-surf, divers, aviation and health ministries specialty programs. Med Tac is even developing modified golf carts with AEDs and emergency response gear onboard.

to enable delivery of lifesaving bystander care within 3 minutes of an event and until professional first responders arrive in 8-10 minutes.

- **Video Stories:** Our learning management approach uses the power of stories to communicate concepts, illustrate tools and describe resources. We are continuously capturing stories and adding them to our multimedia curriculum.
- **Immersive Simulation Scenario:** The many stories used in our online training allow us to develop simulation scenarios, putting students in real-life situations that apply and reinforce key concepts. We use techniques pioneered in aviation and other industries to drive retention and competency impact.

START A MED TAC PROGRAM OF YOUR OWN

Although the Med Tac Team won the 2018 Pete Conrad Global Patient Safety Award for its work, we believe any community, inspired by the "all teach — all learn" mantra, can easily start a program like ours. We challenge others to start similar initiatives or join us in this cause.

We believe the CPR/AED/First Aid pro-

grams of the American Heart Association are excellent. Instructors of those programs are ideally suited to engage with campus programs. Further, the Stop-the-Bleed program sponsored by the American College of Surgeons is also excellent when it is taught as designed. The combination of these two programs can dramatically improve the



The University of Texas Police Department serving the UT MD Anderson Cancer Center and the UT Health Science Center at Houston are pioneering a Med Tac program to specifically address the needs of major medical centers and healthcare institutions. Chief William Adcox and the security team at MD Anderson are pioneering the new study domain of inside and outside threats to the caregivers who serve, the patients they serve and the property they need to deliver their care.

frequency and effectiveness of bystander responses to emergencies.

Recent studies have shown that bystander skills degrade over time, so try to assure "competency-currency." Regular, repeated training, with deliberate practice of bystander care skills, complemented by readily accessible emergency care supplies, is the winning combination for a campus team to help serve those entrusted in their care.

Remember, odds are that a medical emergency will happen on your campus and your students, clinicians, public safety officers, teachers, staff members and administrators will be the immediate responders until professional help can arrive. Med Tac can provide them with the skills they need to respond appropriately and save lives.

For more information about Med Tac visit med-tac.org or email info@med-tac.org. CS

WILLIAM AD COX is the chief security officer for the UT MD Anderson Cancer Center and UT Health Chief of Police. **Dr. GREGORY BOTZ** is a professor of anesthesiology and critical care and UT MD Anderson Cancer Center. **CHARLES DENHAM III** is a Junior Med Tac instructor. **Dr. CHARLES DENHAM III** is the chairman of the Texas Medical Institute of Technology.



CPR AED

Heartsaver® CPR for Non-Medical Professionals



Preparing for Care at Home



Dr. Gregory H. Botz



William Adcox, MBA



Heather Foster RN

**40% of
Work
Force**

**No Family
Training
Provided**





Emerging Threats Community of Practice

Bystander Rescue Care *CareUniversity Series*



John Nance JD



Dr. Gregory Botz



Chief William Adcox



Heather Foster



Dr. Charles Denham



Dr. Casey Clements



Beth Ullem



Dr. McDowell



Dennis Quaid



Preston Head III



Fred Haise



Dr. Steve Swensen



Tyler Sant



Avarie Pettit



Dr. Mary Foley



Bob Chapman



Perry Bechtle III



Becky Martins



Betsy Denham



Charlie Denham III



Dr. C Peabody



Dr. Chris Fox



Randy Styner



Tom Renner



David Beshk



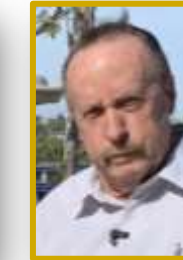
Ann Rhoades



Nancy Conrad



Dr. Chopra



John Little



Debbie Medina



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Bystander Rescue Care *CareUniversity Series*



Dan Ford



Arlene Salamendra



Jennifer Dingman



Bill George



Penny George



Hilary Schmidt PhD



Paul Bhatia EMT

Contributions Through Segments of Documentaries



Prof Christensen



Jim Collins



C Sullenberger



Charlotte Guglielmi



Dr. Don Berwick



Dr. Howard Koh



Dr. Jim Bagian

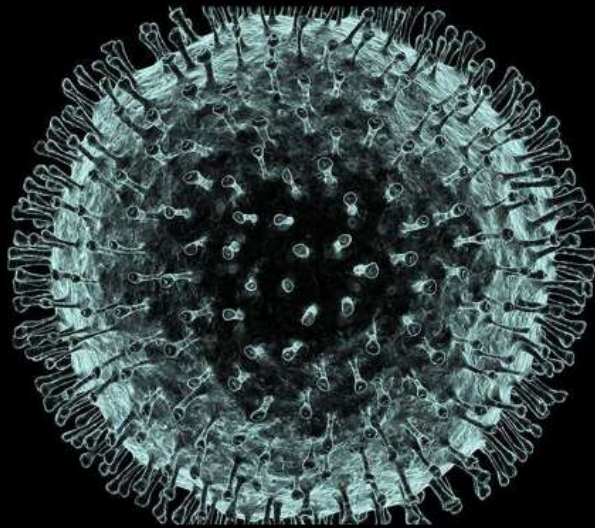


Dr. Harvey Fineberg



The Basics

Understand
the Basics



Practices

Care of Your
Loved Ones



**A Miracle on
the Hudson**

Leadership

Form Family Team &
Health Security Plan



Technologies

Putting Supplies
& Gear to Work

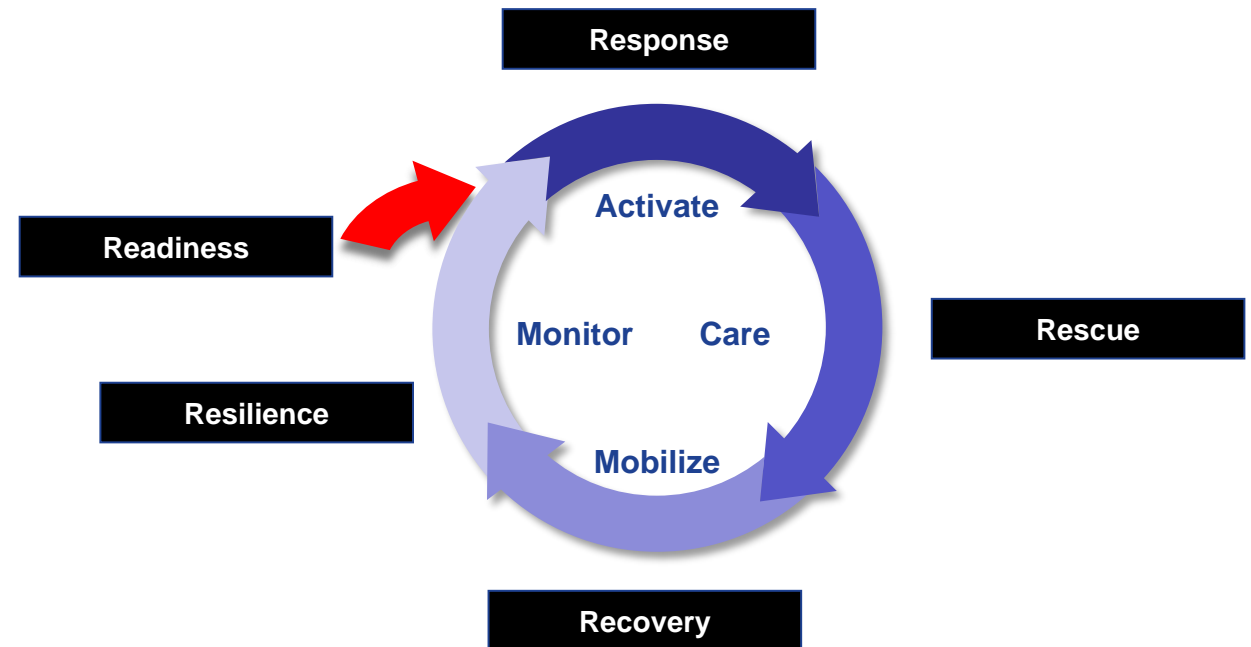


Leadership

Form Family Team & Health Security Plan

- **Family Health Security Plan**
- The Family CFO
- Engaging Family: Head, Heart, Hands, & Voice

Family Health Security Plan™





CDC Guidelines



**Social
Distancing**



**Disinfecting
Surfaces**



**Hand
Washing**



**Use of
Masks**

SOURCE: Centers for Disease Control



CDC Guidelines



**Social
Distancing**



**Disinfecting
Surfaces**



**Hand
Washing**



**Use of
Masks**

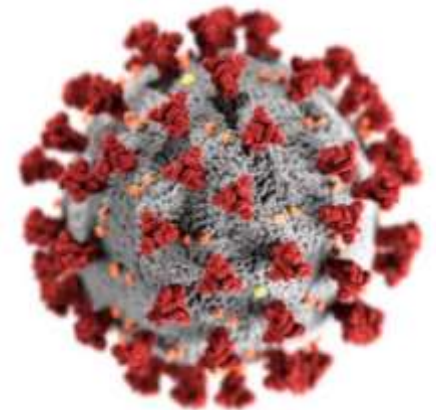
SOURCE: Centers for Disease Control

Family Survive & Thrive Guide:TM The Latest Best Practices



Gregory H. Botz, MD, FCCM

Professor of Anesthesiology and Critical
Care
UT – MD Anderson Cancer Center
Adjunct Clinical Associate Professor,
Department Anesthesiology
Stanford University Medical School



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**Coronavirus Care
Community of Practice**

**Bystander Rescue Care
*CareUniversity Series***

Video Library

Join Us our Community of Practice

Why Social Distancing WORKS

Masks ARE Critical

Masks: The SCIENCE of Success

Hand Washing & DISINFECTANTS

CLEAN High Contact Surfaces

Why ICU Care & Respirators

**Coronavirus Care
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Family Survive & Thrive Guide™: The Latest Best Practices

**Social
Distancing**

**Use of
Masks**

**Hand
Washing**

**Disinfecting
Surfaces**



09:51





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Why Social Distancing WORKS

Masks ARE Critical

Hand Washing & DISINFECTANTS

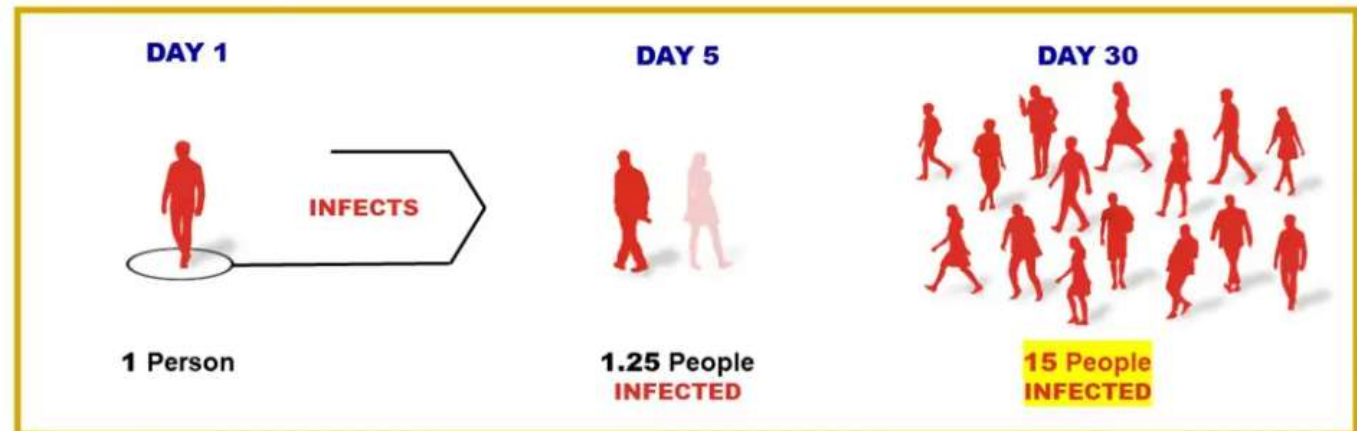
CLEAN High Contact Surfaces

Why ICU Care & Respirators

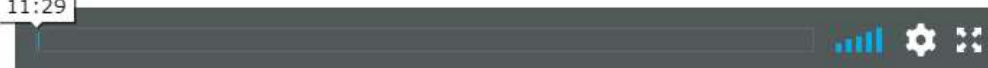
Preparing for CARE at Home

Care of Seniors & those AT-RISK

Why Social Distance WORKS



11:29



Speakers & Reactors



Dr. Gregory Botz



Casey Clements



Christopher Peabody



Heather Foster RN



David Beshk



Jennifer Dingman



Dr. Charles Denham



CDC Guidelines



**Social
Distancing**



**Disinfecting
Surfaces**



**Hand
Washing**



**Use of
Masks**

SOURCE: Centers for Disease Control



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CDC Guidelines



**Social
Distancing**



**Disinfecting
Surfaces**



**Hand
Washing**



**Use of
Masks**

SOURCE: Centers for Disease Control



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Hand Washing & DISINFECTANTS

CLEAN High Contact Surfaces

Why ICU Care & Respirators

RISK of High Contact Surfaces

Coronavirus Lives on Surfaces

	Paper and Tissue Paper**	3 hours	<div></div>
	Copper*	4 hours	<div></div>
	Cardboard*	24 hours	<div></div>
	Wood**	2 days	<div></div>
	Cloth**	2 days	<div></div>

	Stainless Steel*	2-3 days	<div></div>
	Polypropylene Plastic*	3 days	<div></div>
	Glass**	4 days	<div></div>
	Paper Money**	4 days	<div></div>
	Outside of surgical mask **	7 days	<div></div>



07:34



Speakers & Reactors



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Casey Clements



Christopher Peabody



Heather Foster RN



David Beshk



Jennifer Dingman



Dr. Charles Denham



CDC Guidelines



**Social
Distancing**



**Disinfecting
Surfaces**



**Hand
Washing**



**Use of
Masks**

SOURCE: Centers for



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Why Social Distancing WORKS

Masks ARE Critical

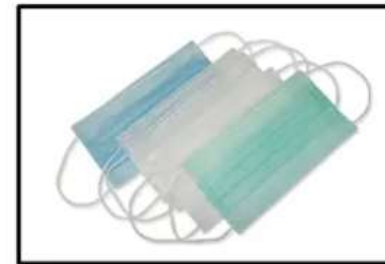
Hand Washing & DISINFECTANTS

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Masks ARE Critical



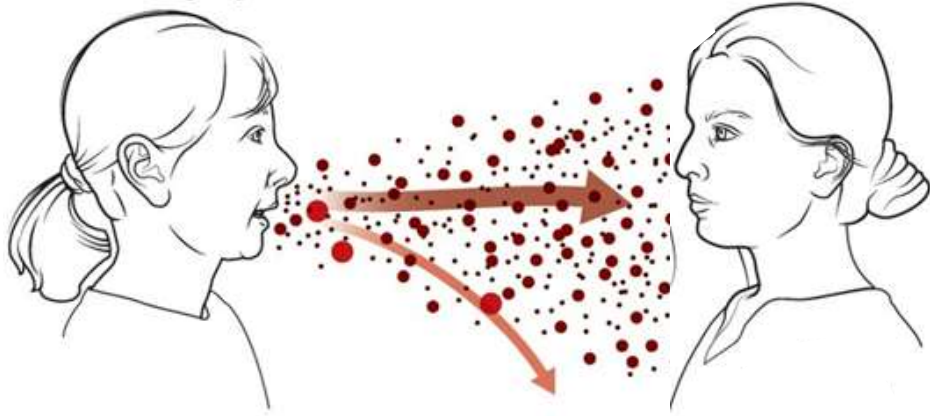
"I protect you; you protect me"



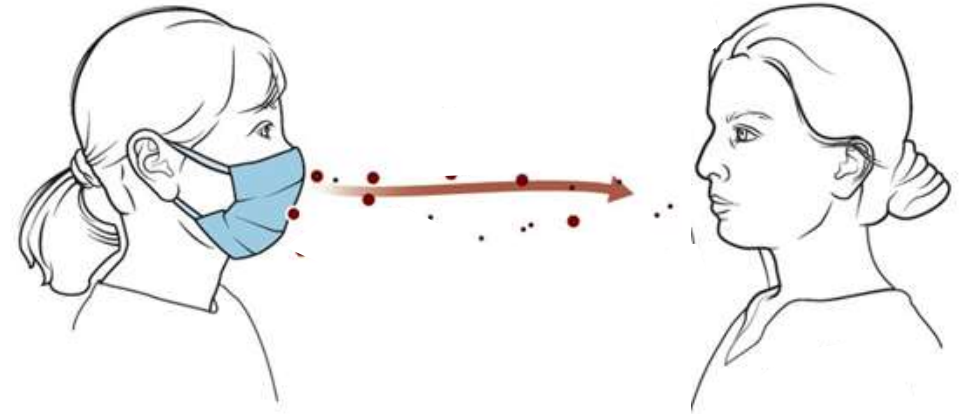
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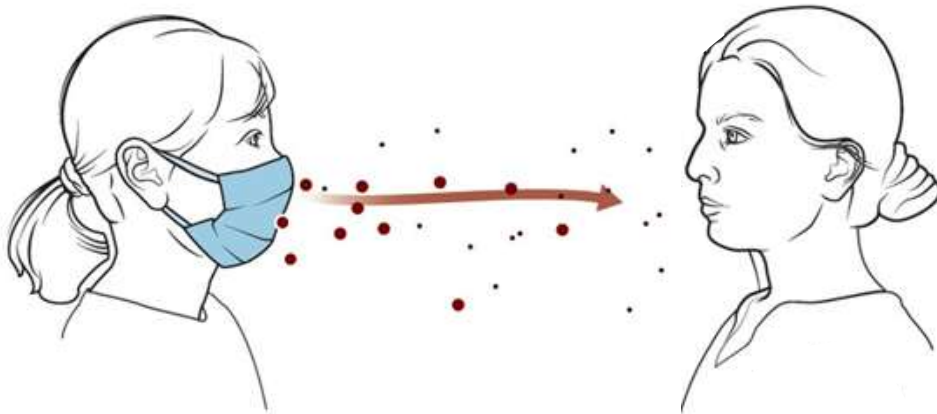
TMIT Global: Effectiveness of Masks



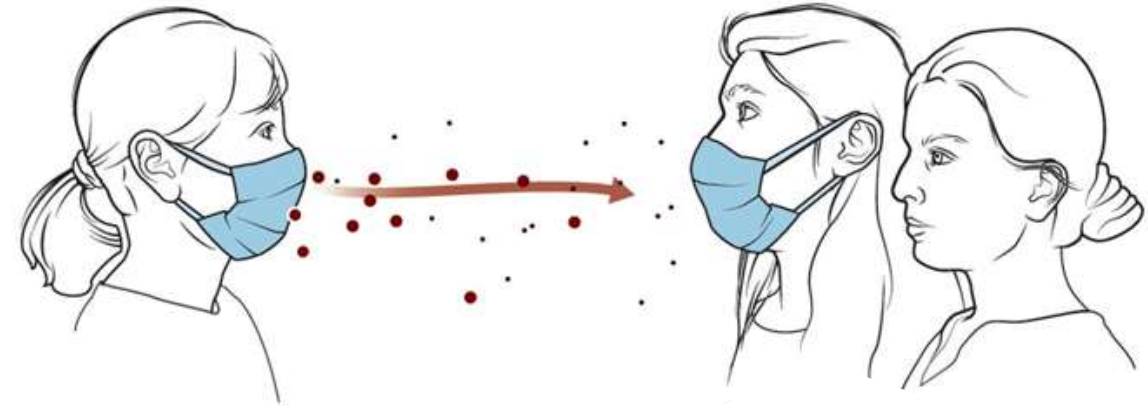
15 minutes within 6 feet = High Risk



**Surgical Mask Reduces
Exhaled Droplets Reduced by 99%
and Inhaled Droplets by 75%**



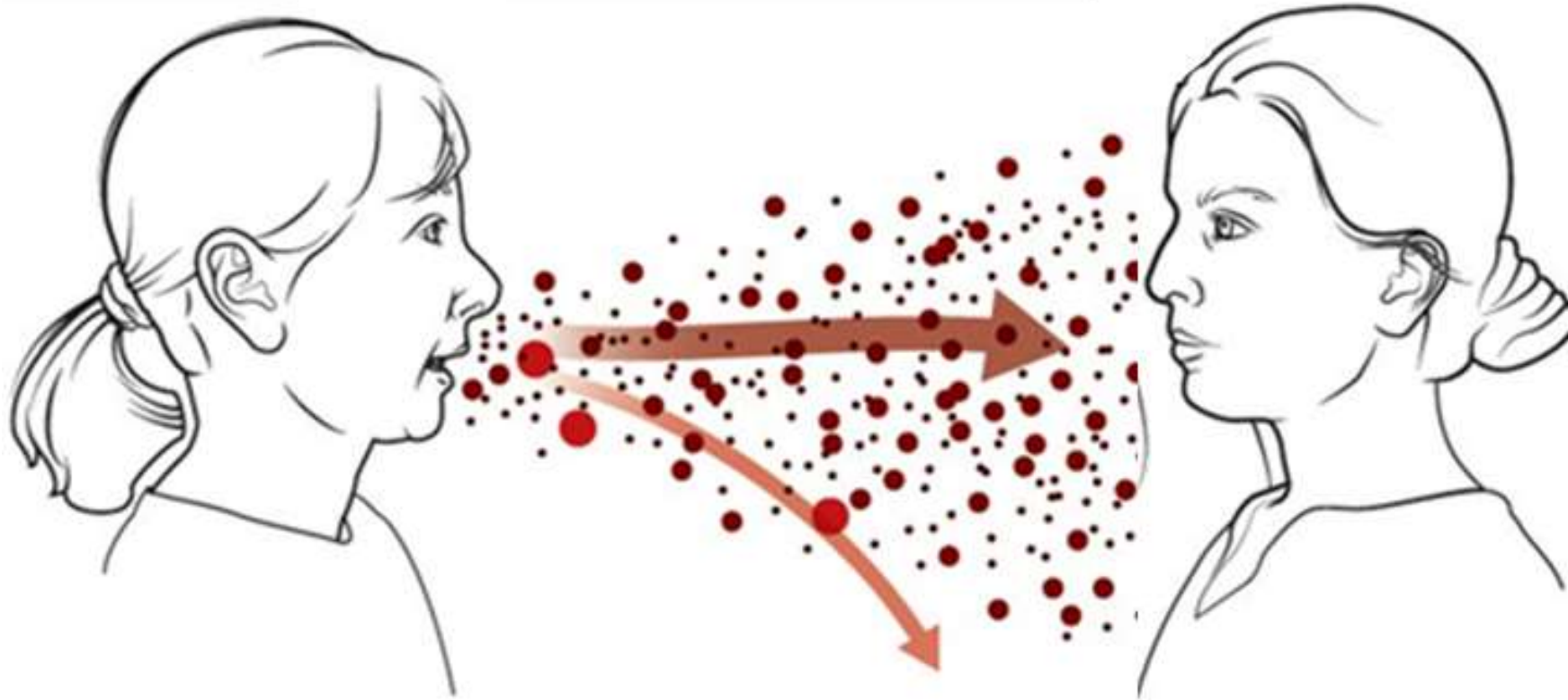
**2 Layer Cloth Mask Reduces
Exhaled and Inhaled Droplets by 60%**



**Best Solution – All Wear Masks
N95 Best, Surgical, then Cloth – All of Value**

Source: Cite as: K. A. Prather et al., Science 10.1126/science.abc6197 (2020)

No Mask – Extreme Risk



15 minutes within 6 feet = High Risk

Source: Cite as: K. A. Prather et al., Science 10.1126/science.abc6197 (2020)



Cloth Mask – Reduced Risk

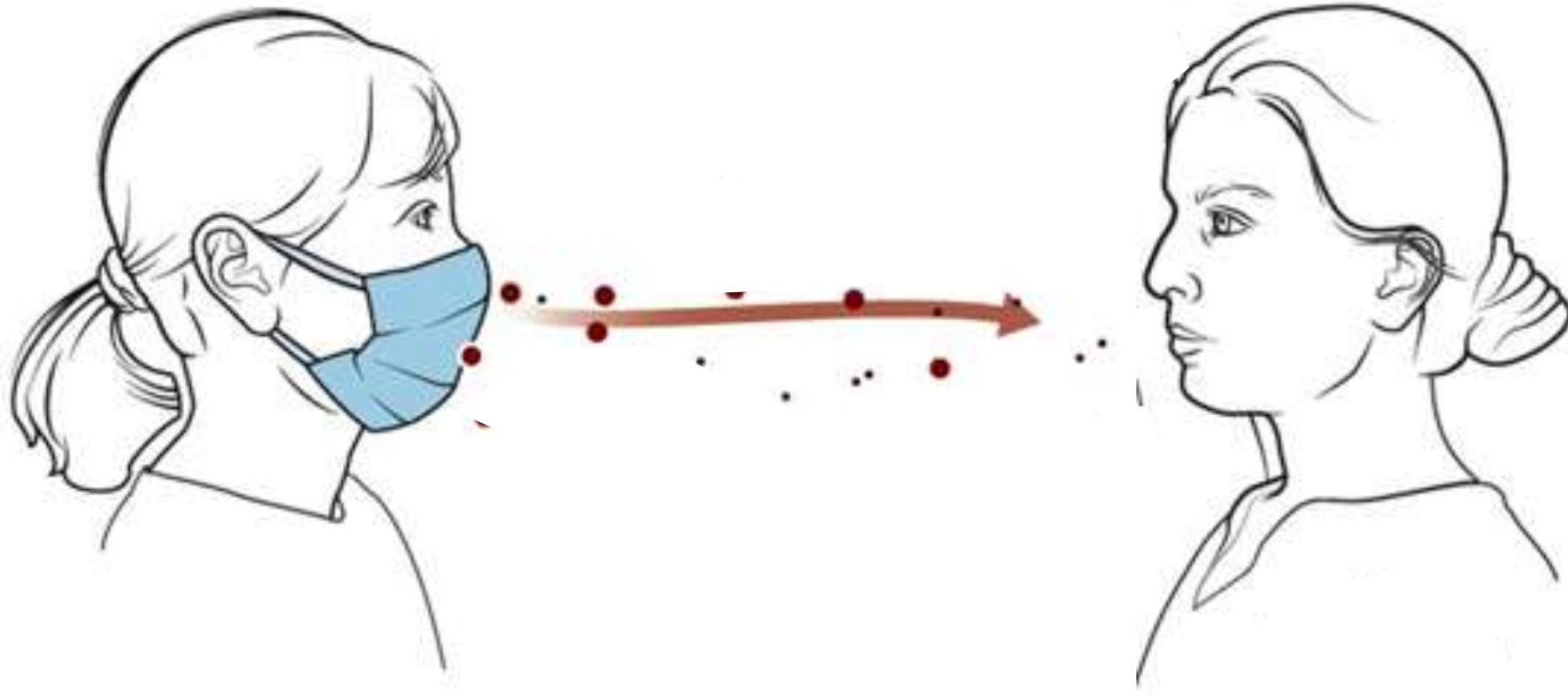


**2 Layer Cloth Mask Reduces
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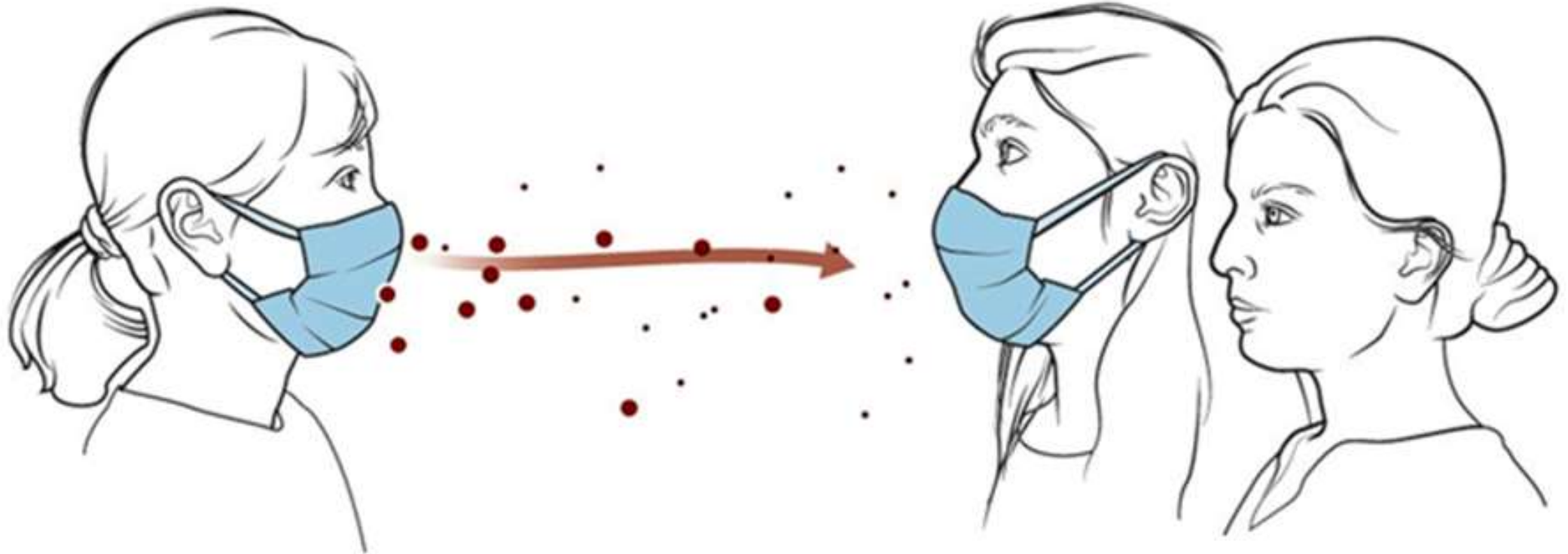
Surgical Mask – Reduced Risk



**Surgical Mask Reduces
Exhaled Droplets Reduced by 99%
and Inhaled Droplets by 75%**

Source: Cite as: K. A. Prather et al., Science 10.1126/science.abc6197 (2020)

Dramatically Reduced Risk



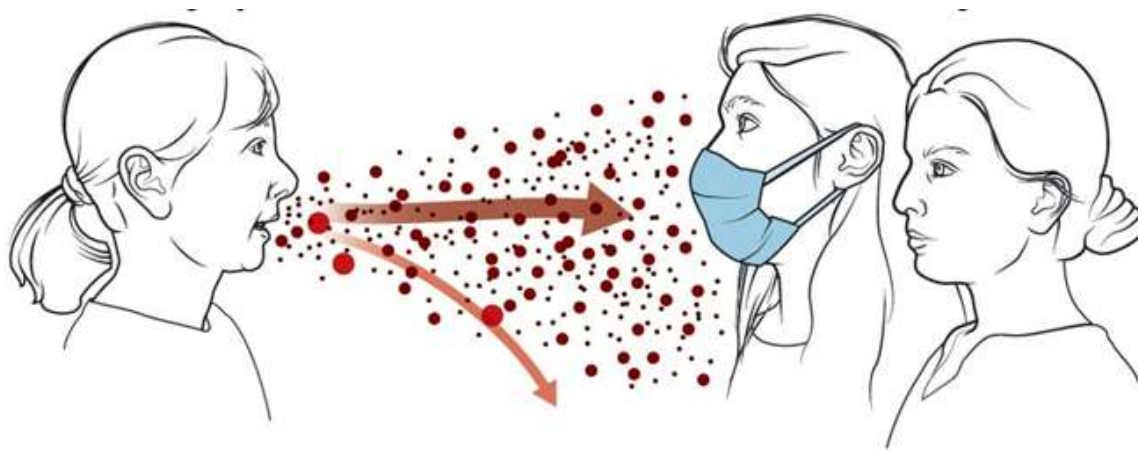
Best Solution – All Wear Masks
N95 Best, Surgical, then Cloth – All of Value

Source: Cite as: K. A. Prather et al., Science 10.1126/science.abc6197 (2020)

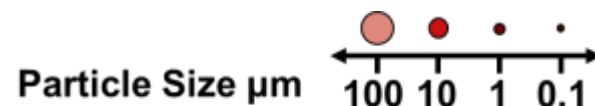
Mask Reduction of Airborne Transmission

Infected Asymptomatic

Healthy



Maximum Exposure



AIRBORNETRANSMISSION: DROPLET & AEROSOL

- **Droplets** > 5 microns and drop nearby 3-6 feet
- **Aerosols** < 5 microns may float in the air
- **Aerosols are likely to represent a large proportion of spread** in from pre-symptomatic to lesser degree asymptomatic patients.
- **“Silent Shedders” are highly contagious** before and may peak at time of first symptoms.
- **Speaking and breathing** generate significant aerosols putting the public at risk.
- **Social distancing based on studies of large respiratory droplets in the 1930s** prior to higher technology measuring capabilities.
- **Airborne transmission** was determined to have played a major role in SARS outbreak 2003.
- **SARS transmitted >6 ft from index patient**

Source: Cite as: K. A. Prather et al., Science 10.1126/science.abc6197 (2020)

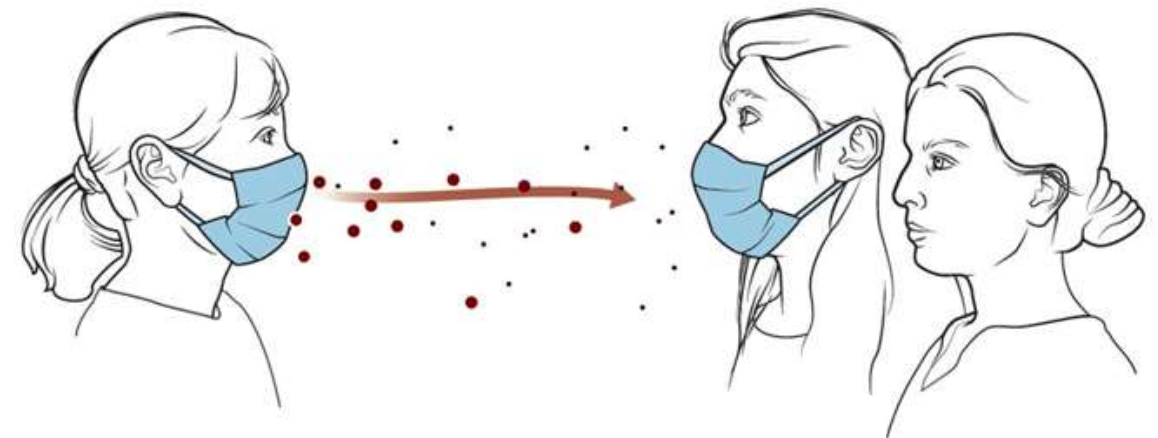
Mask Reduction of Airborne Transmission

MINIMAL EXPOSURE WITH MASK USE

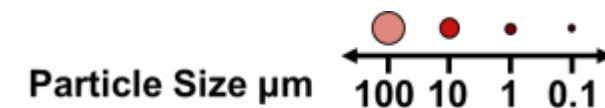
- **N95 Masks, Surgical Masks, and 2-layer cloth masks all have value to BOTH the wearer and the public.**
- **Surgical Masks block 99% of respiratory droplets expelled by people with coronaviruses or influenza viruses** (Science 2020, Atul Gwande)
- **Surgical Masks reduce inhalation of droplet size particles by 75%.** (Mueller, Fernandez Dept Civil Eng & Marine & Env. Sci)
- **Surgical Masks are 3x better than cloth masks at reducing expelled transmission of respiratory viruses.** (Davies et al, Disaster Med & Pub Health Preparedness)
- **If at least sixty per cent of the population wore masks that were just sixty-per-cent effective in blocking viral transmission—which a well-fitting, two-layer cotton mask is—the epidemic could be stopped.** (Howard et al 2020, Atul Gwande)
- **Two Layer Cloth masks reduce inhalation by HALF as much as surgical masks** (Atul Gwande)
- **Mask wearers were HALF as likely to get infected during the SARS Outbreak in 2003.**

Infected Asymptomatic

Healthy



Minimum Exposure



Source: Multiple Sources Cited

Speakers & Reactors



Dr. Gregory Botz



Casey Clements



Christopher Peabody



Heather Foster RN



David Beshk



Jennifer Dingman



Dr. Charles Denham

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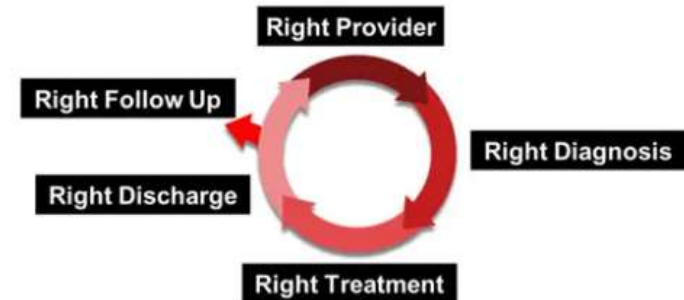
Care of Seniors & those AT-RISK

NEW Emergency Department Issues

NEW Emergency Dept. Issues

**Emergency
Department
and
COVID Care**

The 5 Rights of Emergency Care



06:10



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NEW Emergency Department Issues

TELEMEDICINE Works - Try it



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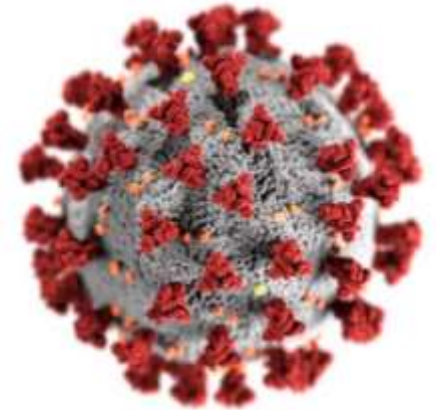
Dr. Charles Denham

Family Survive & Thrive Guide:TM The Latest Best Practices



Casey Clements, MD, PhD

**Emergency Medicine Physician
Mayo Clinic
Rochester, MN**



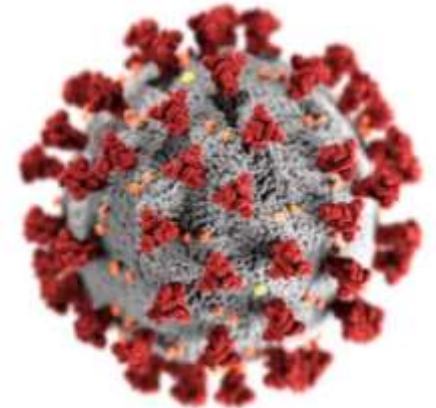
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Christopher R. Peabody, MD, MPH

**Emergency Physician
Director, UCSF Acute Care Innovation
Center, UCSF
Clinical Instructor, UCSF
San Francisco, CA**

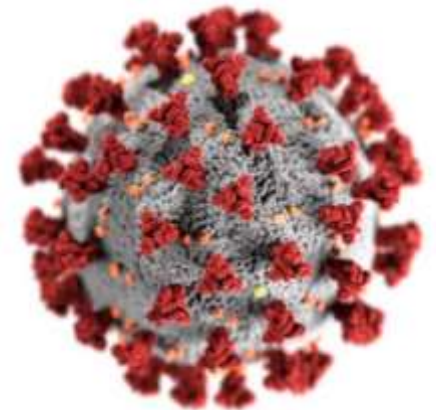


Family Survive & Thrive Guide:TM The Latest Best Practices



Heather Foster RN

**Infection Prevention Nurse
ICU Nurse
Patient Safety Advocate
Cortez Colorado**

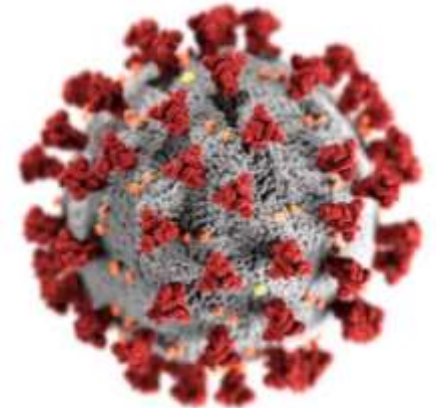


Family Survive & Thrive Guide:TM The Latest Best Practices



David Beshk

**Award Winning Educator
Med Tac School Program
Leader
Scout Program Mentor
San Juan Capistrano, CA**

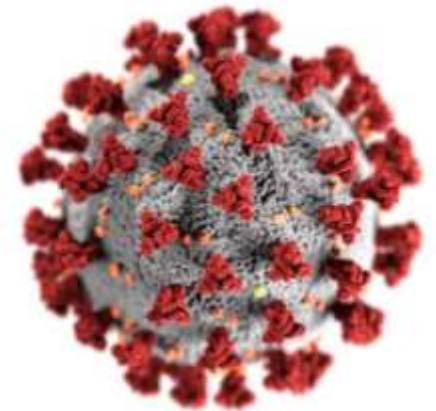


Family Survive & Thrive Guide:TM The Latest Best Practices



Jennifer Dingman

**Founder, Persons United Limiting
Substandard and Errors in Healthcare
(PULSE), Colorado Division
Co-founder, PULSE American Division
TMIT Patient Advocate Team Member
Pueblo, CO**

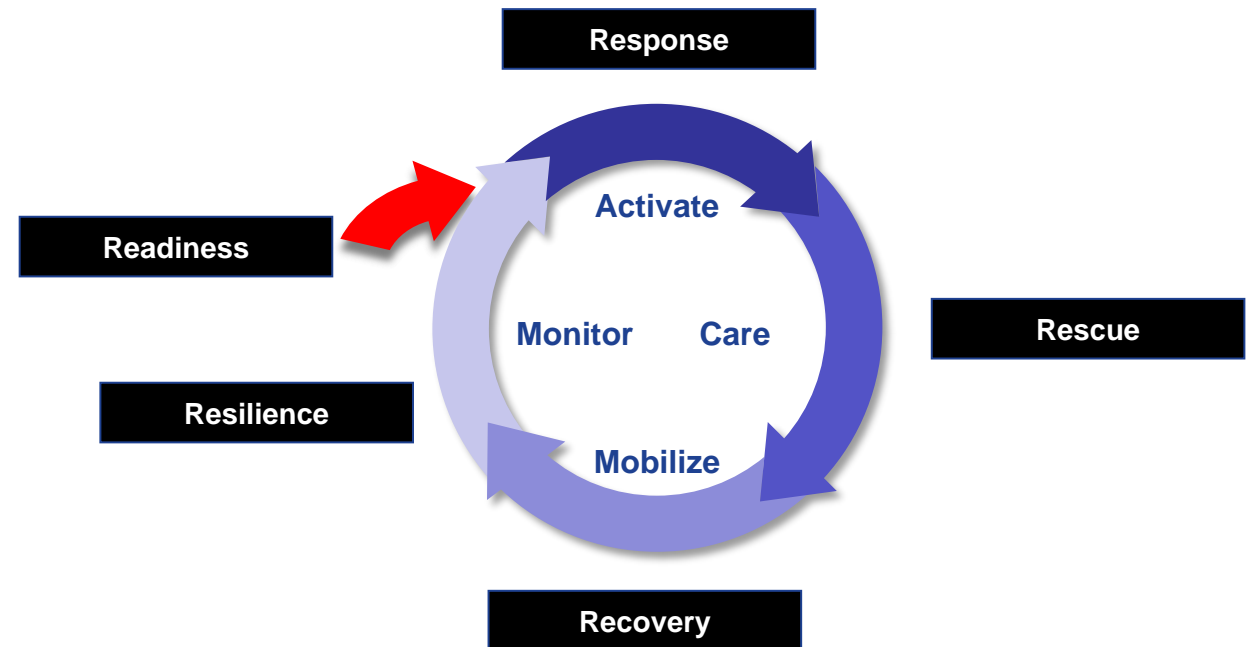


Leadership

Form Family Team & Health Security Plan

- **Family Health Security Plan**
- The Family CFO
- Engaging Family: Head, Heart, Hands, & Voice

Family Health Security Plan™





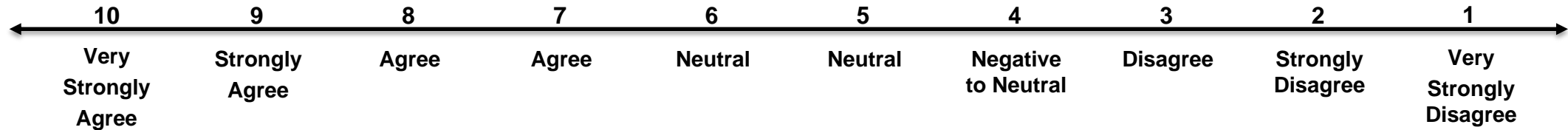
Family Health Safety & Organization Security Plans

Readiness



National Survey Questions

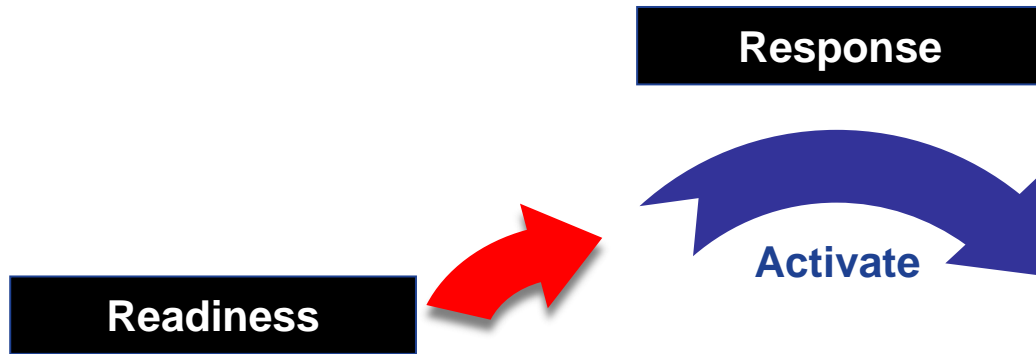
My family is ready to take care of a loved one with Coronavirus in our home



What readiness information would you like to have?

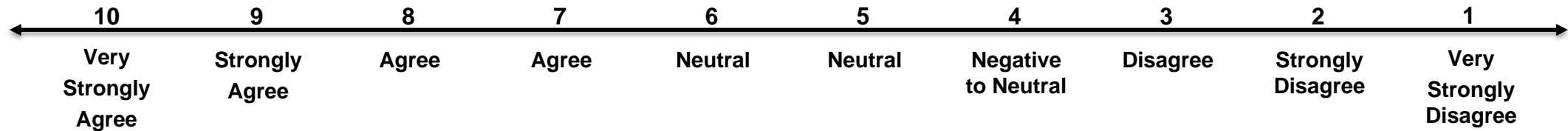


Family Health Safety & Organization Security Plans



National Survey Questions

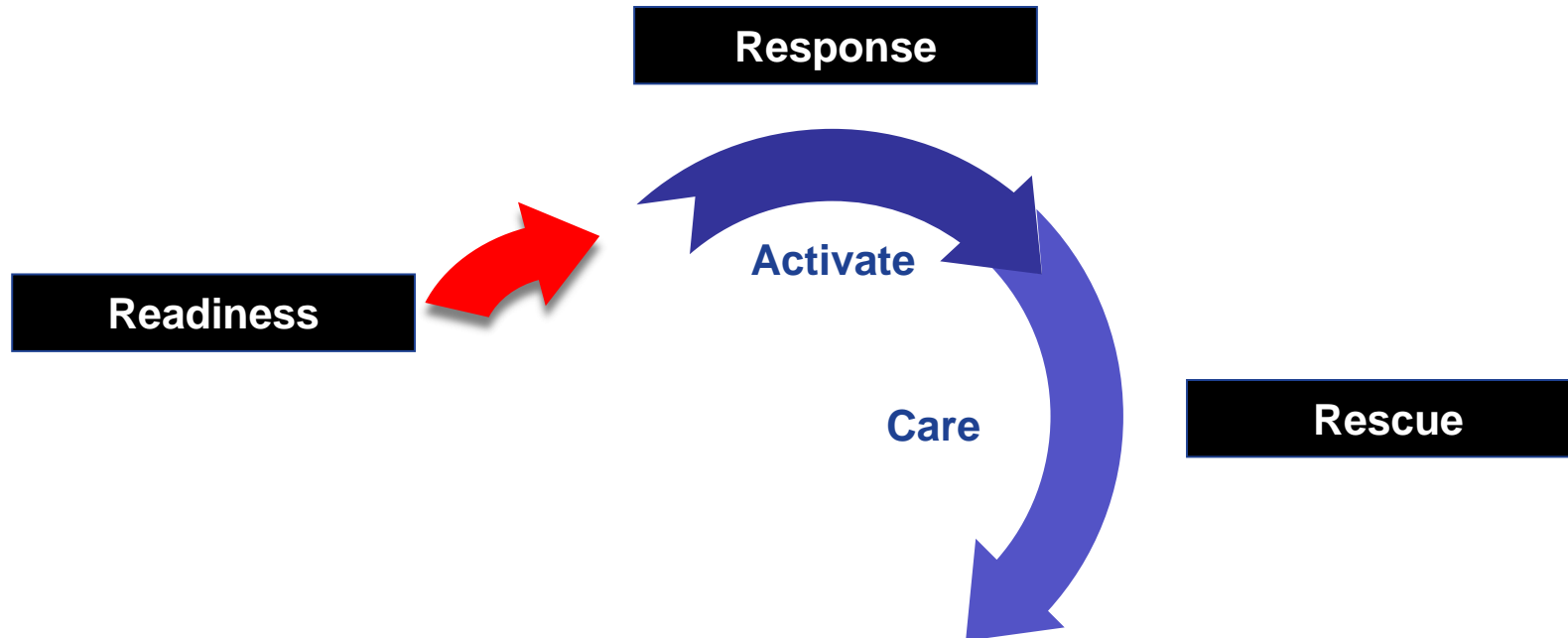
My family knows what actions to take if a loved one becomes infected with Coronavirus.



What information would help you respond when a loved one becomes infected?

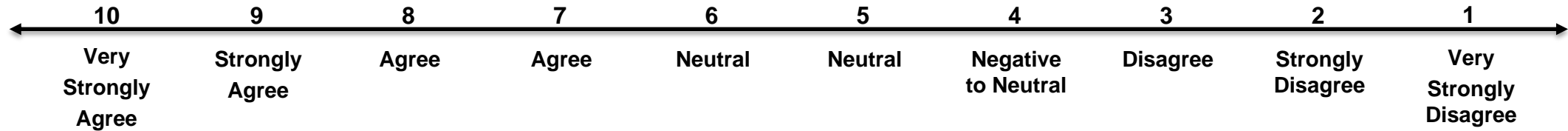


Family Health Safety & Organization Security Plans



National Survey Questions

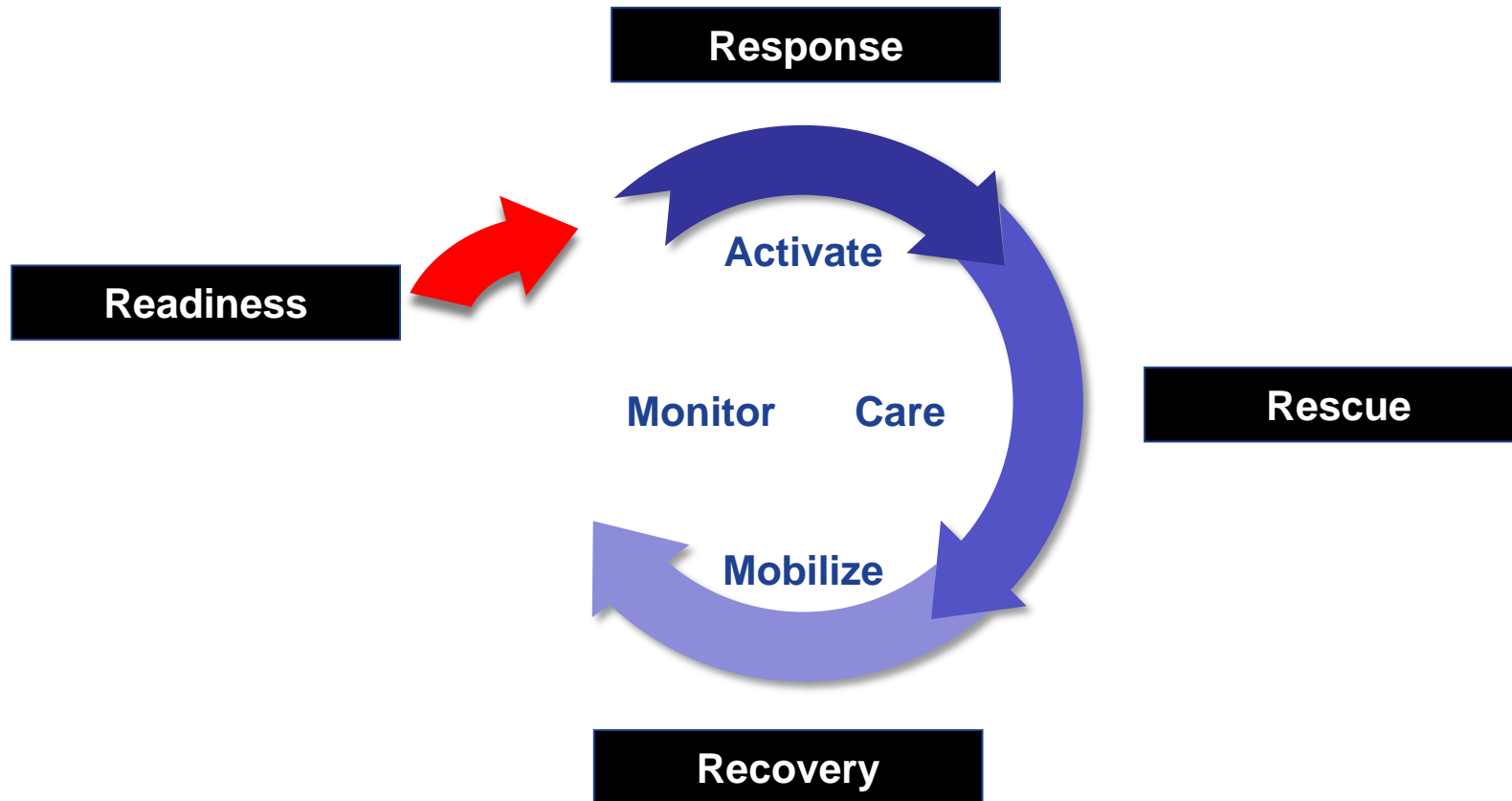
My family knows what do when someone develops severe COVID-19 symptoms.



What information would help your family react if someone develops severe symptoms?

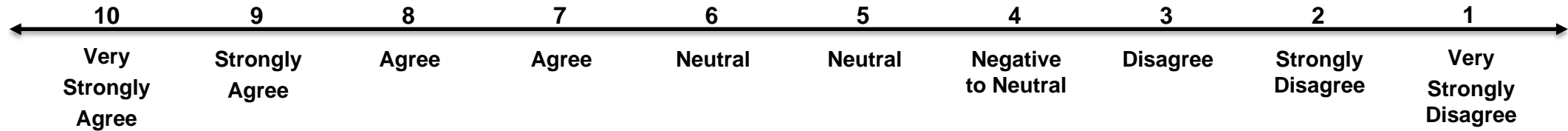


Family Health Safety & Organization Security Plans



National Survey Questions

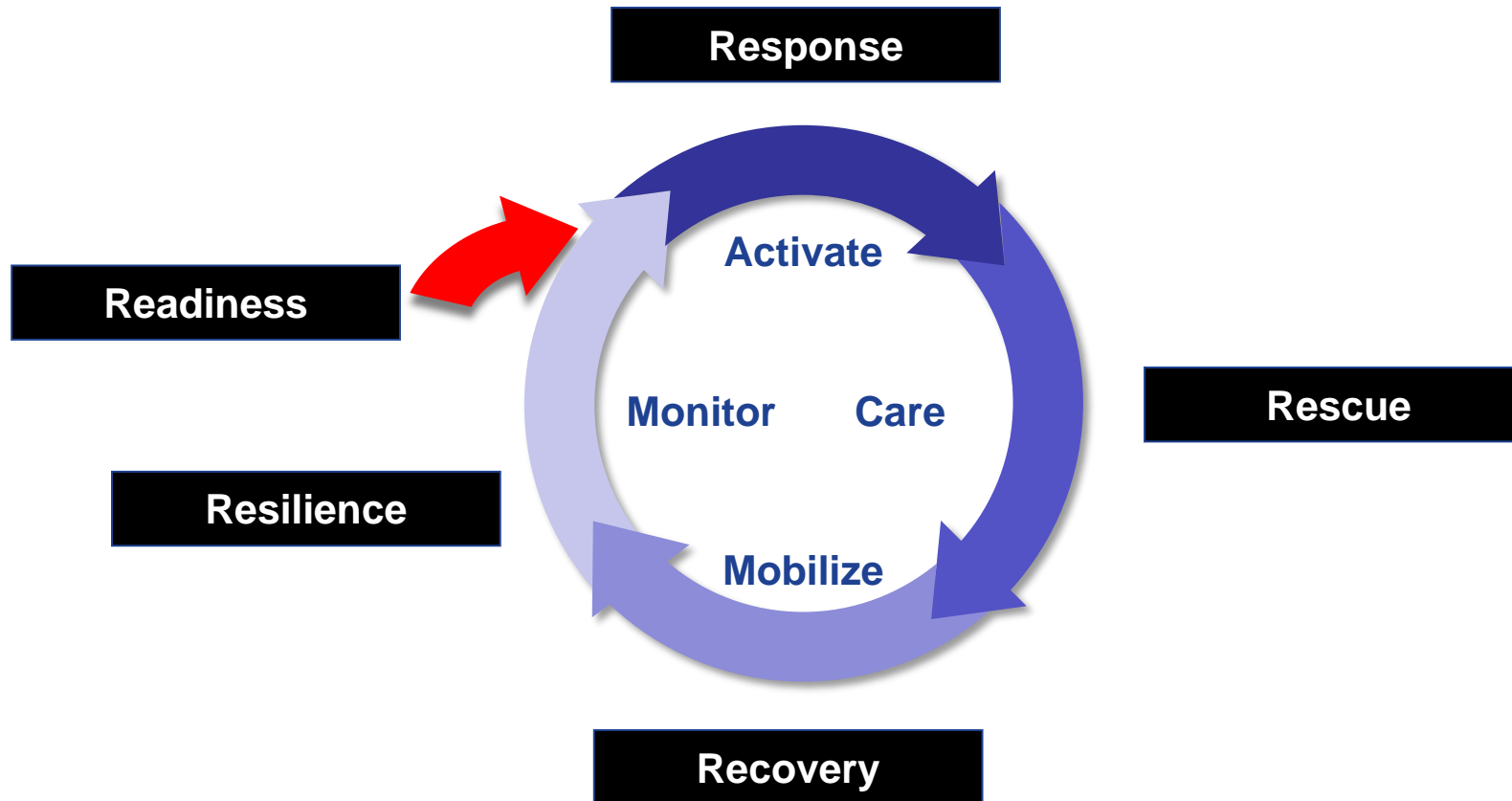
**My family has a safety plan to return to work and play
when the Coronavirus social restrictions are relaxed**



**What information would help your
family return to the new normal?**

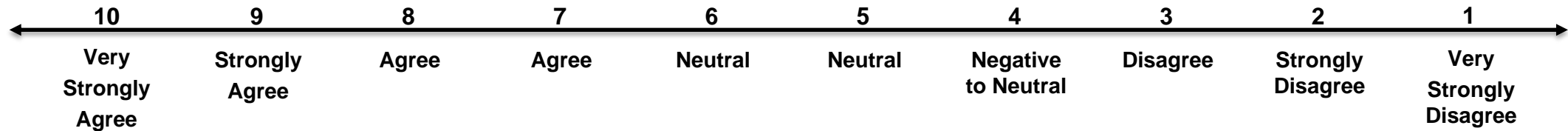


Family Health Safety & Organization Security Plans™



National Survey Questions

My family has a plan to make them less vulnerable to epidemics in the future



What information would help you become more resilient in the future?

Speakers & Reactors



Dr. Gregory Botz



Casey Clements



Christopher Peabody



Heather Foster RN



David Beshk



Jennifer Dingman



Dr. Charles Denham

Voice of the Patient



Jennifer Dingman

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