

MED + TAC Global Coronavirus Care Community of Practice Bystander Rescue Care CareUniversity Series

## Vaccines, Variants, and Victory A Survive & Thrive Guide™

Readiness → Response → Rescue → Recovery

Safety Plan

Resilience

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## Welcome

**Charles Denham, MD**  
 Chairman, TMIT Global  
 Founder Med Tac Bystander Rescue Care  
 Med Tac Bystander Rescue Care  
 April 1, 2021  
 CareUniversity Webinar 158

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## Our Purpose, Mission, and Values

**EMERGING THREATS COMMUNITY OF PRACTICE**

**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.

**Our ICARE Values:**  
 Integrity, Compassion, Accountability, Reliability, and Entrepreneurship.

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## 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 pharmaceutical or device companies discussed in their presentations. The funding of the program is from the Denham Family fund of TMIT Global, a 501c3 Medical Research Organization

- Gregory H. Botz, MD, FCCM, has nothing to disclose.
- Christopher Peabody has nothing to disclose.
- William Adcox has nothing to disclose.
- Casey Clements has nothing to disclose.
- Jennifer Dingman has nothing to disclose.
- Heather Foster has nothing to disclose.
- Manuel Lopez has nothing to disclose.
- Keith Flitner has nothing to disclose.
- Randy Styner has nothing to disclose.
- Brittney Barto has nothing to disclose.
- Jaime Yrastorza has nothing to disclose.
- Daniel Policicchio, Jr., has nothing to disclose.
- Paul Bhatia has nothing to disclose.
- Charlie Denham III has nothing to disclose.
- Jahnvi Rao has nothing to disclose.
- Luis Licon has nothing to disclose.


Charles Denham, MD, is the Chairman of TMIT Global; 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. Dr. Denham is the developer and producer of CareUniversity™, the learning management system providing continuing education materials for TMIT Global.

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**Coronavirus Care Community of Practice**

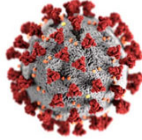
**Bystander Rescue Care**  
*CareUniversity Series*

## 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




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**Coronavirus Care Community of Practice**

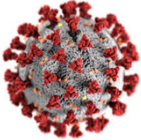
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## Vaccines, Variants, and The Road to Victory: A Survive & Thrive Guide™




**Charles Denham, MD**

Chairman, TMIT Global  
 Founder Med Tac  
 Bystander Rescue Care



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## A Warning



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## Three Big Lifesaving Opportunities



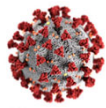
**Save Lives Now**

**The New Normal**

**The Reopening Bridge to The New Normal**

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## Vaccines, Variants, and Victory: A Survive & Thrive Guide



### VACCINES:

- What are vaccines and how do they work?
- What is the “adaptive immune system” – B cells and T cells?
- What is vaccine hesitancy about?
- Are our vaccines really safe?
- What do I need to know about side effects?
- What are the differences between the vaccines?
- What about kids – are vaccines safe and effective?

### VARIANTS:

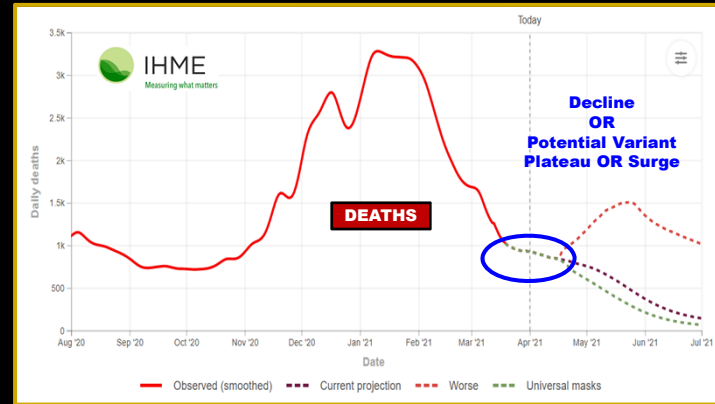
- What are variants and why are they important?
- Why can they be more contagious and more lethal?
- Why is the B117 U.K variant important to us?
- What about the South African and Brazilian variants?

### VICTORY:

- Our *Survive & Thrive Guides*™ What's New?
- What will be the New Normal?
- What do we do on the “recovery bridge to victory”
- What is the “*Take a Shot and Play it Safe*” Campaign.
- What is a Good **AND SAFE** Samaritan

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## Covid-19 & Surges

*The Atlantic*

March 30, 2021



### VACCINATED

- 73 percent over 65
- 36 percent of all eligible adults received **at least one dose**.
- More than 50 million people are **now considered fully vaccinated**.

### The Fourth Surge Is Upon Us. This Time, It's Different.

A deadlier and more transmissible variant has taken root, but now we have the tools to stop it if we want.

Across the United States, cases have started rising again. In a few cities, even hospitalizations are ticking up. The twists and turns of a pandemic can be hard to predict, but this most recent increase was almost inevitable: A more transmissible and more deadly variant called B.1.1.7 has established itself at the precise moment when many regions are opening up rapidly by lifting mask mandates, indoor-gathering restrictions, and occupancy limits on gyms and restaurants.

**We appear to be entering our fourth surge.**

The good news is that this one is different. We now have an unparalleled supply of astonishingly efficacious vaccines being administered at an incredible clip. If we act quickly, this surge *could* be merely a blip for the United States. But if we move too slowly, more people will become infected by this terrible new variant, which is acutely dangerous to those who are not yet vaccinated.

The United States has an advantage that countries such as Canada, France, Germany, and Italy, who are also experiencing surges from this variant, don't. The Moderna, Pfizer, and Johnson & Johnson vaccines work very well against this variant, and the U.S. has been using them to vaccinate more than 3 million people a day. That's more than 4 percent of our vaccine-eligible population every three days. An astonishing 73 percent of people over 65, and 36 percent of all eligible adults in the country, have already received **at least one dose**. More than 50 million people are now considered **fully vaccinated**, having received either their booster dose or the “one and done” Johnson & Johnson shot. Many states have already opened up vaccination to anyone over 16, and everyone eligible is expected to have a chance to get at least a first dose no later than May.

Source: <https://www.theatlantic.com/health/archive/2021/03/fourth-surge-variant-vaccine/618463/>

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### Speakers & Reactors

 Dr. Gregory Botz	 Dr. Toff Peabody	 Heather Foster RN	 Dr. Brittney Barto	 William Adcox	 John Little
 Jennifer Dingman	 Keith Filtner	 Randy Styner	 Charlie Denham III	 Jamie Yratorza	 Jahnavi Rao
 Dr. Charles Denham	 Paul Bhatia EMT	 Danny Policicchio	 Luis Licon	 Manue Lopez	 Dominick Contreras
				 Ivy Tran	




parentingOC






FOURTH ANNUAL  
TOP 25  
TEACHERS



**High Impact Care Hazards to Patients, Students, and Employees**




- Cardiac Arrest
- Choking & Drowning
- Opioid Overdose
- Anaphylaxis
- Major Trauma
- Infections
- Transportation Accidents
- Bullying

<p>Med Tac Story Article</p> 	<p>Active Shooter Healthcare Article</p> 	<p>Rapid Response Teams Article</p> 	<p>AED &amp; Bleeding Control Gear Article</p> 	<p>Family Safety Plan Article</p> 
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**A Medical-Tactical Approach** undertaken by clinical and non-clinical people can have enormous impact on los 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.

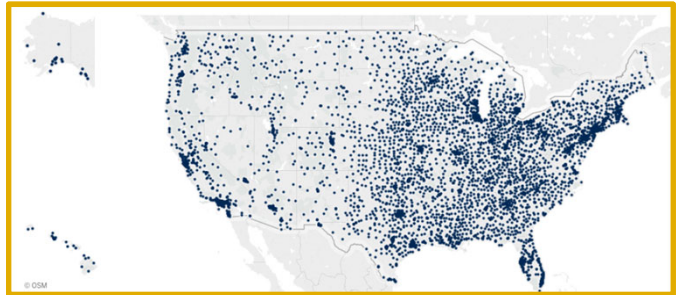


**Supports today's webinar**

**Survive & Thrive Guide: Keeping Your Family Safe**

## TMIT Global Research Test Bed

**3,100 Hospitals in 3,000 Communities**  
**500 Subject Matter Expert Pool Developed over 35 Years**





**Survive & Thrive Guide: Protecting Your Family**

**500 Subject Matter Experts**

Graphic Representation to Protect Export Privacy

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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 Halse	Dr. Steve Swensen	Tyler Sant	Avarie Pettit	Dr. Mary Foley	Bob Chapman	Perry Bechtel 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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Matt Horace	John Tomlinson	Dan Ford	Ariene Salamendra	Jennifer Dingman	Bill George	Penny George	Hilary Schmidt PhD	Paul Bhatia EMT	Dr. McDowell

**Contributions Through Segments of our Discovery Channel Documentaries**

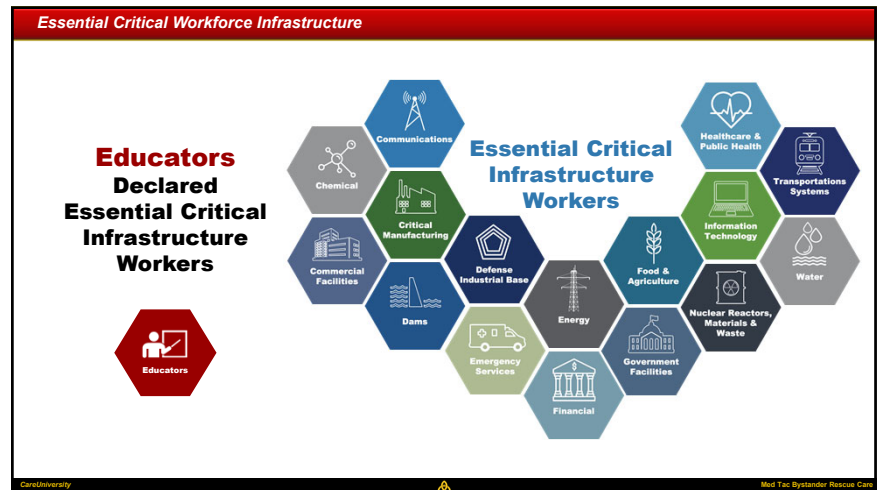
Prof Christensen	Jim Collins	C Sullenberger	Charlotte Guglielmi	Dr. Don Berwick	Dr. Howard Koh	Dr. Jim Baglan	Dr. Harvey Fineberg

**Chasing Zero**  
ENDING THE WAR ON HEALTHCARE COSTS

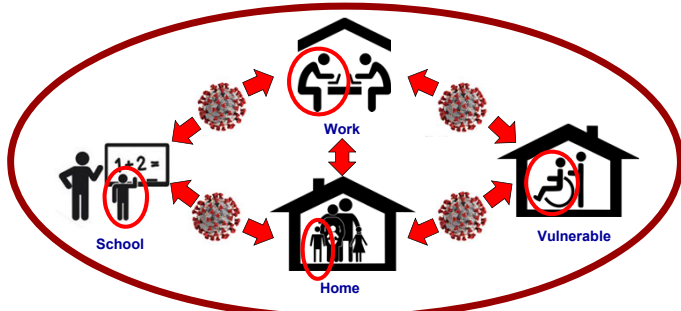
**Surfing the Healthcare Tsunami**  
ENDING THE HEALTHCARE TSUNAMI: BRING YOUR BEST BEANS!

**2:53**  
3 Minutes & Counting  
Bystanders Care!

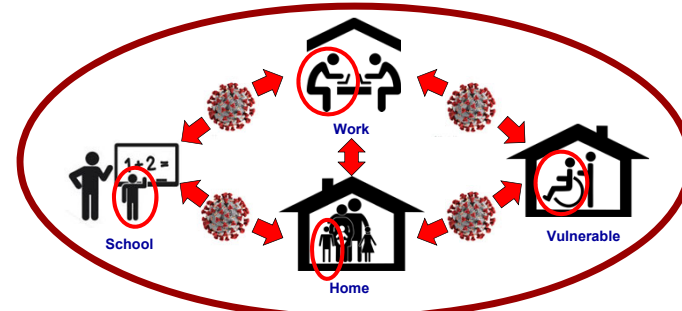
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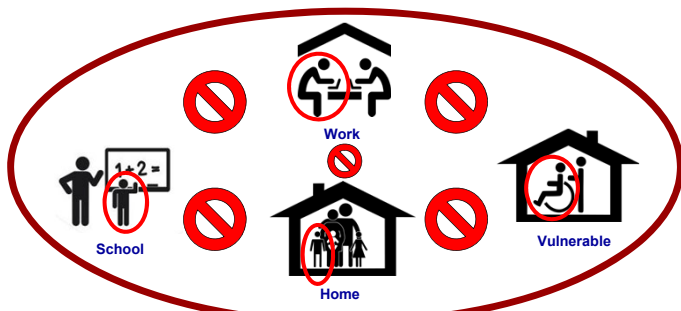
### Save the Families...



### Save the Families... You Save the Worker



### Breaking Family Transmission Chains



Monthly Webinars every first Thursday of the month at 1PM ET (Noon Central and 10AM PT). Free, video, and resources posted.

**BASIC MODULES**

- Why Social Distancing WORKS
- Why Masks ARE Critical
- Masks: The SCIENCE of Success
- Hand Washing & DISINFECTANTS
- GLASS High Contact Surfaces
- Building a FAMILY SAFETY PLAN
- If we NEED Emergency Care
- Why ICU, Respirators, and EMMV

**ADVANCED MODULES**

- Preparing for CARE at Home
- TELEMEDICINE Works - Try It
- Care of Seniors & those at Risk
- The Latest Best Practices
- Companions and the Most Weak
- Getting Home Safely
- The New Return Webinar
- Back to School Safety

**BASIC MODULES:**

- Short Videos 4-10 min
- Critical Information
- Hits Pillars of Prevention

**ADVANCED MODULES:**

- Longer more detailed
- Webinar Recordings
- Technical Information

[www.medtacglobal.org/coronavirus-response/](http://www.medtacglobal.org/coronavirus-response/)

abc NEWS

## Vaccines

<https://abcnews.go.com/Health/real-world-study-shows-mma-vaccines-protect-symptomatic/story?id=76752330>

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abc NEWS

## Vaccine Hesitancy

CareUniversity Med Tac Bystander Rescue Care

THE WALL STREET JOURNAL.

## Variants

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## Vaccines, Variants, and Victory: A Survive & Thrive Guide

Vaccines

Variants

Victory

**VACCINES:**

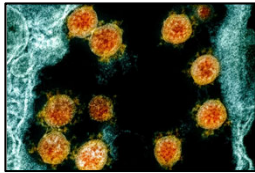
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- What are the differences between the vaccines?
- What about kids – are vaccines safe and effective?

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March 29, 2021

### How Long Will The Coronavirus Vaccines Protect You? Experts Weigh In.



You may be among **the more than 95 million people in the United States** who have taken at least one dose of a **coronavirus** vaccine. Or you may still be awaiting your turn. Regardless, there's a crucial question on most of our minds: How long will the vaccine really protect us?

**As with most aspects of the virus, the answer is not completely clear.** Why? Because although we have been battling the pandemic for more than a year, the vaccines were granted emergency use authorization relatively recently. So experts have not had time to observe their long-term effectiveness. However, that research is underway, and in the meantime, experts say we can make an educated guess.

**How long will vaccine immunity last?**  
Federal health authorities **have not provided a definitive answer** to this question.

**But based on clinical trials, experts do know that vaccine-induced protection should last a minimum of about three months.** That does not mean protective immunity will expire after 90 days; that was simply the time frame participants were studied in the initial Pfizer, Moderna and Johnson & Johnson trials. As researchers continue to study the vaccines, that shelf life is expected to grow.

Source: <https://www.washingtonpost.com/lifestyle/2021/03/29/how-long-immunity-lasts-covid-vaccine/>



April 1, 2021

### Ongoing Trial Shows Pfizer Covid-19 Vaccine

#### Remains Highly Effective After Six Months



The ongoing Phase 3 clinical trial of Pfizer/BioNTech's coronavirus vaccine confirms its **protection lasts at least six months after the second dose**, the companies said Thursday.

The question of how long vaccine protection lasts can only be answered once enough time has passed, and while six months of protection is a modest target, it's longer than previously known.

The study is continuing and future updates may reveal more about how long and how strong this protection is.

The **vaccine remains more than 91% effective against disease with any symptoms for six months**, the companies said.

And it appeared to be **fully effective against the worrying B.1.351 variant of the virus, which is the dominant strain circulating in South Africa** and which researchers feared had evolved to evade the protection of vaccines, the companies said.

Source: <https://www.cnn.com/2021/04/01/health/pfizer-covid-vaccine-efficacy-six-months-bn/index.html>



March 30, 2021

### Pfizer-BioNTech says COVID Vaccine is 100% Effective in Kids Ages 12 to 15



Pfizer said Wednesday its Covid-19 vaccine was **100% effective in a study of adolescents ages 12 to 15**, encouraging results that could clear the shots for use in middle school students before school starts this fall.

Pfizer CEO Albert Bourla said the company plans to submit the new data on the vaccine, which is developed in partnership with German drugmaker **BioNTech**, to the Food and Drug Administration and other regulators "as soon as possible," with the **hope that kids in the age group will be able to get vaccinated before the next school year.**

**The trial enrolled 2,260 participants in the United States.** There were 18 confirmed Covid-19 infections observed in the placebo group and **NO CONFIRMED INFECTIONS IN THE GROUP that received the vaccine**, the company said. That resulted in a vaccine efficacy of 100%, it said, adding that the shot was also well-tolerated, with side effects generally consistent with those seen in adults.

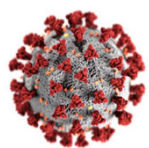
Source: [https://www.cnbc.com/2021/03/31/covid-vaccine-pfizer-says-shot-is-100percent-effective-in-kids-ages-12-to-15.html?\\_source=iosappshare%7C.com.apple.UKIT.activity.Mail](https://www.cnbc.com/2021/03/31/covid-vaccine-pfizer-says-shot-is-100percent-effective-in-kids-ages-12-to-15.html?_source=iosappshare%7C.com.apple.UKIT.activity.Mail)

## Vaccines, Variants, and The Road to Victory: A Survive & Thrive Guide™



Britney Barto, MD

Board Certified Pediatrician Philadelphia, PA





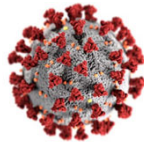


## Vaccines, Variants, and The Road to Victory: A Survive & Thrive Guide™



**Paul Bhatia, EMT**

President, Anteater Emergency  
Medical Services  
Pre-medical Student  
University of California at Irvine



03-30-21

### As Covid-19 Vaccinations Ramp Up, Hesitancy Wanes

Survey shows decline in reluctance, driven by increasing willingness in Southern states and more broadly among Black Americans

The findings come from the latest release of a large-scale survey conducted by the U.S. Census Bureau and developed in concert with the Centers for Disease Control and Prevention and the National Center for Health Statistics. The most recent survey gauged responses from nearly 80,000 adults between March 3 and March 15.

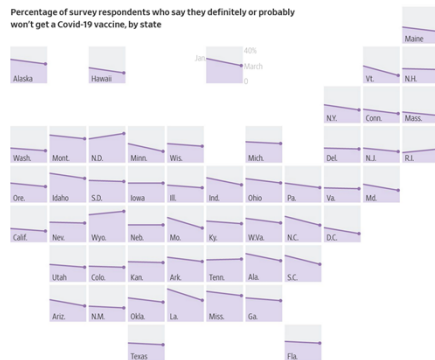


Source: U.S. Census Bureau Household Pulse Survey

03-30-21

### As Covid-19 Vaccinations Ramp Up, Hesitancy Wanes

Percentage of survey respondents who say they definitely or probably won't get a Covid-19 vaccine, by state. Reluctance to get vaccinated remains highest in the South. But many Southern states have seen a steep decline in hesitancy since the January survey, particularly Alabama, Louisiana, North Carolina and South Carolina.

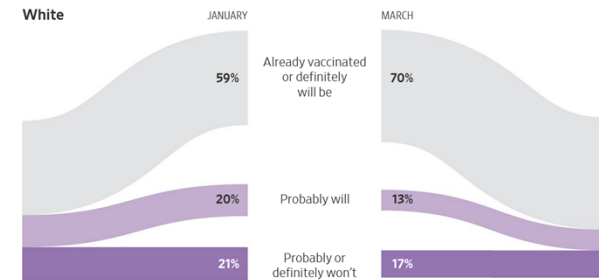


03-30-21

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**White Americans**



**Survive & Thrive Guide**

THE WALL STREET JOURNAL  
03-30-21

**As Covid-19 Vaccinations Ramp Up, Hesitancy Wanes**  
Survey shows decline in reluctance, driven by increasing willingness in Southern states and more broadly among Black Americans

**Black Americans**

Hesitancy among Black Americans has diminished considerably. Black Americans are still the most likely to say they will probably or definitely not get vaccinated. But in January, Black Americans were 13 percentage points more likely than white Americans to say that; as of mid-March, the gap had shrunk to five points.

Response	January	Mid-March
Already vaccinated or definitely will be	34%	58%
Probably will	32%	20%
Probably or definitely won't	34%	22%

<https://www.wsj.com/articles/as-covid-19-vaccinations-ramp-up-hesitancy-wanes-11617096603>

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**Survive & Thrive Guide**

THE WALL STREET JOURNAL  
03-30-21

**As Covid-19 Vaccinations Ramp Up, Hesitancy Wanes**  
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**18-29 Years of Age**

Still, getting younger Americans vaccinated remains a challenge. While hesitancy among all ages has declined since January, nearly a quarter of those age 18-39 still say they probably or definitely won't get the shot—down just 5 percentage points from January.

Response	January	Mid-March
Already vaccinated or definitely will be	45%	57%
Probably will	27%	20%
Probably or definitely won't	28%	23%

<https://www.wsj.com/articles/as-covid-19-vaccinations-ramp-up-hesitancy-wanes-11617096603>

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THE NEW ENGLAND JOURNAL of MEDICINE  
03-31-21

**"Vaccine Passport" Certification — Policy and Ethical Considerations**  
Mark A. Hall, J.D., and David M. Studdert, Sc.D., L.L.B., M.P.H.

The public appears to be **deeply divided on the appropriateness of immunity privileges**. Last summer, we elicited views from a nationally representative panel.

Support for certification programs based on positive tests for antibodies to Covid-19 was almost evenly split. Moreover, **in contrast with views on many other pandemic-control policies, the division of opinion on immunity passports cut across ideological, racial, and socioeconomic lines.**

The survey was conducted during an earlier phase of the pandemic and did not address vaccination-acquired immunity explicitly, although more **recent surveys that have done so have also revealed deeply divided views.**

Category	Support government-issued "immunity passports"	Support private "immunity certificates"
Overall Support	~45%	~50%
General work	~35%	~35%
High-risk work	~55%	~55%
Attendance at large recreational events	~45%	~45%

Support for Immunity Privileges and Perceived Fairness of Their Use by Activity in a Nationally Representative Sample of 1315 People.

NEJM 03-31-21

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**Vaccines, Variants, and The Road to Victory: A Survive & Thrive Guide™**

**Christopher R. Peabody, MD, MPH**

Emergency Physician  
Assistant Clinical Professor of Emergency Medicine,  
University of California San Francisco  
Clinical Instructor, University of California San Francisco  
San Francisco, CA

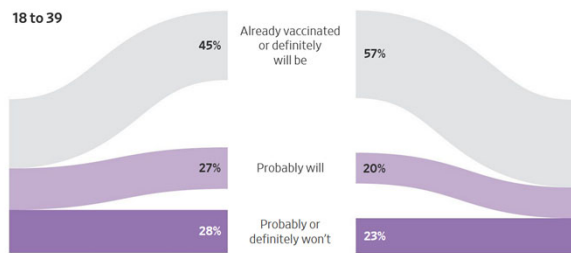
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03-30-21

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**18-29 Years of Age**

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<https://www.wsj.com/articles/as-covid-19-vaccinations-ramp-up-hesitancy-wanes-11617096603>

**Addressing Vaccine Hesitancy in BIPOC Communities — Toward Trustworthiness, Partnership, and Reciprocity**

Sandra C. Quinn, Ph.D., and Michele P. Andrasik, Ph.D.

Questions and Answers Used in Train-the-Trainer and Community Education*
<b>How did these trials move so quickly?</b> Research has been done on the genetic structure of the virus. Manufacturing started while the clinical trials were still underway. mRNA vaccines are faster to produce than traditional vaccines. Other vaccines use platforms that have proven successful in the development of vaccines. The studies included more participants than a typical study and disease transmission rates were high, enabling researchers to determine efficacy in a shorter time. The FDA and the CDC prioritized review, authorization, and recommendation of Covid-19 vaccines.
<b>Were vaccines tested on people like me?</b> Yes. Vaccine trials included all adults >18 yr of age. It was randomized that 25% of participants in Moderna and Pfizer trials were to be <65 yr of age. Study participants included at least 25% of people with common health problems such as high blood pressure, diabetes, HIV, and asthma.
<b>Do these vaccines work for all races/ethnic groups?</b> Yes. There is strong evidence that the vaccines work well for all people, regardless of their genetic background.
<b>What type of reactions have been reported after vaccination?</b> Common reactions: Sore arm, headache, achiness, fever may appear within 48 hours. These are similar to reactions seen after dengue and influenza vaccines. Rare reaction: anaphylaxis: Pfizer: 21 cases with 2 million doses. Moderna: 30 cases with 1 million doses. Current recommendation: 15 minutes of observation after injection if you discuss vaccination with your provider and undergo 30 minutes of observation after receiving the vaccine. Most people with a history of allergies or anaphylaxis have received a vaccine with no issues.
<b>Should I get a vaccine now or "wait and see"?</b> Yes, you should get vaccinated. COVID-19 is spreading. Over 1 million deaths worldwide. COVID-19 is spreading. Over 1 million deaths worldwide. COVID-19 is spreading. Over 1 million deaths worldwide.
<b>Does mRNA change your DNA?</b> No. mRNA is a signal to your cell. It stays in the outer part of the cell and does not enter the nucleus where DNA is located. The mRNA for the vaccine is present in the body for only 1-3 days; then it degrades and the immune system is primed and ready. The vaccine vaccine can stay in your body for more than a week, but it does not reproduce itself. This may lead to increased protection over time.
<b>Has the mRNA changed your DNA?</b> No. It does not affect someone's fertility. No. It does not contain fetal tissue, microchips, or any other devices.
<b>Which vaccine is the best?</b> All the vaccines — Pfizer, Moderna, and Pfizer — are very good at preventing severe disease, so they will greatly reduce rates of severe disease progression, hospitalization, and death. When you are offered a vaccine, you should take it.
<b>Why do I have to wear a mask after getting immunized against Covid-19?</b> The vaccines prevent Covid-19 disease, severe disease, and death. We know much less about whether vaccines prevent asymptomatic infection, so this question was not studied. Until we know that, we must assume that vaccinated people might get Covid-19 and not be aware of it. Masks, social distancing, handwashing are still required until we have more information.

**Questions & Answers in Train-the-Trainer Program**

- How did these trials move so quickly?
- Were the vaccines tested on people like me?
- Do these vaccines work for all races / ethnic groups?
- What type of reactions have been reported after vaccination?
- Should I get a vaccine now or "wait and see"?
- Does mRNA change your DNA?
- I've hear that the mRNA vaccine...
  - No it will not give you COVID-19
  - No it does not affect a woman's fertility
  - No, it does not contain fetal tissue, microchips, or any other devices
- Which vaccine is the best?
- Why do I have to wear a mask after getting immunized against COVID-19

NEJM 03-31-21

03-31-21

**Addressing Vaccine Hesitancy in BIPOC Communities — Toward Trustworthiness, Partnership, and Reciprocity**

Sandra C. Quinn, Ph.D., and Michele P. Andrasik, Ph.D.

**Questions and Answers in Train-the-Trainer Program**

Questions and Answers Used in Train-the-Trainer and Community Education*
<b>How did these trials move so quickly?</b> Researchers used existing clinical trial networks. Manufacturing started while the clinical trials were still underway. mRNA vaccines are faster to produce than traditional vaccines. Other vaccines use platforms that have proven successful in the development of vaccines. The studies included more participants than a typical study and disease transmission rates were high, enabling researchers to determine efficacy in a short time. The FDA and the CDC prioritized review, authorization, and recommendation of Covid-19 vaccines.
<b>Were vaccines tested on people like me?</b> Yes. Vaccine trials included all adults >18 yr of age. It was randomized that 25% of participants in Moderna and Pfizer trials were to be <65 yr of age. Study participants included at least 25% of people with common health problems such as high blood pressure, diabetes, HIV, and asthma.
<b>Do these vaccines work for all races/ethnic groups?</b> Yes. There is strong evidence that the vaccines work well for all people, regardless of their genetic background.
<b>What type of reactions have been reported after vaccination?</b> Common reactions: Sore arm, headache, achiness, fever may appear within 48 hours. These are similar to reactions seen after dengue and influenza vaccines. Rare reaction: anaphylaxis: Pfizer: 21 cases with 2 million doses. Moderna: 30 cases with 1 million doses. Current recommendation: 15 minutes of observation after injection if you discuss vaccination with your provider and undergo 30 minutes of observation after receiving the vaccine. Most people with a history of allergies or anaphylaxis have received a vaccine with no issues.

<b>Should I get a vaccine now or "wait and see"?</b> Yes, you should get vaccinated. COVID-19 is spreading. Over 1 million deaths worldwide. COVID-19 is spreading. Over 1 million deaths worldwide. COVID-19 is spreading. Over 1 million deaths worldwide.
<b>Does mRNA change your DNA?</b> No. mRNA is a signal to your cell. It stays in the outer part of the cell and does not enter the nucleus where DNA is located. The mRNA for the vaccine is present in the body for only 1-3 days; then it degrades and the immune system is primed and ready. The vaccine vaccine can stay in your body for more than a week, but it does not reproduce itself. This may lead to increased protection over time.
<b>I've heard that the mRNA vaccine...</b> No. It does not give you Covid-19. No. It does not affect someone's fertility. No. It does not contain fetal tissue, microchips, or any other devices.
<b>Which vaccine is the best?</b> All the vaccines — Pfizer, Moderna, and Pfizer — are very good at preventing severe disease, so they will greatly reduce rates of severe disease progression, hospitalization, and death. When you are offered a vaccine, you should take it.
<b>Why do I have to wear a mask after getting immunized against Covid-19?</b> The vaccines prevent Covid-19 disease, severe disease, and death. We know much less about whether vaccines prevent asymptomatic infection, so this question was not studied. Until we know that, we must assume that vaccinated people might get Covid-19 and not be aware of it. Masks, social distancing, handwashing are still required until we have more information.

NEJM 03-31-21

**Student Outreach Team**



Paul Bhatta EMT



Charlie Denham III



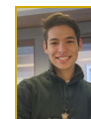
Jamie Yrstorza



Dominick Contreras EMT



Jahnavi Rao



Luis Licon



Manue Lopez



Danny Policicchio



Ivy Tran EMT

**Family Rescue R&D**

**The 5 R's of Safety**

Response  
Rescue  
Recovery  
Resistance  
Readiness

**Safety**

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## “Take the Shot – Play it Safe” Campaign

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## “Take the Shot – Play it Safe” Campaign

- Take the Shot - Beat the Fake News
- Play it Safe – Masks & Distance
- Why Vaccinate?
- Why Wait?
- Why Now?

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## Vaccines, Variants, and The Road to Victory: A Survive & Thrive Guide™


**Jahvani Rao**  
Harvard University President & Founder at New Voters Leader Med Tac Student Outreach Program

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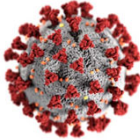
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## Vaccines, Variants, and The Road to Victory: *A Survive & Thrive Guide™*



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Assistant Producer  
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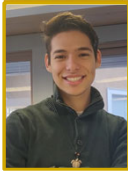


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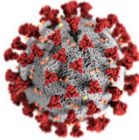
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**Luis Licon**

Med Tac App Developer  
 CareMoms® App  
 Med Tac® App  
 UCI Graduate




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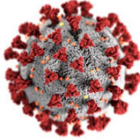
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## Vaccines, Variants, and The Road to Victory: *A Survive & Thrive Guide™*



**Dominick Contreras EMT**

Sophomore Honors BA  
 Harvard College  
 History of Science  
 Global Health & Health Policy  
 Crimson EMS Team



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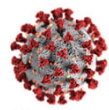
**Survive & Thrive Guide:**

# VARIANTS

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## Vaccines, Variants, and Victory: A Survive & Thrive Guide



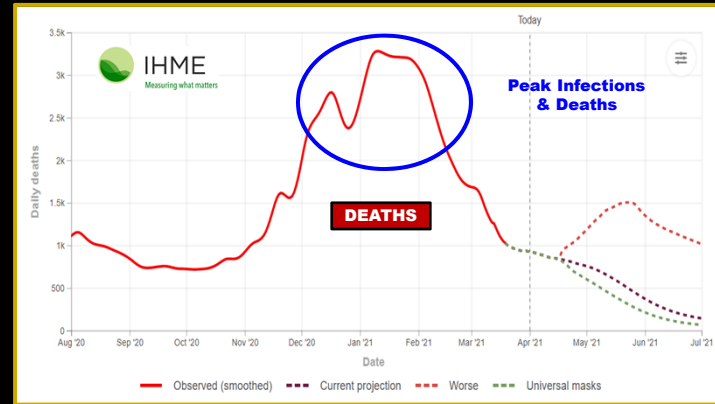
Vaccines Variants Victory

### VARIANTS:

- What are variants and why are they important?
- Why can they be more contagious and more lethal?
- Why is the B117 U.K variant important to us?
- What about the South African and Brazilian variants?

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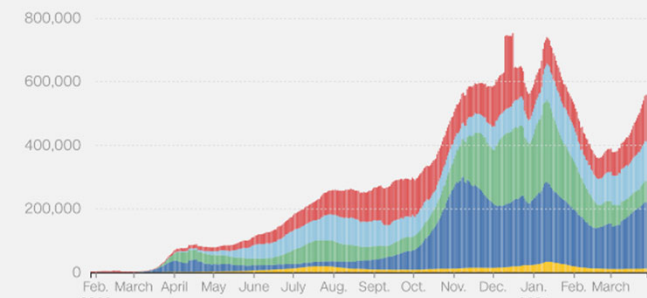
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## Daily new cases by region

A Global Warning

Asia Latin America and the Caribbean North America  
Europe Africa Oceania



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Johns Hopkins

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## Michael Osterholm: The Perfect Storm

**Center for Infectious Disease Research and Policy: Osterholm Update**  
 Source: 03-23-21 Live Broadcast [www.cidrap.umn.edu/covid-19/podcasts-webinars](http://www.cidrap.umn.edu/covid-19/podcasts-webinars)

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#### WALL STREET JOURNAL

01-16-20

#### Why the New Covid-19 Variants Could Be More Infectious

Mutations in the virus's appendage have created potentially more infectious versions of the pathogen, including one currently circulating around the world

The coronavirus uses spike proteins to enter and infect cells.

The spike protein binds to a receptor on human cells known as ACE2

After binding, the spike protein shape shifts and its stalk interacts with other key proteins on the cell's surface.

That helps the virus fuse with the cell.

Source: <https://www.wsj.com/articles/why-the-new-covid-19-variants-could-be-more-infectious-11610802327> Source: Jason McLellan, University of Texas at Austin

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#### WALL STREET JOURNAL

01-16-20

**A mutation known as D614G increases the likelihood of the spike proteins being more efficient at binding to cells.**

Source: <https://www.wsj.com/articles/why-the-new-covid-19-variants-could-be-more-infectious-11610802327>

Each spike protein consists of three distinct, but identical, parts known as protomers

When these are closed together, the spike is not as efficient at binding the receptor.

A mutation known as D614G increases the likelihood of the protein being more open.

That facilitates binding.

GIVES IT A MORE OPEN SHAPE

1 protomer

2 protomers

3 protomers

LIKELIHOOD OF INFECTION

Source: Yurkovetskiy et al., 2020

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#### WALL STREET JOURNAL

01-16-20

**The Receptor-Binding Domain is critically important.**

**Variants from South Africa, Brazil, and UK may be more transmissible due to mutations here.**

Source: <https://www.wsj.com/articles/why-the-new-covid-19-variants-could-be-more-infectious-11610802327>

**The N-Terminal Domain has been found to be another location of differences due to mutations. Variants here may lead to inefficiencies in immune defenses.**

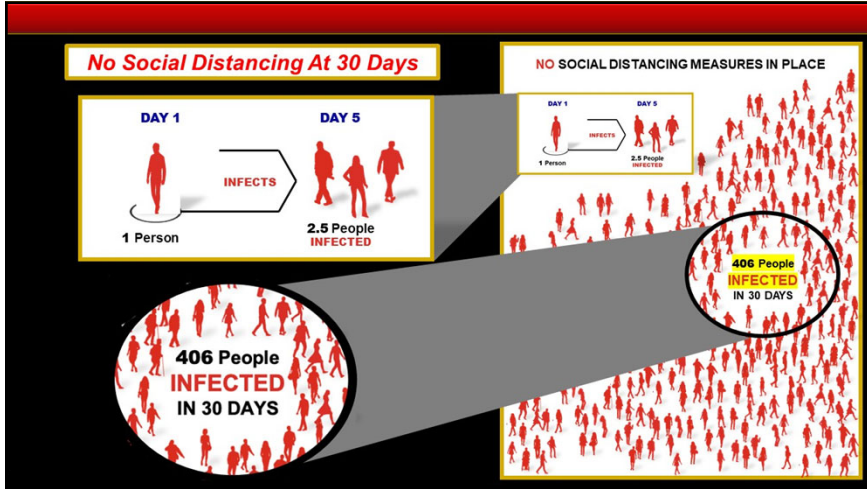
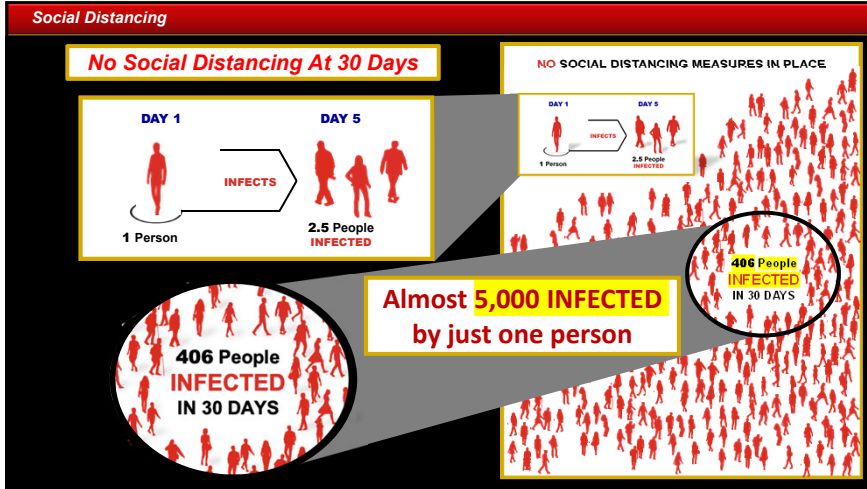
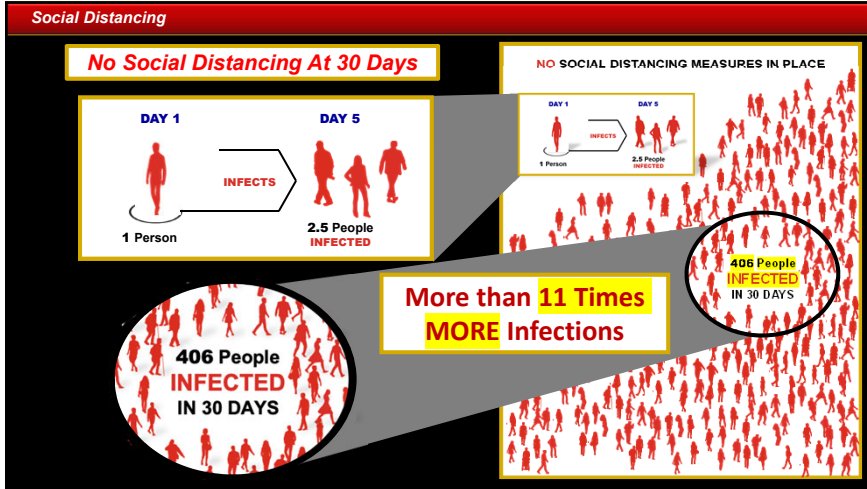
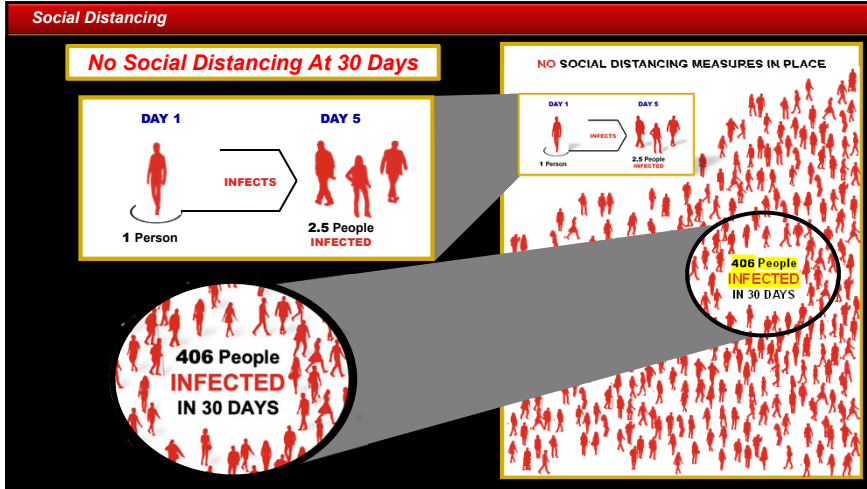
Its function is poorly understood. The viral variants found in the U.K. and South Africa have chunks missing in this region.

RECEPTOR-BINDING DOMAIN

This area helps the virus bind to receptors on cells. The variants that have emerged in South Africa, Brazil and the U.K. have mutations here.


HEAD      STALK REGION

Source: Jason McLellan, University of Texas at Austin

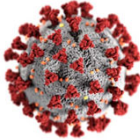


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## Vaccines, Variants, and The Road to Victory: A Survive & Thrive Guide™




**Jaime Yrastorza**  
UCSD Graduate  
Incoming Med Student  
Leader Med Tac  
Student Outreach Program  
Co-producer Med Tac CME Program



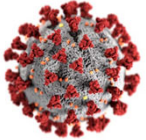
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## Vaccines, Variants, and The Road to Victory: A Survive & Thrive Guide™




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Assistant Clinical Professor of Emergency  
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University of California San Francisco  
Clinical Instructor, University of California  
San Francisco  
San Francisco, CA



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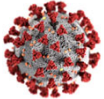

### Vaccines, Variants, and Victory: A Survive & Thrive Guide



Vaccines
Variants
Victory

**VICTORY:**

- Our *Survive & Thrive Guides*™ What's New?
- What will be the New Normal?
- What do we do on the “recovery bridge to victory”
- What is the “Take a Shot and Play it Safe” Campaign.
- What is a Good **AND SAFE** Samaritan

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### Three Big Lifesaving Opportunities

**Save Lives Now**



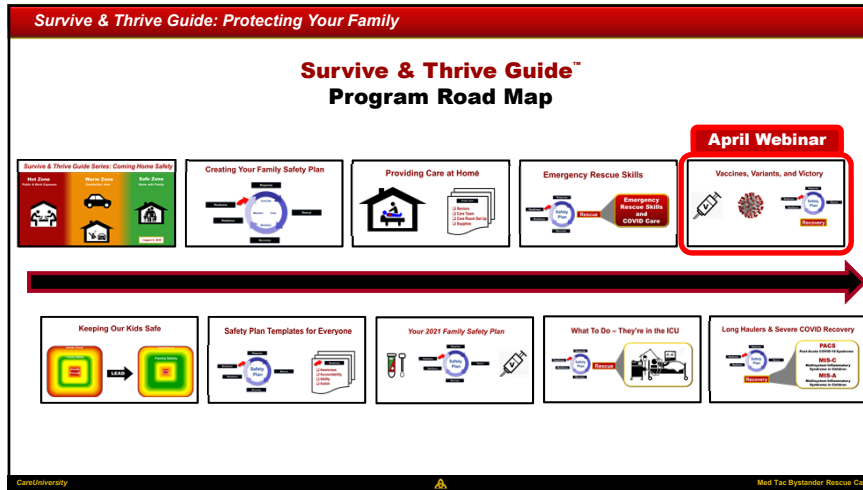


**The New Normal**

**The Reopening Bridge to The New Normal**




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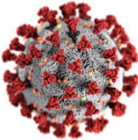


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## Vaccines, Variants, and The Road to Victory: A Survive & Thrive Guide™




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## Coming Home Safely Family Survive & Thrive Guide™



The diagram shows three zones with corresponding icons:

- Hot Zone (Public & Work Exposure):** Red background, icons of a house with people and a car.
- Warm Zone (Disinfection Area):** Orange background, icons of a car and a house with a person.
- Safe Zone (Home with Family):** Green background, icon of a house with a family.

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Survive & Thrive Guide: Protecting Your Family

### Hot-Warm-Safe Zone Practices

Hot Zone	Warm Zone	Safe Zone
Public & Work Exposure	Disinfection Area	Home with Family
<b>Maintain Best Protection</b> <ul style="list-style-type: none"> <li>Social Distance</li> <li>Masks</li> <li>Hand Hygiene</li> <li>Clean HI-Contact Surfaces</li> </ul>	<b>Disinfection &amp; Storage</b> <ul style="list-style-type: none"> <li>Considered Contaminated</li> <li>Remove PPE</li> <li>Disinfect each Person</li> <li>Store PPE</li> <li>Separate Laundry</li> <li>Clean Surfaces</li> </ul>	<b>Maintain Zone Virus Free</b> <ul style="list-style-type: none"> <li>Disinfection Stations at doors at Warm Zones</li> <li>Clean Contact Surfaces</li> <li>Maintain Ventilation</li> <li>Manage Isolation, Quarantine, and Senior Care</li> </ul>

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### Keeping Our Kids Safe

#### Family Survive & Thrive Guide™

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Survive & Thrive Guide: Protecting Your Family

### Threats X Vulnerability = Risk to Your Family

Threats:	Vulnerability:	Risk:
Likely to cause HARM.	Weaknesses that can be EXPLOITED by threats.	PROBABILITY of harm by a threat exploiting vulnerability.

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### Creating Your Family Safety Plan

#### Family Survive & Thrive Guide™

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**Survive & Thrive Guide: Protecting Your Family**

### Family Health Safety Plans

**Readiness:** Preparation, regular review, and updating of a plan based on the latest science. Regular deliberate practice of roles and skills each family member undertake.

**Response:** Family moves to action to respond to an emergency. Safeguards are put in place. The family may respond to a member being infected or exposed to someone infected.

**Resilience:** Fortify response, rescue, and recovery actions in plan. In law enforcement and healthcare, we call this "target hardening".

**Rescue:** Regular deliberate practice of roles and skills to take a loved one to the Emergency Department if they have severe symptoms. This means having records and medications ready go with the patient.

**Recovery:** Follow up care of the family member after an event. Returning to normal family activities after a family member is infected and isolated, hospitalized, or under quarantine."

CardUniversity © C DeBham 2020 Med Tac Bystander Rescue Care

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### Family Survive & Thrive Guide: Providing Care at Home

**Primary Contributors**

Heather Foster RN      Dr. Gregory Botz

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### Emergency Rescue Skills A Survive & Thrive Guide™

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### What To Do – They're in the ICU A Survive & Thrive Guide™

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## Vaccines, Variants, and The Road to Victory: A Survive & Thrive Guide™



**Charles R. Denham III**

High School Student  
 Co-founder Med Tac Bystander Rescue Care Program  
 Co-lead Lifeguard Surf Program  
 Junior Med Tac Instructor  
 Certified Lifeguard



**David Beshk**

Award Winning Educator  
 Med Tac Master Instructor  
 Eagle Scout Advisor  
 Merit Badge Counselor

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**Family Lifeguard**

## Be Your Family Lifeguard

90% Prevention and 10% Rescue




**Holiday Huddle Checklist**

**The Goal - Prevent Bubble Trouble**  
 Maintain the Four Pillars: Distance, Hand Hygiene, Disinfect Surfaces, and Mask Use

**Before Event:**

- Assign Tasks to Family Members
- Prepare Separate Family Bubble Portions
- Set Up Handwashing Stations
- Develop a Bathroom Plan
- Prepare Bathroom - Optimize Ventilation
- Maintain Kitchen Hygiene

**During Event:**

- Convene Holiday Huddle with Guests
- Opening Prayer
- Describe Safe Family Bubbles
- Review Four Safety Pillars
- Provide Restroom Plan
- Describe Eating Plan
- Summarize Clean Up Plan

**After Event:**

- Glove up to Clean Up
- Soak Plates and Cutlery in Soapy Water
- Wipe down surfaces touched by guests
- Wipe down bathroom used by guests
- Meet to de-brief to be safer next time

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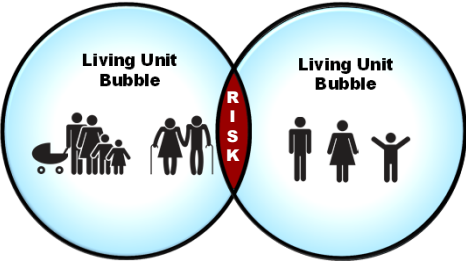
**Family Lifeguard**

## “Double Bubble Trouble” Create Transmission Chains

**CDC Close Contact**

**Exposure Risks**

- 15 Minutes within 6 feet over 24 Hours
- Provided Care to COVID-19 Infected
- Physical Contact (hugs & kisses)
- Use Same Cooking Utensil's
- Droplet Contact



**General Risks**

- Indoor Events
- Poorly Ventilated Environments
- Common use bathroom facilities
- High Contact Surfaces not disinfected
- Common Food Access

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**Family Lifeguard**

## Spring Break, Ski Week, and Easter Vacations





**Holiday Huddle Checklist**

**The Goal - Prevent Bubble Trouble**  
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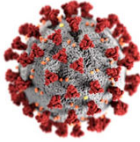
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## Vaccines, Variants, and The Road to Victory: A Survive & Thrive Guide™



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 Business Development Manager  
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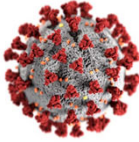
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**Randal Styner**  
 Director of Emergency Management  
 University of California at Irvine




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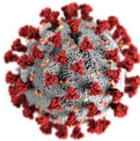
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**Manue Lopez**  
 District Executive  
 El Camino Real District  
 Orange County Scout Council  
 Med Tac Scout Program




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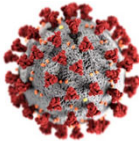
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## Vaccines, Variants, and The Road to Victory: A Survive & Thrive Guide™




**Heather Foster RN BSN**  
 Frontline Nurse  
 Infection Prevention Advisor  
 Patient Safety Advocate  
 Dolores Colorado



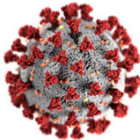
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## Vaccines, Variants, and The Road to Victory: A Survive & Thrive Guide™




**John Little**  
 Medical Service  
 Security Service  
 Saddleback Church  
 Former Para-medic  
 & Former Law Enforcement



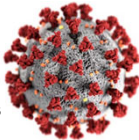
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**William Adcox, MBA**  
 Chief of Police and Chief Security Officer  
 MD Anderson  
 Cancer Center and The University of Texas  
 Health Science Center, Houston, TX



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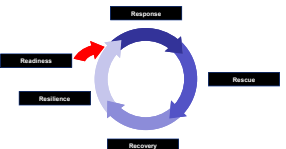
**THE UNIVERSITY OF TEXAS MD Anderson Cancer Center** **MAYO CLINIC**

**Stanford University** **HARVARD UNIVERSITY**

**UCSF** University of California San Francisco **UCI**

**UF UNIVERSITY of FLORIDA** **UTSouthwestern Medical Center** **USC University of Southern California**

**Family Rescue R&D**



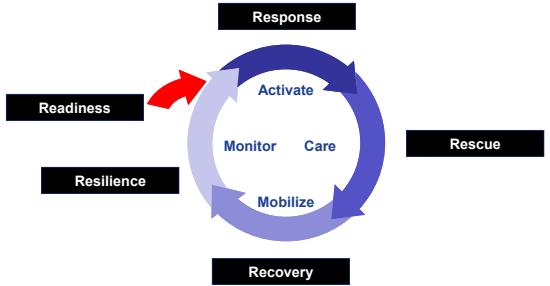
**The 5 R's of Safety**

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**Survive & Thrive Guide: Protecting Your Family**

**Health Security**

### Family Health Safety & Organization Security Plans™



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National Survey Questions

I have already responded to the Family Health Safety Survey

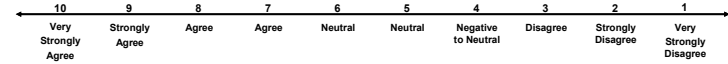
YES

NO

State what you want to see in the Family Safety Plan Templates in Free Text Entry

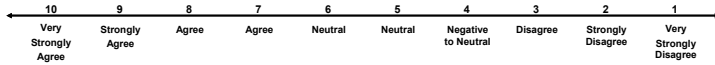
READINESS

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



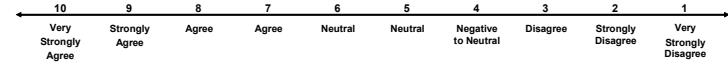
RESPONSE

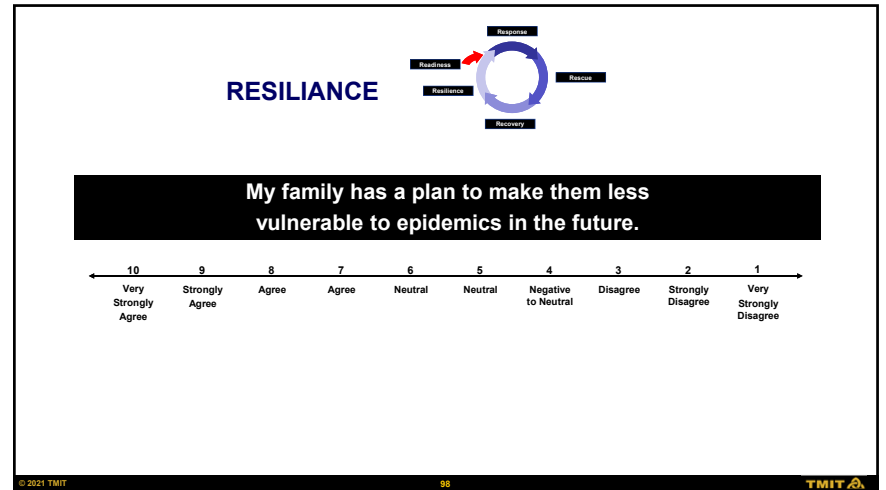
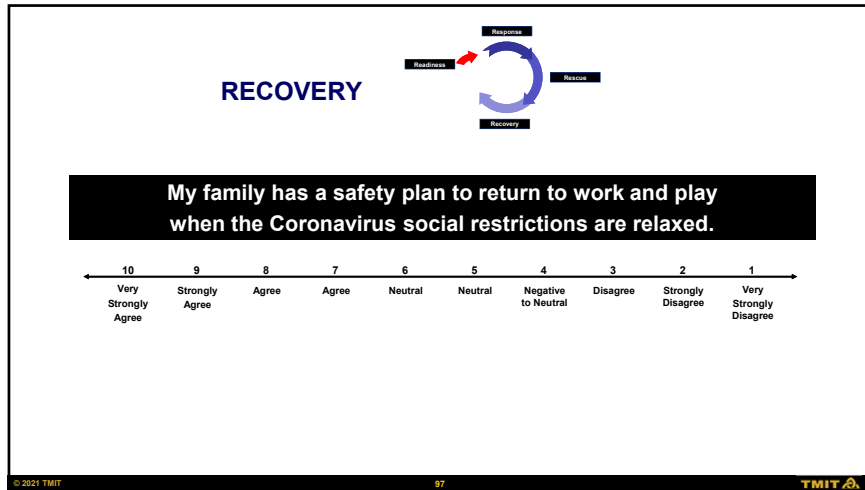
My family knows what actions to take if a loved one becomes infected with Coronavirus.



RESCUE

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





## The 5 Rights of Emergency Care™

[www.medtacglobal.org/](http://www.medtacglobal.org/)

**Med Tac Bystander Rescue Care**

**5 Rights of Emergency Care™**

- Right Provider
- Right Follow Up
- Right Diagnosis
- Right Treatment
- Right Discharge

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**Coronavirus Care  
Community of Practice**

**Bystander Rescue Care  
CareUniversity Series**

## Vaccines, Variants, and The Road to Victory: A Survive & Thrive Guide™

**Christopher R. Peabody, MD, MPH**

Emergency Physician  
Assistant Clinical Professor of Emergency Medicine,  
University of California San Francisco  
Clinical Instructor, University of California San Francisco  
San Francisco, CA

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**Family Lifeguard**

## Emergency Rescue Skills: After Discharge & Transport Home

The diagram illustrates the 'Emergency Care Loop' as a continuous cycle between three stages: HOME, ED (Emergency Department), and TRANSPORT. Arrows indicate the flow: HOME to TRANSPORT, TRANSPORT to ED, and ED back to HOME. Below this cycle, four images represent key components of emergency care: an oxygen concentrator, a pulse oximeter, a pharmacy bag, and a person in a car, likely representing transport home.

*CareUniversity* *Med Tac Bystander Rescue Care*

**MED + TAC Global** **Coronavirus Care Community of Practice** *Bystander Rescue Care CareUniversity Series*

### Speakers & Reactors

Jennifer Dingman	Keith Fitner	Randy Styner	Charlie Denham III	Jamie Yrastorza	Jahnvi Rao
David Beshk	Dr. Charles Denham	Paul Bhatia EMT	Danny Pollicchio	Luis Licon	Manue Lopez
Dominick Contreras	Ivy Tran				

102 *Med Tac Bystander Rescue Care*

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## Recovery: Long Haulers, Loss, and Caregivers

### A Survive & Thrive Guide™

**PACS**  
Post-Acute COVID-19 Syndrome

**MIS-C**  
Multisystem Inflammatory Syndrome in Children

**MIS-A**  
Multisystem Inflammatory Syndrome in Children

*Recovery*

*Readiness* *Response* *Resilience* *Rescue*

**Safety Plan**

*Recovery*

*103* *Med Tac Bystander Rescue Care*

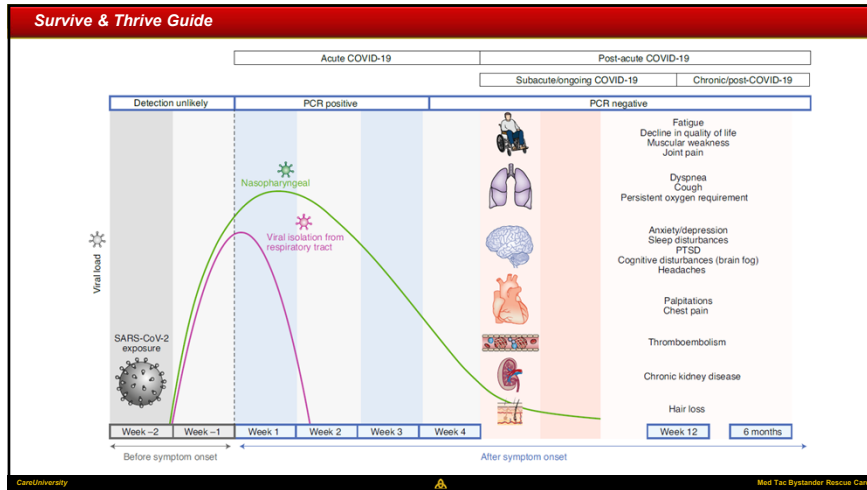
**Survive & Thrive Guide**

**Post-acute COVID-19 syndrome**

The graph plots 'Viral load' on the y-axis against time on the x-axis. It shows 'SARS-CoV-2 exposure' at Week -2, followed by 'Detection unlikely' until Week -1. At Week -1, 'PCR positive' begins. Symptoms like 'Nasopharyngeal' and 'Viral reactivation from respiratory tract' are shown peaking around Week 1. The graph is divided into 'Acute COVID-19' (Weeks 1-4), 'Subacute/lingering COVID-19', and 'Chronic/post-COVID-19' (Week 12 and 6 months). Symptoms listed include fatigue, decline in quality of life, muscle weakness, joint pain, dyspnea, cough, persistent oxygen requirement, anxiety/depression, sleep disturbances, PTSD, cognitive disturbances, papulations, chest pain, thromboembolism, and chronic kidney disease.

<https://doi.org/10.1038/s41591-021-01283-z>

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**Survive & Thrive Guide**

**Post-acute COVID-19 syndrome**

nature medicine

Multidisciplinary collaboration is essential to provide integrated outpatient care to survivors of acute COVID-19 in COVID-19 clinics. Depending on resources, prioritization may be considered for those at high risk for post-acute COVID-19, defined as those with severe illness during acute COVID-19 and/or requirement for care in an ICU, advanced age and the presence of organ comorbidities (pre-existing respiratory disease, obesity, diabetes, hypertension, chronic cardiovascular disease, chronic kidney disease, post-organ transplant or active cancer). The pulmonary/ cardiovascular management plan was adapted from a guidance document for patients hospitalized with COVID-19 pneumonia<sup>76</sup>. HRCT, high-resolution computed tomography; PE, pulmonary embolism.

<https://doi.org/10.1038/s41591-021-01283-z>

**MED TAC** Global **Coronavirus Care Community of Practice** **Bystander Rescue Care CareUniversity Series**

**Vaccines, Variants, and The Road to Victory: A Survive & Thrive Guide™**

**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

**Fight the Good Fight**  
**Finish the Race**  
**Keep the Faith**

# Additional Resources and Slides from Videos

Rescue →

**Rescue → Family Plan Checklist**

**Awareness**

- ☐ **Family Rescue Scenario Awareness:** Members need to be aware of "rescue scenarios" and what the CDC describes as "emergency warning signs":
  - **Trouble breathing**
  - **Persistent pain or pressure in the chest**
  - **New confusion**
  - **Inability to wake or stay awake**
  - **Bluish lips or face**
- ☐ **Rescue Knowledge - 4 P's:** Family members are aware of how to be prepared, prevent medical errors, protect loved ones, and learn performance improvement from caregivers.

**Accountability**

- ☐ **Rescue Task Accountability Reinforced:** Everyone needs to know what, when, why, and how to respond when someone develops the CDC emergency warning signs.
- ☐ **Rescue Task Completion Log:** These recorded lifesaving tasks are vital to professional caregivers.

**Ability**

- ☐ **Rescue Skills:** Care of an infected family member in isolation requires safe use of PPE, safe transportation, and protecting family members.
- ☐ **Rescue Resources:** Staff, supplies, space, and financial resources vital. Staff include family members and service providers. Adequate funding, PPE supplies, and disinfection resources are critical.

**Action**

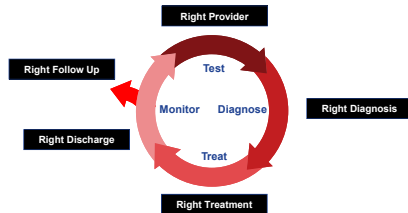
- ☐ **Follow the Plan for the Family Member Scenario:** Specific checklists for each scenario needs to be followed. The most important issue is that patients will have to be admitted to hospital alone.
  - ☐ **Infected & Severely Symptomatic – Need Help:** Emergency Sign recognition, safe transportation, safe communication with Caregivers are critical. See SBAR for Patients Communication Tool.
  - ☐ **Infected Requiring Hospitalization:** Communication with Hospital Caregivers will have to be by phone or mobile web device. Briefings with family members is ideal through one family member.
  - ☐ **Infected & Require ICU Life Support Respiator & ECMO:** The seriousness of the situation should be communicated to the family members.

Family Member Scenarios	Care of loved on with severe symptoms.
No Exposure No Test or Negative Test	Know the triggers for emergency care. Have med records ready for family
Exposure to Infected Person and No Test	Know the triggers for emergency care. Have med records ready for family
Infected & Asymptomatic – No Symptoms Ever	Watch for the signs and symptoms triggering seeking emergency care.
Infected & Pre-symptomatic – Before Symptoms	Watch for the signs and symptoms triggering seeking emergency care.
Infected & Symptomatic – Have Symptoms	Watch for the signs and symptoms triggering seeking emergency care.
Infected & Severely Symptomatic – Need Help	Seek emergency care immediately. Have medical records and medications for ED care providers.
Infected & Requiring Hospitalization	Watch for triggers for emergency care of other family members who may get sick.
Infected & Require ICU Life Support Respiator & ECMO	Watch for symptom triggers requiring emergency care visit if others in family get sick.

CardUniversity

Med Tac Bystander Rescue Care

## The 5 Rights of Emergency Care™



**Right Provider:** Patients and families need to choose the best emergency care provider they will use prior to experiencing an emergency.

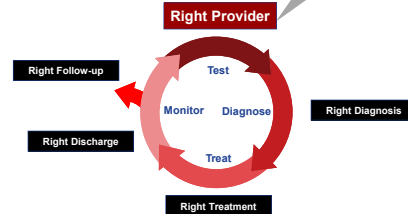
**Right Diagnosis:** The right diagnosis depends on information – make sure to help the emergency care providers with all of the information you have to help them.

**Right Treatment:** It is important to understand both the short-term implications of emergency care as well as the long-term implications. An emergency medicine visit is a snapshot in time.

**Right Discharge:** A critical area for safety is the discharge from the Emergency Department. The information shared with the patient and family will have a major impact on the outcome of care. We need to understand why we may need to come back for care.

**Right Follow-up:** The continuity of care after an Emergency Medicine visit is very important to the long-term outcome of the care received. The breakdown in follow up is often an area of safety risk.

## The 5 Rights of Emergency Care™



**Right Provider:** Patients and families need to choose the best emergency care provider they will use prior to experiencing an emergency.

- **Choose RIGHT Emergency Care Provider:** The one that already has your records, especially for complex issues
- **Your Choices:** Urgent Care, Community Hospital, Specialty Center – Pediatric, CA, Stroke Center Trauma Center...if you have a choice.
- **Bigger Centers – Bigger Problems:** when in doubt with serious problems the larger more comprehensive center may be best.
- **ICE – In Case of Emergency:** Make sure to always have your In Case of Emergency (ICE) contact in your wallet and on phone. First responders will look for it if you are in an accident.



## The 5 Rights of Emergency Care™

**Right Diagnosis:** The right diagnosis depends on information – make sure to help the emergency care providers with all of the information you have to help them.

- **Bring Your Medical Records:** your prior hospital records and summaries of the latest care if you have them.
- **Bring your Care Plan** if you have one.
- **Bring Medications:** your actual medications in a bag and be prepared to describe how you take them.
- **Imaging Studies & Reports:** If you have imaging studies on disc which can prevent you from getting other studies.
- **Tests & Diagnosis:** Understand the tests the findings of the tests.

Source: Denham, CR

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## The 5 Rights of Emergency Care™

- **Treatment of Short-term Symptoms and of Long-term Conditions:** Procedures, medications, and new behaviors you need to maintain should be understood for the short-term and long-term timeframes.
- **Shared Decision Making:** Understand the treatment and decide together
- **Risks and Benefits:** Understand the risks and the benefits of proposed treatment.
- **Hospital Admissions:** Understand why you might be admitted for care in the hospital versus what would be required for care at home.

**Right Treatment:** It is important to understand both the short-term implications of emergency care as well as the long-term implications. An emergency medicine visit is a snapshot in time.

Source: Denham, CR

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## The 5 Rights of Emergency Care™

- **Return Precautions:** Understanding when to come back to ED — signs and symptoms to return. Care is never over during the visit. This is a vital safety area and we often wait too long before returning.
- **Understanding What Happened:** The Medical Problem, Diagnosis, and Treatment must be understood to make sure to have long-term results.
- **Medication Reconciliation:** The stops, adds, and changes in medications must be understood.
- **Records Reconciliation:** Assembling and summarizing the latest records are vital.
- **Care Plan:** Wound care, diet, and special instructions need to be understood.
- **Get the Records:** All of the records of the visit including imaging should be obtained and maintained at home – even if releases are required and in the following days to get the records.

**Right Discharge:** A critical area for safety is the discharge from the Emergency Department. The information shared with the patient and family will have a major impact on the outcome of care. We need to understand why we may need to come back for care.

Source: Denham, CR; McDowell, GM CareUniversity CME Program

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## The 5 Rights of Emergency Care™

**Right Follow-up:** The continuity of care after an Emergency Medicine visit is very important to the long-term outcome of the care received. The breakdown in follow up is often an area of safety risk.

- **WHO, about WHAT, and WHEN:** In follow up we need to understand who we need to see as a caregiver, about what issues, and when we need to see them.
- **Update Your Records:** You will want to update your home records with the follow up visit records for future reference.
- **See New Caregivers:** You may need to see a new doctor and the records from primary care, ED visit, medications lists, and imaging studies will all be important.

Source: Denham,

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**Survive & Thrive Guide: Protecting Your Family**

**Hot-Warm-Safe Zone Practices**

**Hot Zone**  
Public & Work Exposure

**Warm Zone**  
Disinfection Area

**Safe Zone**  
Home with Family

**Maintain Best Protection**

- Social Distancing
- Masks
- Hand Hygiene
- Clean Hi-Contact Surfaces

**Disinfection & Storage**

- Considered Contaminated
- Maintain PPE
- Disinfect Fresh Person
- Disinfect PPE
- Separate Laundry
- Clean Surfaces

**Maintain Zone Virus Free**

- Disinfection Stations at doors of Warm Zones
- Clean Contact Surfaces
- Maintain Ventilation
- Manage Isolation, Quarantine, and Senior Care

**Hot Zone**  
Public & Work Exposure

**Hot WARM-SAFE ZONE PRACTICES**

- Social Distance – 6 Feet is a MINIMUM
- Handwashing is poor even in caregivers – 20 sec
- Avoid Poorly Ventilated Spaces
- Don't Touch Face Masks or the Face
- Be gracious but firm when others invade your space
- It is critical to know how to put on and take off Personal Protective Equipment (PPE). Called "Don and Doff" in healthcare jargon.
- Whenever in doubt, wash your hands.
- Know the process for reporting outbreaks.
- "Exposure to Infected" is being within 6 FEET OF INFECTED FOR LONGER THAN 15 MINUTES.

**Maintain Best Protection**

- Social Distancing
- Masks
- Hand Hygiene
- Clean Hi-Contact Surfaces

---

**Hot-Warm-Safe Zone Practices**

**WARM ZONE**  
Leaving Hot Zone Practices

- Disinfect before getting in car.
- Contain Contaminated Materials
- Wipe Down Car Door Handles and contact surfaces if car is warm zone.
- If Car is WARM ZONE: It must be considered contaminated.
- Be ready to store contaminated gear in your car if you must.

**WARM ZONE**  
Joining Hot Zone Practices

- Assure your mask has good fit.
- Practice no mask or face touching
- If contaminated – wash hands.
- Know the rules of the workplace or public venue.

**WARM ZONE**  
Disinfection Area

**SAFE ZONE PRACTICES**

- Establish and maintain disinfection stations at doors.
- Regularly clean high contact surfaces.
- Prevent people or parcels from bringing the virus home.
- If possible, keep rooms well ventilated.

**Care of Someone At Home**

- Getting your "MacGyver On" – Use what you have.
- Whether the flu or Coronavirus – use same processes.
- Isolation is for all those who are infected or sick.
- The infected NEED to wear masks. Social distance and hand hygiene are important. Surfaces ARE a risk.
- Quarantine is for who may be infected – assume infected until end of quarantine period or test negative.

**Safe Zone**  
Home with Family

**Maintain Zone Virus Free**

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- If contaminated – wash hands.
- Know the rules of the workplace or public venue.

**Warm Zone**  
Disinfection Area

**WARM ZONE**  
**Coming Home Practices**

- Designate WARM ZONE room or space for disinfecting.
- Assemble & Maintain Disinfection Station with cleaning supplies.
- Keep the family out of WARM ZONE
- Increase precautions if someone is in quarantine or isolation.

**WARM ZONE**  
**Leaving Home Practices**

- New or Cleaned masks, gloves, face shields and coverings.
- Bring disinfectants in your car or your gear.
- Bring extra masks if you have them.

**Survive & Thrive Guide: Protecting Your Family**

**Hot-Warm-Safe Zone Practices**

**SAFE ZONE PRACTICES**

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Home with Family

**Maintain Zone Virus Free**

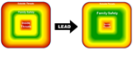
- Disinfection Stations at doors of Warm Zones
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### Survive & Thrive Guide: Protecting Your Family

**Keeping Our Kids Safe...by Keeping the Unit Family Safe**



**Reduce Family Vulnerability**



**STEP 1: Identify Each Family Member's Threat Profile**

- Family living together and those in direct contact.
- Identify threats due to age, underlying conditions, and outside threats related to region and living conditions.

**STEP 2: Identify and Follow Local Coronavirus Threats**

- Local Community Infection Factors, trends, and public health guidelines will drive your behaviors and plans.
- Understand the public health processes in place where the family members will work, learn, play, and pray.

**STEP 3: Develop a Family Safety Plan**

- A leader or leaders of the family act as the CFO – Chief Family Officer who drives the plan: Readiness, Response, Rescue, Recovery, and Resilience.

**STEP 4: Plan the Flight and Fly the Plan**

- The novel Coronavirus virus science, threats, vulnerabilities, and therefore the family risk changes continuously. Every airplane flight plan is modified along the route – so will your family safety plan.

**Survive & Thrive Guide: Protecting Your Family**

**STEP 2: Identify and Follow Local Coronavirus Threats**

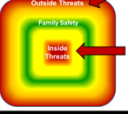
**Outside Threats:**

- High Background Community Infection or Traveling with more infections.
- Schools without proper Test, Trace, Treat, Isolate, and Quarantine Programs.
- Group Activities and Sports without Proper Prevention, Social Distancing, etc.

**Inside Threats:**

- Lack of Mask Use by all exposed to family.
- Community without adequate public health services including Test, Trace, Treat, Isolate, and Quarantine Programs.
- Critical Essential Infrastructure Worker Exposure bringing virus home to family.

**Family Safety**



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**Survive & Thrive Guide: Protecting Your Family**

**STEP 1: Identify Each Family Member Threat Profile**

**Understanding the Threats, Vulnerability, and Risk of Harm to our Children**



**Family Unit Threat Profile:**

**Outside Threats from Coronavirus**

- Threats, Vulnerability, and Risk from the outside environment for each individual family member for being infected, harmed, and death.
- Threats, Vulnerability, and Risk of current behaviors.

**Inside Threats to Family - Home and Community**

- Threats, Vulnerability, and Risk for each family member unique to them for being infected, harmed, and death.
- Threats, Vulnerability, and Risk of current behaviors within the home and living spaces.


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**Family Health Safety Plan**

Readiness → Response → Recovery


Protective → Supportive → Resilient

Family Safety




### Keeping Our Kids Safe: Steps 1-4

## Keeping Our Kids Safe...by Keeping the Unit Family Safe




**Reduce Family Vulnerability**


→ LEAD →


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