

Coronavirus Care

Community of Practice

Bystander Rescue Care

CareUniversity Series

The Essential Worker Toolbox

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Med Tac Bystander Rescue Care

Essential Worker Toolbox:

1. Vaccines – Take the Shots
2. Coming Home Safe
3. Keeping the Family Safe
4. Creating a Family Safety Plan
5. Practicing the Family Safety Plan
6. Providing Care at Home
7. Emergency Rescue Skills
8. What to Do – They're in ICU
9. Long Haulers & COVID Recovery
10. The 4 P's at the New Normal

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Med Tac Bystander Rescue Care



Teens, College Students, and Young Adults

An Infection Every Second... A Death Every 2 Minutes



A 13-year-old Missouri boy's on quarantine and last day of school was in late October. He died from Covid-19 days later




A 20-year-old dies on quarantine in her dorm room of pulmonary embolism. Test result "never delivered due to clerical error".

CarrollUniversity Med Tac Bystander Rescue Care


Survive & Thrive Guide: Protecting Your Family

Who is Your CHSO & Family CFO?


PUBLIC HEALTH OFFICERS



THE CHIEF HEALTH SECURITY OFFICER



THE CFO CHIEF FAMILY OFFICER




THEY HAVE TO TAKE CHARGE NOW!

Source: C Denham

CarrollUniversity Med Tac Bystander Rescue Care

Family Safety Plan



Readiness → **Response** → **Rescue** → **Recovery** → **Resilience**

Family Member Scenarios
No Exposure No Test or Negative Test
Exposure to Infected Person and No Test
Infected & Asymptomatic – No Symptoms Ever
Infected & Pre-symptomatic – Before Symptoms

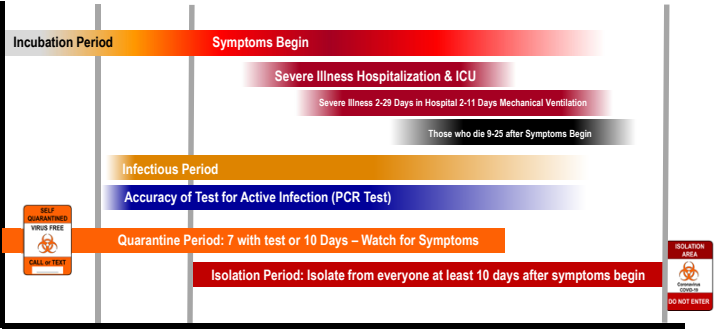
Every family or living unit needs to have a plan for each of these scenarios. They will drive the elements of your plan.

Infected & Symptomatic – Have Symptoms
Infected & Severely Symptomatic – Need Help
Infected & Requiring Hospitalization
Infected & Require ICU Life Support Respirator & ECMO

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Survive & Thrive Guide

COVID-19 Infection Timeline



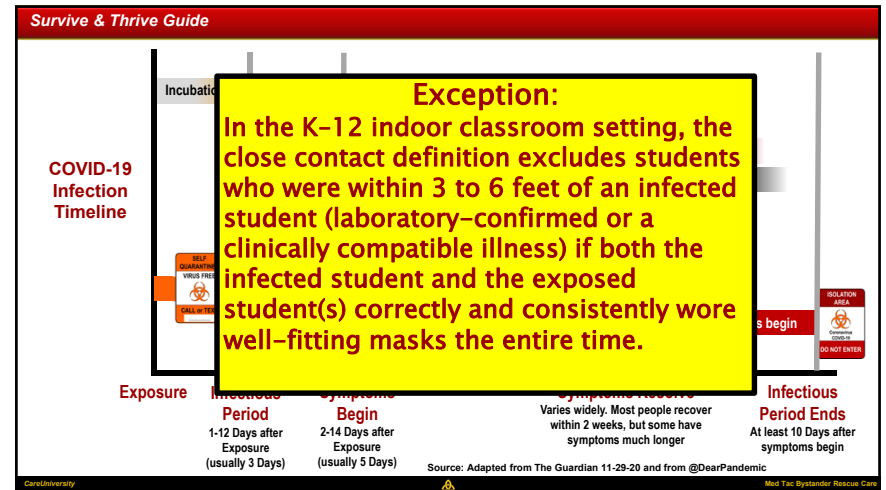
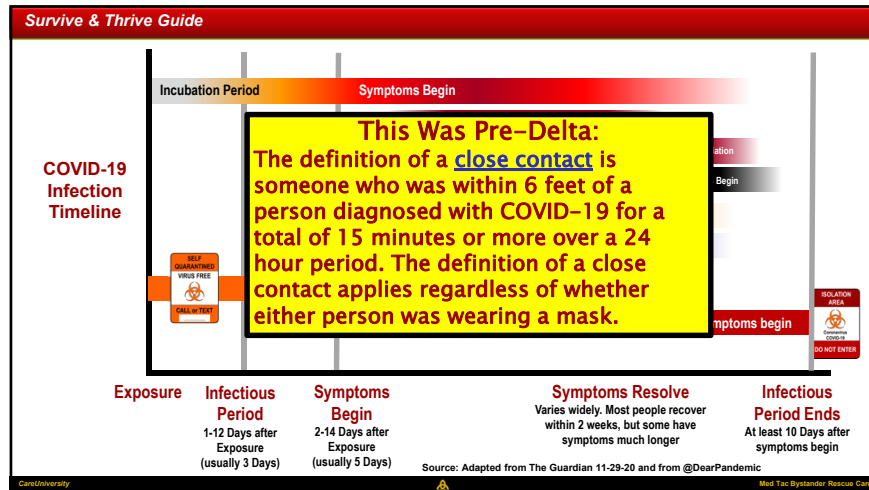
Exposure | **Infectious Period** (1-12 Days after Exposure, usually 3 Days) | **Symptoms Begin** (2-14 Days after Exposure, usually 5 Days) | **Symptoms Resolve** (Varies widely, most people recover within 2 weeks) | **Infectious Period Ends** (At least 10 Days after symptoms begin)

Key Events:

- Incubation Period:** Severe Illness Hospitalization & ICU; Severe Illness 2-29 Days in Hospital 2-11 Days Mechanical Ventilation; Those who die 9-25 after Symptoms Begin
- Infectious Period:** Accuracy of Test for Active Infection (PCR Test)
- Quarantine Period:** 7 with test or 10 Days – Watch for Symptoms
- Isolation Period:** Isolate from everyone at least 10 days after symptoms begin

Source: Adapted from The Guardian 11-29-20 and from @DearPandemic

CarrollUniversity Med Tac Bystander Rescue Care



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

CORONAVIRUS DISEASE 2019 (COVID-19)

Domestic Travel
RECOMMENDATIONS AND REQUIREMENTS

	Not Vaccinated	Fully Vaccinated
Get tested 1-3 days before travel	✓	
Get tested 3-5 days after travel and self-quarantine for 7 days. Self-quarantine for 10 days if you don't get tested.	✓	
Self-monitor for symptoms	✓	✓
Wear a mask and take other precautions during travel	✓	✓

cdc.gov/coronavirus

CS23315-A (04/02/2021)


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

Welcome

Charles Denham, MD
Chairman, TMIT Global
Founder Med Tac Bystander Rescue Care
Med Tac Bystander Rescue Care
August 5, 2021
CareUniversity Webinar 169




www.MedTacGlobal.org



Coronavirus Care

Community of Practice

Bystander Rescue Care

CareUniversity Series

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

- John Christian Fox MD has nothing to disclose.
- Christopher Peabody MD has nothing to disclose.
- Gregory H. Botz, MD, FCCM, has nothing to disclose.
- William Adcox has nothing to disclose.
- Jennifer Dingman has nothing to disclose.
- Paul Cross has nothing to disclose.
- Randy Styner has nothing to disclose.
- Heather Foster has nothing to disclose.
- David Beshk has nothing to disclose.
- Paul Bhatia has nothing to disclose.
- David Morris 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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EMERGING THREATS

COMMUNITY OF PRACTICE




Our Purpose, Mission, and Values

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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Coronavirus Care

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Bystander Rescue Care

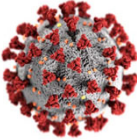
CareUniversity Series

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**

Bystander Rescue Care
CareUniversity Series

Speakers & Reactors

 Jennifer Dingman	 William Adcox	 Paul Cross	 Randy Styner	 Dr. Gregory Botz	 Heather Foster RN
 Charlie Denham III	 Dr. C Peabody	 David Morris	 Jaime Yrastorza	 Paul Bhatia EMT	 David Beshk
 Dr. C Denham					

Essential Critical Workforce Infrastructure

**Educators
Declared
Essential Critical
Infrastructure
Workers**

Essential Critical Infrastructure Workers

Educators

Chemical

Communications

Healthcare & Public Health

Transportation Systems

Information Technology

Water

Nuclear Reactors, Materials & Waste

Government Facilities

Financial

Emergency Services

Defense Industrial Base

Energy

Dams

Critical Manufacturing

Commercial Facilities

Food & Agriculture

High Impact Care Hazards to Patients, Students, and Employees



Med Tac System Rescuer Course

This course is designed to provide students with the knowledge and skills necessary to become competent in the use of the Med Tac System Rescuer. The course covers the following topics:

- History of the Med Tac System Rescuer
- The Med Tac System Rescuer's components and parts
- The Med Tac System Rescuer's operation and use
- The Med Tac System Rescuer's maintenance and repair
- The Med Tac System Rescuer's safety features
- The Med Tac System Rescuer's performance and testing
- The Med Tac System Rescuer's application and use in various environments
- The Med Tac System Rescuer's future development and improvements

Video Library

Med Tac Liveable Tools
About a New Program
A History of Emergency Triage
Emergency Triage Program
An Introduction to the Program
A History of the Program
A History & Evolution of the Program
About Med Tac Products



The Battle Against Falls to Rescue

The Med Tac System Rescuer is a life-saving device that can be used to rescue anyone who falls from a height. It is a portable, lightweight, and easy-to-use device that can be deployed in seconds. The Med Tac System Rescuer is made of strong, durable materials and is designed to withstand the most demanding conditions. It is a must-have for any organization that has workers at heights.



Key Features:

- Portable and Lightweight
- Easy to Deploy
- Strong and Durable
- Lightweight and Easy to Carry
- Quick Deployment
- Simple Operation
- Reliable Performance
- Long Life Span
- Low Maintenance
- Cost Effective
- Safe and Secure
- Easy to Store
- Compact Design
- Lightweight Construction
- Easy to Assemble
- Quick Deployment
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High Impact Care Hazards to Patients, Students, and Employees

Active Shooter
Healthcare Article

Rapid Response
Teams Article

AED & Bleeding
Control Gear Article

Family Safety
Plan Article

Cardiac Arrest

Choking & Drowning

Opioid Overdose

Anaphylaxis

Major Trauma

Infections

Transportation Accidents

Bullying

Med Tac
Story 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.

Take the Shot...
Save a Life



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Med Tac Bystander Rescue Card



Coronavirus Care Community of Practice


September 2021 Progress Report

www.medtacglobal.org/coronavirus-response/

Coronavirus Care Results

- Established National Community of Practice
- Launched Multi-center Family R&D Study – 1,000 Polled
- 34 Ninety Minute Broadcasts and Online Programs
- 13 *Survive & Thrive Family Training* Programs
- Produced a National Campus Safety Summit
- Published Multiple Articles Providing Guidance
- Established Student Led College & Alumni Programs
- Delivered Free Continuing Education for Caregivers
- Short Videos for Mobile Viewing
- Rapid Response to Family Gatherings
- National Vaccine Hesitancy Student Outreach
- Smart Phone Mobile Applications



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

Short Video Topics

Masks: Filter, Fit, and Finish

- Hand Washing & Disinfecting Surfaces
- Clean High Contact Surfaces
- Building a FAMILY SAFETY PLAN
- If not REED Emergency Care
- Why N95, Respirators, and AHEC
- Family Labeled Program
- Vaccination Conversation

SHORT TOPIC:

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

Survive & Thrive Guide Program Road Map

SURVIVE & THRIVE 90 MINUTE COURSES:

- Longer more detailed
- Webinar Recordings
- Technical Information

Related Resources

Care of the At Risk & Seniors at Home

www.medtacglobal.org/coronavirus-response/

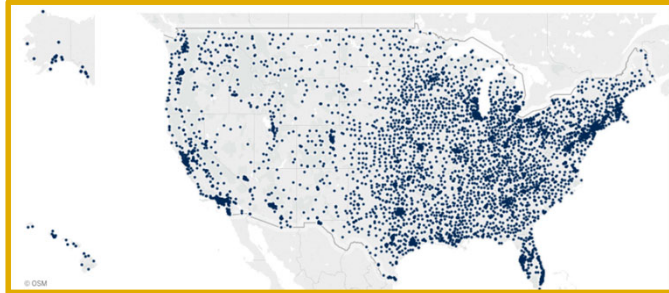
Survive & Thrive Guide Program Road Map

Survive & Thrive Guide Series: Coming Home Safety	Keeping Our Kids Safe	Creating Your Family Safety Plan	Safety Plan Templates for Everyone
Providing Care at Home	Your 2021 Family Safety Plan	Emergency Rescue Skills	What To Do – They're in the ICU
Vaccines, Variants, and Victory	Long Haulers & Severe COVID Recovery	10 Best Practices for Reopening	The New Normal & The 4 P's

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TMIT Global Research Test Bed

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



500 Subject Matter Experts



Coronavirus Care Community of Practice

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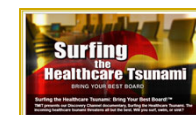


Coronavirus Care Community of Practice

Bystander Rescue Care CareUniversity Series



Contributions Through Segments of our Discovery Channel Documentaries



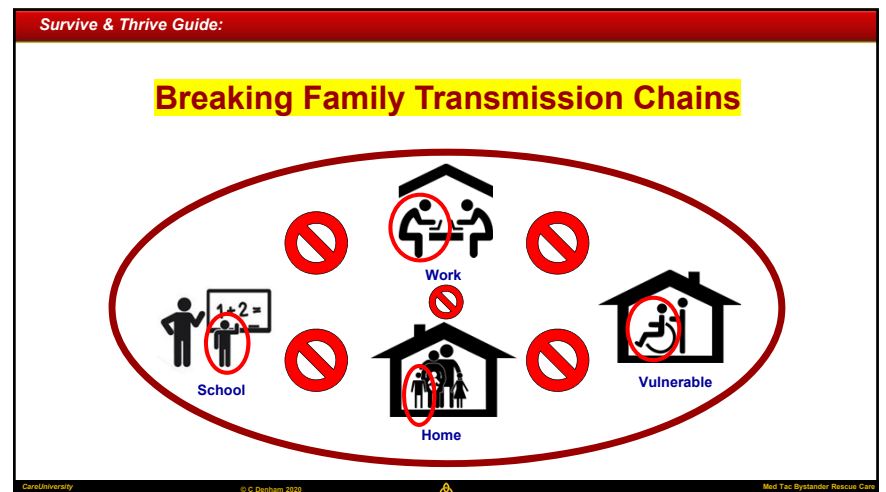
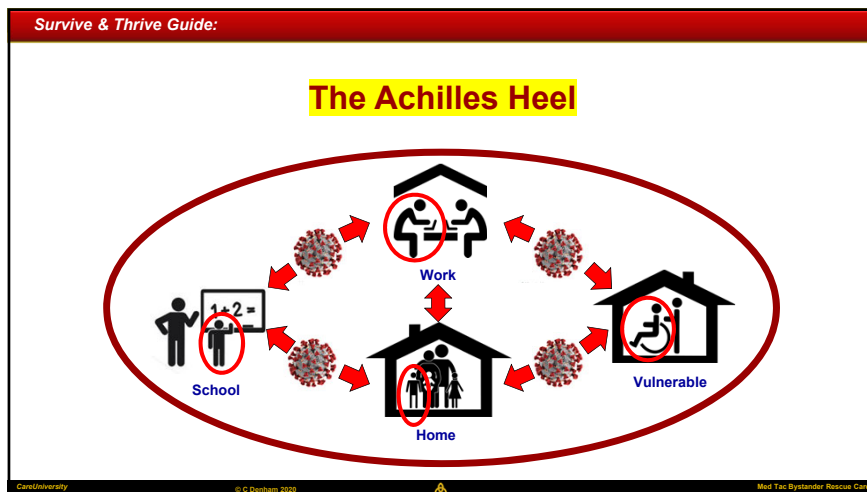
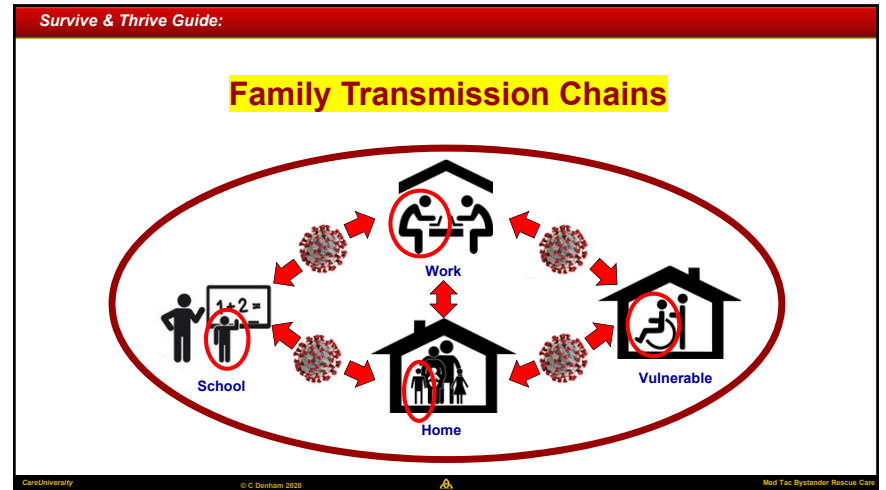
Family Rescue R&D

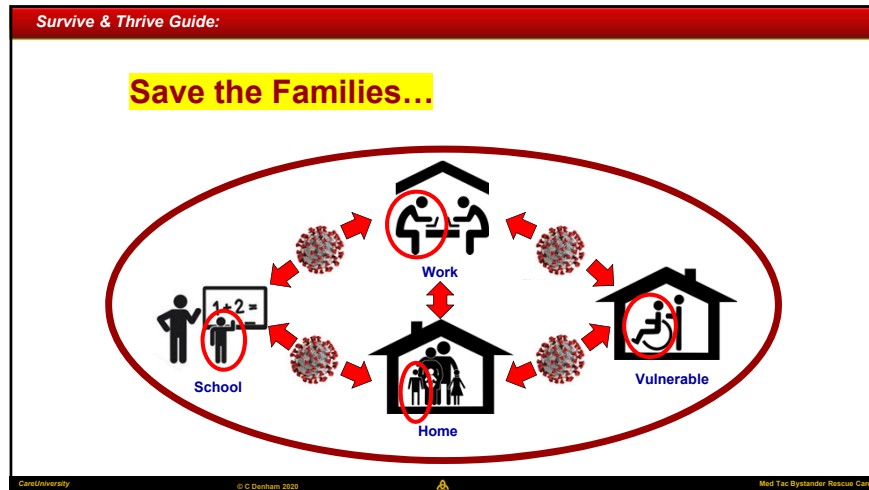
The 5 R's of Safety

Logos of partner institutions:

- THE UNIVERSITY OF TEXAS MDAnderson Cancer Center
- Stanford University
- UCSF University of California San Francisco
- UF UNIVERSITY of FLORIDA
- MAYO CLINIC
- HARVARD UNIVERSITY
- UCI
- UT Southwestern Medical Center
- USC University of Southern California

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In the News

Charles Denham, MD
 Chairman, TMIT Global
 Founder Med Tac Bystander Rescue Care
 Med Tac Bystander Rescue Care
 September 2, 2021
 CareUniversity Webinar 169

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WALL STREET JOURNAL
 08-04-21

Florida Battles Record Covid-19 Hospitalizations, as Delta Variant Surges

"This is putting 25-year-olds in the hospital, in intensive care and on ventilators,"

The Wall Street Journal video describes the reasons why the Delta virus is such a serious health concern.

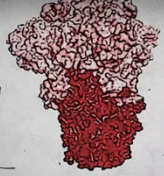
Source: www.wsj.com/articles/florida-battles-record-covid-19-hospitalizations-as-delta-variant-surges-11628027994

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WALL STREET JOURNAL
08-04-21

The Science Behind Why the Delta Variant Is Spreading Covid-19 Faster

SPIKE PROTEIN



Source: www.wsj.com/articles/florida-battles-record-covid-19-hospitalizations-as-delta-variant-surges-11628027994

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Global COVID Deaths

CIDRAP Center for Infectious Disease Research and Policy

News & Perspective Infectious Disease Topics Antimicrobial Stewardship Ongoing Programs About Us **DONATE NOW**

TRENDING TOPICS COVID-19 Antimicrobial Stewardship Ebola Chronic Wasting Disease Resilient Drug Supply

Episode 67: You Can't Run Out the Game Clock

Filed Under: **COVID-19**
Sep 02, 2021

Osterholm Update: COVID-19 Episode 67: You Can't Run Out the Game Clock September 2, 2021


In this episode, Dr. Osterholm and host Chris Dall discuss the state of the pandemic in the US and abroad, evolving data on vaccines and their effectiveness, and schools in the age of Delta.

Email your questions: OsterholmUpdate@umn.edu

Listen to the standalone version of Mike's interview w

Browse the podcast and CIDRAP **merchandise store**

This podcast is available on Apple Podcasts, Spotify a



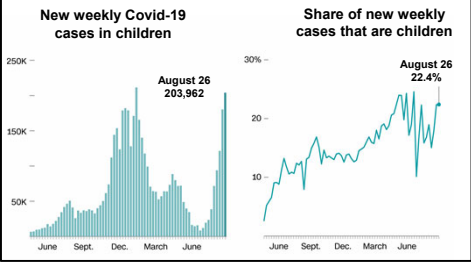
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In The News

CNN

09-01-21

What the data reveals about children and Covid-19 in the US



Source: <https://www.cnn.com/2021/09/01/us/us-covid-kids-data/index.html>

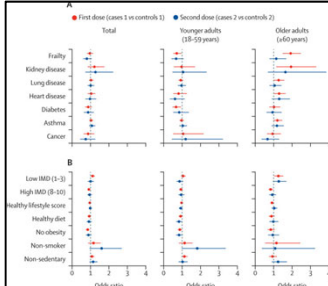
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In The News

THE LANCET Infectious Diseases

09-01-21

Risk factors and disease profile of post-vaccination SARS-CoV-2 infection in UK users of the COVID Symptom Study app: a prospective, community-based, nested, case-control study



We found that the odds of having symptoms for 28 days or more after post-vaccination infection were approximately halved by having two vaccine doses. This result suggests that the risk of long COVID is reduced in individuals who have received double vaccination, when additionally considering the already documented reduced risk of infection overall.

Source: [https://www.thelancet.com/journals/laninf/article/PIIS1473-3099\(21\)00460-6/fulltext](https://www.thelancet.com/journals/laninf/article/PIIS1473-3099(21)00460-6/fulltext)

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Corporate Health Security Systems

Corporate Care

COVID Impact on Direct Healthcare Cost

- Business Disruption
- Absenteeism
- Presenteeism
- Cost of Turnover
- Healthcare Costs

- Growth of 8.4% 2020-2021
- Insurers stop waiving cost sharing
- COVID Care Cost is Significant
- Long COVID is a Time Bomb**

Largest Long-term Study of COVID Patients

- More than 2/3 have symptoms at 6 months
- Almost half have symptoms at 12 months
- Most common symptom fatigue
- Almost 1/3rd have breathing difficulty at 12 months
- 20% of non-hospitalized patients persist with symptoms

Corporate Health Security Systems

Corporate Care

Survive & Thrive Corporate Solutions™

The COVID Tsunami is a lethal threat to business... yet it's an enormous opportunity for those who leverage the wave.

The surfers will make things happen, the swimmers watch things happen, the sinkers will drown and wonder what happened. Catch the wave with our *Survive & Thrive Corporate Solutions*.

Our service offerings range from the most basic Employee Safety Training to End-to-End Corporate Solutions with continually updated tactics to maximize your success.

THE CHIEF HEALTH SECURITY OFFICER

THEY HAVE TO TAKE CHARGE NOW!

Our programs are built on 35 years of national experience of turning science into safety. We draw on the experience of a network of hundreds of medical and business experts.

Choices – Act, Delay, or Deny

Act Now: You can seize the moment and take the path that is faster, better, and cheaper to successfully come through the crisis and succeed. The surfers of the COVID wave will make things happen in their sectors and lead out of the crisis. There will be more surges.

Why, Why Now, and Why this Program?

- An Achilles Heel - Family Transmission Chains**

If you save the family, you save the worker. If you save the worker – you save the business. Your employees are your greatest asset. They will be the source of your success. Why act? By investing in this program and lead out of the crisis. There will be more surges.

Corporate Health Security Systems

Corporate Care

The Surfers will leverage the wave and make things happen...

The Swimmers will tread water and watch things happen...

And the Sinkers will drown and wonder what happened.

Our service offerings range from the most basic Employee Safety Training to End-to-End Corporate Solutions with continually updated tactics to maximize your success.

Our programs are built on 35 years of national experience of turning science into safety. We draw on the experience of a network of hundreds of medical and business experts.

Why, Why Now, and Why this Program?

- An Achilles Heel - Family Transmission Chains**

If you save the family, you save the worker. If you save the worker – you save the business. Your employees are your greatest asset. They will be the source of your success. Why act? By investing in this program and lead out of the crisis. There will be more surges.

Your Three Choices – Act, Delay, or Deny

- Act Now:** You can seize the moment and take the path that is faster, better, and cheaper to successfully come through the crisis and succeed. The surfers of the COVID wave will make things happen in their sectors and lead out of the crisis. There will be more surges.

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CareUniversity
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Survive & Thrive Guide: Protecting Your Family

Health Security: The Organization & Family Units

PUBLIC HEALTH

**Tradeoffs for Population:
Cost of Doing Business**

VS

ORGANIZATIONAL HEALTH

**Tradeoffs for Business:
Act Delay or Deny**

VS

FAMILY HEALTH

You pay more and do more to spare your family

YOU HAVE TO TAKE CHARGE NOW!

Source: C Denham

Survive & Thrive Guide: Protecting Your Family

Who is Your CHSO?

PUBLIC HEALTH OFFICERS

THE CHIEF HEALTH SECURITY OFFICER

My Job is Organizational Health Security

- Clinical
- Operational
- Financial

THEY HAVE TO TAKE CHARGE NOW!

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Survive & Thrive Guide: Protecting Your Family

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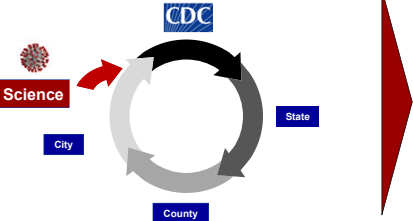
Source: C Denham

CarrollUniversity Med Tac Bystander Rescue Care

Survive & Thrive Guide: Keeping Your Family Safe

The Science is Evolving

Public Health Guidelines

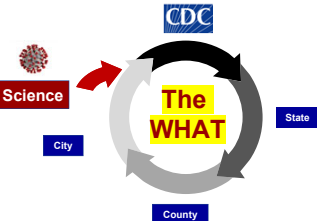


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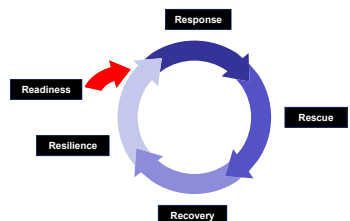
Survive & Thrive Guide: Keeping Your Family Safe

They tell the WHAT....

Public Health Guidelines



Family Safety Plans



CarrollUniversity Med Tac Bystander Rescue Care

Survive & Thrive Guide: Keeping Your Company Safe

They tell the WHAT....We provide the HOW

Public Health Guidelines



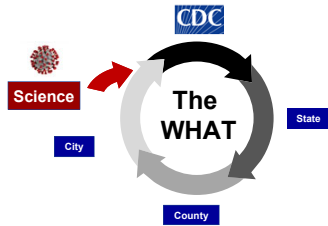
Family Safety Plans



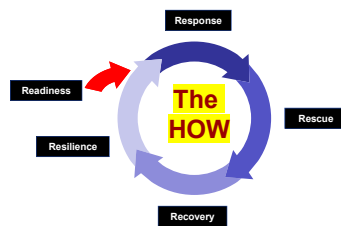
CarrollUniversity Med Tac Bystander Rescue Care

Turn the Science into Safety

Public Health Guidelines

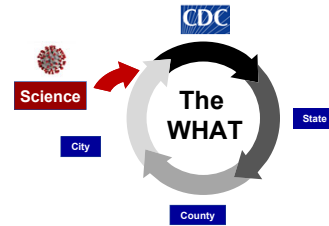


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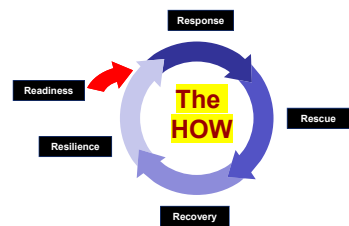


Turn the Safety into Success

Public Health Guidelines



Family Safety Plans



Coronavirus Care
Community of Practice

Bystander Rescue Care
CareUniversity Series

Essential Workers Toolbox Clinical Perspective



Gregory H. Botz, MD, FCCM

Professor of Anesthesiology and Critical Care
UT MD Anderson Cancer Center, Houston, TX
Adjunct Clinical Professor, Department of
Anesthesiology
Stanford University School of Medicine,
Stanford, CA



Heather Foster RN BSN

Frontline Nurse
Infection Prevention Advisor
Patient Safety Advocate
Dolores Colorado



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Essential Workers Toolbox First Responder Perspective



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



Randy Styner
Director Emergency Management
University of California Irvine
Best Selling Author
Scout Leader



**Paul Cross, MBA,
FBINA 194th**
Assistant Chief
The University of Texas
Police at Houston



David M. Morris, PH.D., J.D.
President of Morris & McDaniel, Inc.
Law Enforcement and First
ResponderExpert and Researcher

Turn **Science** into **Safety**

- Business Disruption
- Absenteeism
- Presenteeism
- Cost of Turnover
- Healthcare Costs
- Liability

- Employee Engagement
- Employee Loyalty
- Rapid Rebound
- Customer Safety
- Customer Satisfaction
- Competitive Advantage

Turn **Safety** into **Success**

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Survive & Thrive Program™ Return On Investment

- Business Disruption
- Absenteeism
- Presenteeism
- Cost of Turnover
- Healthcare Costs

COVID Impact on Direct Cost

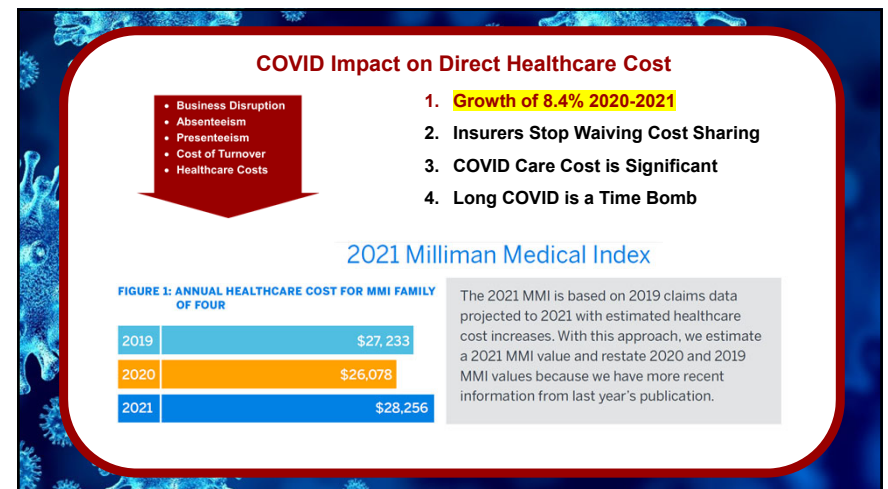
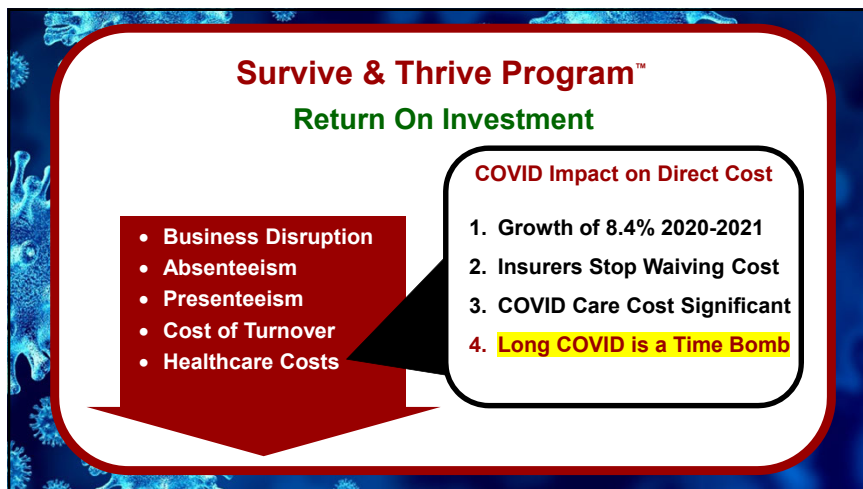
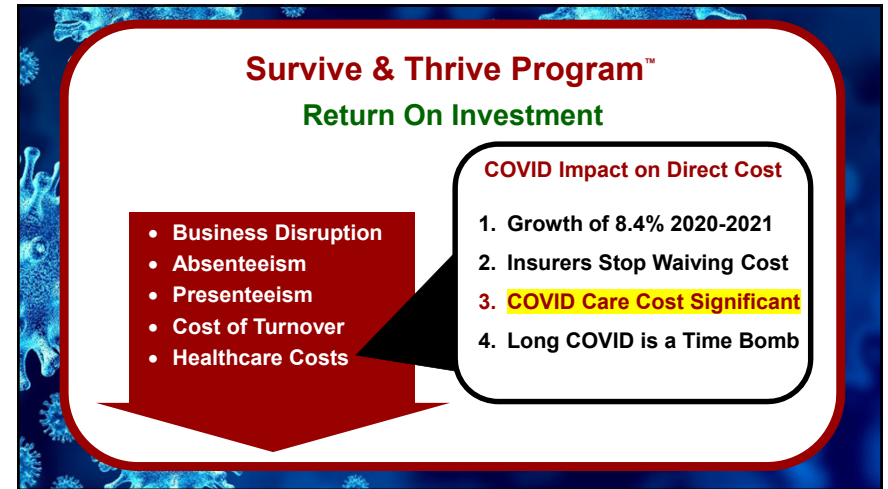
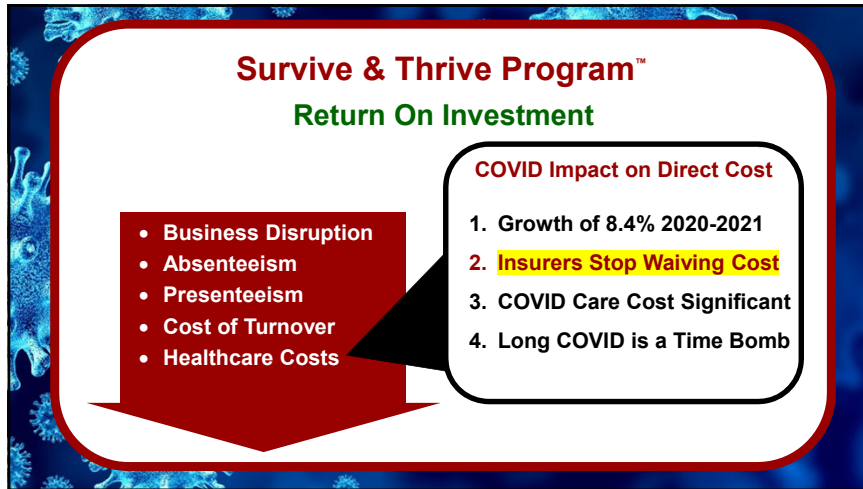
1. Growth of 8.4% 2020-2021
2. Insurers Stop Waiving Cost
3. COVID Care Cost Significant
4. Long COVID is a Time Bomb

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2021 Milliman Medical Index

FIGURE 1: ANNUAL HEALTHCARE COST FOR MMI FAMILY OF FOUR

2019	\$27,233
2020	\$26,078
2021	\$28,256

The 2021 MMI is based on 2019 claims data projected to 2021 with estimated healthcare cost increases. With this approach, we estimate a 2021 MMI value and restate 2020 and 2019 MMI values because we have more recent information from last year's publication.

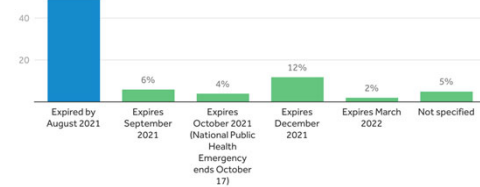
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Nearly 3 out of 4 of Largest Health Plans No Longer Waive Cost Sharing for COVID Care.

Cost Sharing Waivers Expire



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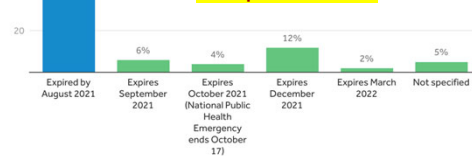
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Q3 Impact Enormous



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FAIRHealth
Consumer

30 Billion
Claims Analyzed

Cost of COVID Hospital Stay

- \$73,300 with no healthcare insurance
- \$38,221 in network cost
- Out of pocket costs to consumers significant

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Delta Airlines Cost Shift

- Declares average cost of COVID hospitalization costs Delta \$50,000.
- Charging each unvaccinated employee \$200 per month to defray the cost.

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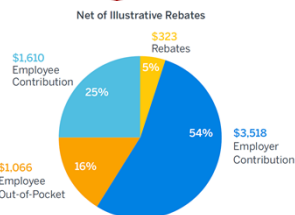
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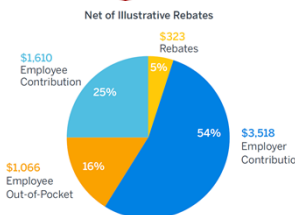
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- Bankruptcy due to medical bills rising
- More than 60% of all bankruptcies
- COVID consumer costs exploding as healthcare payors waiving cost sharing

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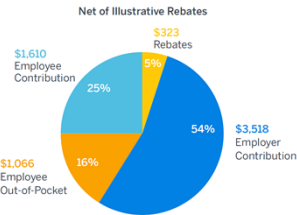
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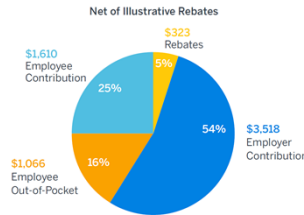
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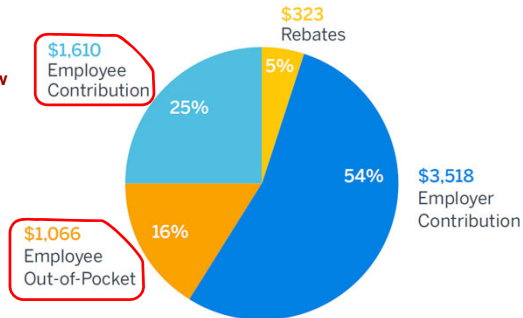
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2021 Direct Healthcare Cost

COVID Impact on future Employee Contribution will grow in years to come

Individual COVID Cost Share of care will greatly increase Out-of-Pocket Costs above average



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Largest Long-term Study of COVID Patients

THE LANCET

TIME

- More than 2/3 have symptoms at 6 months
- Almost half have symptoms at 12 months
- Most common symptom fatigue
- Almost 1/3rd have breathing difficulty at 12 months
- 20% of non-hospitalized patients persist with symptoms

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THE LANCET
TIME

Essential Worker Toolbox:

- Vaccines – Take the Shots
- Coming Home Safe
- Keeping the Family Safe
- Creating a Family Safety Plan
- Practicing the Family Safety Plan
- Providing Care at Home
- Emergency Rescue Skills
- What to Do – They're in ICU
- Long Haulers & COVID Recovery
- The 4 P's at the New Normal

Essential Critical Infrastructure Workers

Diagram showing various sectors: Education, Healthcare, Food & Agriculture, Transportation, Information Technology, Manufacturing, Retail, Energy, Government Services, and Public Safety.

Essential Worker Toolbox

Essential Worker Toolbox:

- Vaccines – Take the Shots**

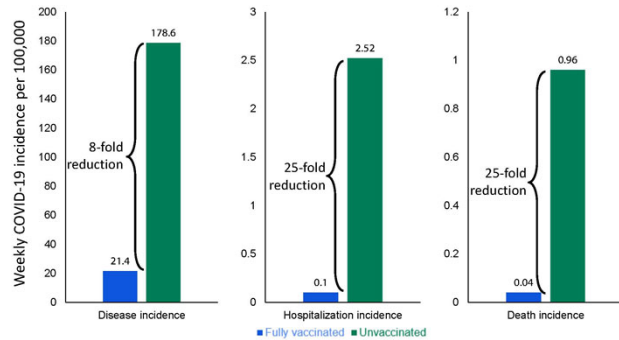
Vaccines: Take the Shots

Vaccination Checklist

Can I: Catch it...Spread it...Get Sick...Get Long Haul?

Vaccination Status	Can I CATCH it?	Can I SPREAD it	Can I GET SICK?	Can I Get LONG HAUL?
Unvaccinated	Yes VERY HIGH RISK	Yes VERY HIGH RISK	Yes VERY HIGH RISK May Get Sicker than Vac.	Yes HIGHER RISK
Vaccinated	Yes but LOWER RISK 3.5 X Reduced Risk	Yes but LOWER RISK	Yes but LOWER RISK 8 X Risk of Symptoms 25 x Risk Hospitalization 25 x Risk of Death	Under Study
Youth 12-17	More than Alpha (UK virus)	More than Alpha Half Adult Spread	More than Alpha	More than Alpha
Children Ages 2-12	Yes LOWER RISK	Yes Under Study	Yes LOW RISK	Yes LOW RISK 8%

Greater risk of disease, hospitalization and death among unvaccinated vs. vaccinated people: National estimates



At current incidence, 35,000 symptomatic infections per week among 162 million vaccinated Americans

Data from COVID Tracker as of July 24, 2021. Average incidence 100 cases per 100,000 persons per week. Vaccine effectiveness against symptomatic illness = 88% (Lopez Bernal et al. [NEJM 2021](#)), where risk is $(1 - VE)$ or 12%. Vaccine effectiveness hospitalization (or death) = 96% (Stowe et al. [BMJ 2021](#)), where risk is $(1 - VE)$ or 4%. Rate in unvaccinated = Community rate $(1 - \text{fully vaccinated coverage}) + (1 - VE) \times \text{fully vaccinated coverage}$. Rate in fully vaccinated = $(1 - VE) \times \text{rate in unvaccinated}$. Fully vaccinated coverage proportions were from COVID Data Tracker as of July 24, 2021 (50% for US).

Vaccination Checklist

Can I Catch it...Spread it...Get Sick...Get Long Haul?

Vaccination Status	Can I CATCH it?
Unvaccinated	Yes VERY HIGH RISK
Vaccinated	Yes but LOWER RISK 3.5 X Reduced Risk
Youth 12-17	More than Alpha (UK virus)
Children Ages 2-12	Yes Under Study

Yes You Can CATCH It
Vaccinated or Not.

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Transmission of Delta variant vs. ancestral strain and other infectious diseases



The New York Times
Original graph from 2/28/2020.

Delta variant is more transmissible than:
- MERS & SARS
- Ebola
- Common cold
- Seasonal flu & 1918 ("Spanish") flu
- Smallpox
Delta variant is as transmissible as:
- Chicken Pox

Note: Average case-fatality rates and transmission numbers are shown. Estimates of case-fatality rates can vary, and numbers for the new coronavirus are preliminary estimates.

Vaccination Checklist

Can I Catch it...Spread it...Get Sick...Get Long Haul?

Vaccination Status	Can I CATCH it?	Can I SPREAD It
Unvaccinated	Yes VERY HIGH RISK	Yes VERY HIGH RISK
Vaccinated	Yes but LOWER RISK 3.5 X Reduced Risk	Yes but LOWER RISK
Youth 12-17	More than Alpha (UK virus)	More than Alpha Half Adult Spread
Children Ages 2-12	Yes Under Study	Yes Under Study

Yes You Can SPREAD It
Vaccinated or Not.

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Vaccination Checklist				
Can I Catch it...Spread it... Get Sick ...Get Long Haul?				
Vaccination Status	Can I CATCH it?	Can I SPREAD It	Can I GET SICK?	Yes You can GET SICK Vaccinated or Not
Unvaccinated	Yes VERY HIGH RISK	Yes VERY HIGH RISK	Yes VERY HIGH RISK May Get Sicker than Vac.	
Vaccinated	Yes but LOWER RISK 3.5 X Reduced Risk	Yes but LOWER RISK	Yes but LOWER RISK 8 X Risk of Symptoms 25 x Risk Hospitalization 25 x Risk of Death	
Youth 12-17	More than Alpha (UK virus)	More than Alpha Half Adult Spread	More than Alpha	
Children Ages 2-12	Yes Under Study	Yes Under Study	Yes LOW RISK	

Vaccination Checklist				
Can I Catch it...Spread it...Get Sick... Get Long Haul?				
Vaccination Status	Can I CATCH it?	Can I SPREAD It	Can I GET SICK?	Can I Get LONG HAUL?
Unvaccinated	Yes VERY HIGH RISK	Yes VERY HIGH RISK	Yes VERY HIGH RISK May Get Sicker	Yes HIGHER RISK
Vaccinated	Yes but 3.5 X R	Yes You can LONG HAUL Vaccinated or Not		Under Study
Youth 12-17	More than Alpha (UK virus)	More than Alpha Half Adult Spread	More than Alpha	More than Alpha
Children Ages 2-12	Yes Under Study	Yes Under Study	Yes LOW RISK	Yes LOW RISK 8%

Take the Shot – Save a Life™

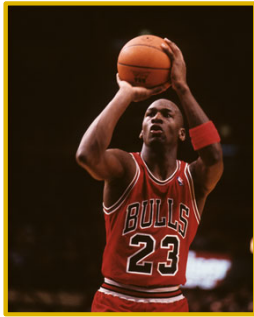




Photo 73861834 © Jerry Coll | Dreamstime.com

The Vaccination Conversation

- Why Vaccinate?
- Why You?
- Why Now?

Masks: Filter, Fit, and Finish

The Vaccination Conversation

Video Tape: < 14 Minutes

<https://www.medtacglobal.org/student-outreach-program/itsconversation/>

**Coronavirus Care
Community of Practice**

**Bystander Rescue Care
CareUniversity Series**

Youth & Young Adult Team

D Contreras EMT
Harvard

Ivy Tran EMT
Harvard

Nick Scheel
UCSB

Sophia McDowell
California Inst. of Arts

Audrey Lam EMT
USC

Jacqueline Botz
Chapman

Luis Licon
UCI Alum

Melanie Rubalcava
UCSD

Charlie Denham III
High School Lead

Charlie Beall
Stanford Alum

Marcus McDowell
U of Cincinnati

Jaime Yrastorza
UCSD Pre-med

Paul Bhatia EMT
UCI Pre-med

D Policichio
NYU Film

Manue Lopez
Berkeley Alum

Preston Head III
UCLA Alum

101
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Family Rescue R&D

The 5 R's of Safety

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Coming Home Safe Tools

Essential Worker Toolbox:

- Vaccines – Take the Shots
- Coming Home Safe**

Coming Home Safe

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Survive & Thrive Guide: Protecting Your Family

CDC Guidelines

Social Distancing

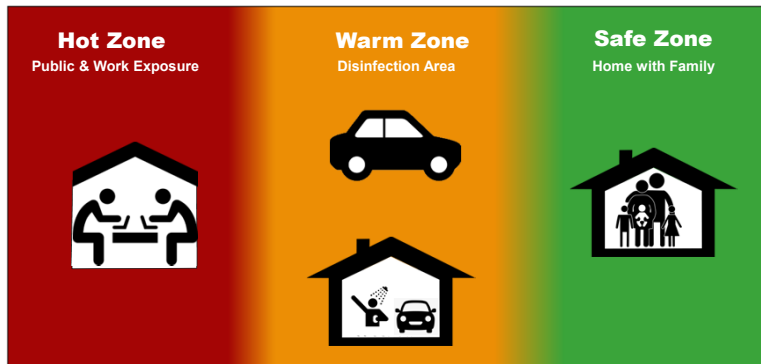
Hand Washing

Disinfecting Surfaces

Use of Masks

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Survive & Thrive Guide Series



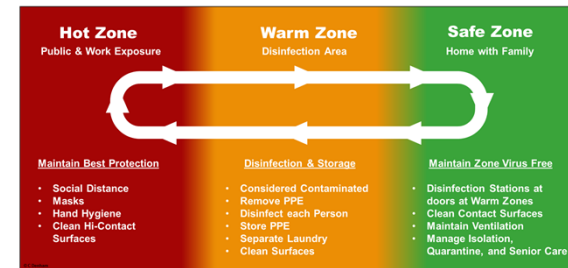
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Coming Home Safely

- How do we keep from bringing the virus home?

Hot-Warm-Safe Zone Practices

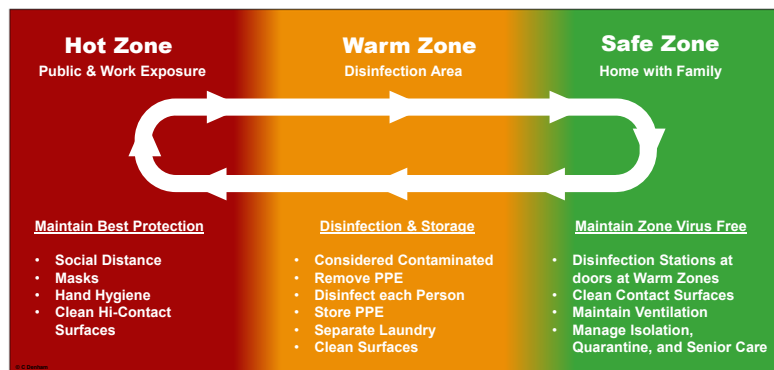


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Hot-Warm-Safe Zone Practices



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Hot-Warm-Safe Zone Practices



HOT ZONE PRACTICES

- ☐ Social Distance – 6 Feet is a MINIMUM
- ☐ Handwashing is poor even in caregivers – 20 sec
- ☐ **Avoid Poorly Ventilated Spaces**
- ☐ **Upgrade Masks to Surgical Level 3 or N95 BEST**
- ☐ **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 MIN. Shorter for Delta**

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Survive & Thrive Guide: Protecting Your Family

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

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.**

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Survive & Thrive Guide: Protecting Your Family

Hot-Warm-Safe Zone Practices

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

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

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TMIT Global

Mask Reduction of Airborne Transmission

A competition between droplet size, inertia, gravity, and evaporation determines how far emitted drop-lets and aerosols will travel in air.

AEROSOLS are smaller will evaporate faster than they can settle, are buoyant, and thus can be affected by air currents, which can transport them over longer distances.

DROPLETS will undergo gravitational settling faster than they evaporate, contaminating high contact surfaces and leading to contact transmission.

Particle Size μm 100 10 1 0.1

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

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Masks: Filter, Fit, and Finish

Masks: A Critical Factor

N95 Mask Surgical Mask Cloth Mask

Video Tape: < 15 Minutes

www.medtacglobal.org/coronavirus-response/#basicmodule

www.medtacglobal.org/coronavirus-response/mask-video/

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Survive & Thrive Guide: Filter, Fit, and Finish

Masks: Filter, Fit, and Finish

The Delta Variant is driving all of us to upgrade our masks. If possible N95 masks that have the best **Filter** with the best **Fit** so no air escapes. **Finish** safely handling after use without contaminating you or anyone else.



N95 Mask



Surgical Mask



Cloth Mask

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Survive & Thrive Guide: Protecting Your Family

Short Video Topics

- Masks: Filter, Fit, and Finish
- Hand Washing & DISINFECTANTS
- CLEAN High Contact Surfaces
- Building a FAMILY SAFETY PLAN
- If we NEED Emergency Care
- Why ICU, Respirators, and ECMO
- Family Lifeguard Program
- Vaccination Conversation

Handwashing & DISINFECTANTS



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Survive & Thrive Guide: Protecting Your Family

Short Video Topics

- Masks: Filter, Fit, and Finish
- Hand Washing & DISINFECTANTS
- CLEAN High Contact Surfaces
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- If we NEED Emergency Care
- Why ICU, Respirators, and ECMO
- Family Lifeguard Program
- Vaccination Conversation

RISK of High Contact Surfaces

Coronavirus Lives on Surfaces

Paper and Tissue Paper**	3 hours	Stainless Steel*	2-3 days
Copper*	4 hours	Polypropylene Plastic*	3 days
Cardboard*	24 hours	Glass**	4 days
Wood**	2 days	Paper Money**	4 days
Cloth**	2 days	Outside of surgical mask**	7 days

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Coming Home Safe Tools

Essential Worker Toolbox:

1. Vaccines – Take the Shots
2. Coming Home Safe
3. **Keeping the Family Safe**

Keeping the Family Safe



Threats x Vulnerability = Risk

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Survive & Thrive Guide: Protecting Your Family

How do we Keep Our Kids Safe?

ONLY POSSIBLE by keeping the “family unit” safe...

We have to **BREAK FAMILY TRANSMISSION CHAINS...**

The diagram consists of two identical square heatmaps. Each heatmap has a red outer ring labeled 'Outside Threats', a yellow middle ring labeled 'Family Safety', and a green inner square labeled 'Inside Threats'. A black arrow labeled 'LEAD' points from the first heatmap to the second.

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Survive & Thrive Guide: Protecting Your Family

Health Security: The Family Unit

PUBLIC HEALTH

FAMILY HEALTH

Versus

Tradeoffs for Population:
Cost of Doing Business

You will pay more and do more to spare your family

YOU HAVE TO TAKE CHARGE NOW!

Source: C Denham

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Survive & Thrive Guide: Protecting Your Family

Threats X Vulnerability = Risk to Your Family

Threats:
Likely to cause **HARM**.

The diagram consists of two identical square heatmaps. Each heatmap has a red outer ring labeled 'Outside Threats', a yellow middle ring labeled 'Family Safety', and a green inner square labeled 'Inside Threats'. A black arrow labeled 'LEAD' points from the first heatmap to the second.

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Survive & Thrive Guide: Protecting Your Family

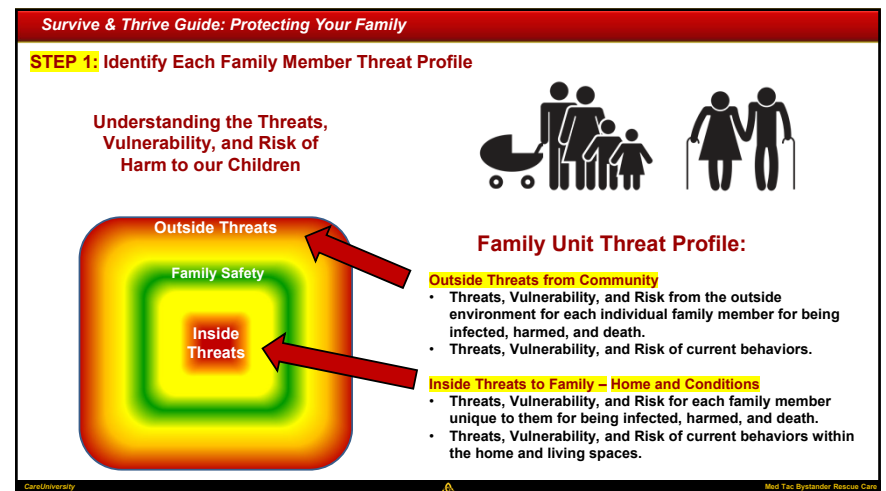
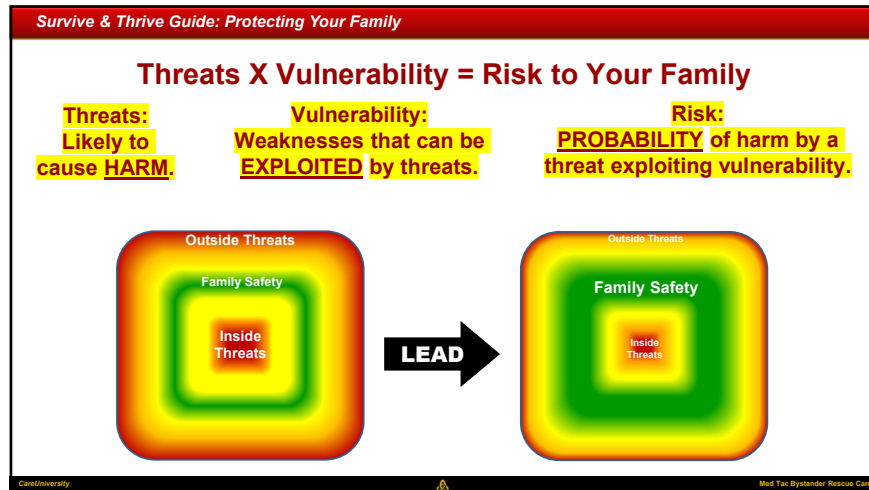
Threats X Vulnerability = Risk to Your Family

Threats:
Likely to cause **HARM**.

Vulnerability:
Weaknesses that can be **EXPLOITED** by threats.

The diagram consists of two identical square heatmaps. Each heatmap has a red outer ring labeled 'Outside Threats', a yellow middle ring labeled 'Family Safety', and a green inner square labeled 'Inside Threats'. A black arrow labeled 'LEAD' points from the first heatmap to the second.

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Survive & Thrive Guide: Protecting Your Family

STEP 1: Identify Each Family Member Threat Profile

Pregnant Moms

- Have been found to have certain higher risks for severe COVID illness due to pregnancy – an “inside risk” (CDC)

Under 2 Years

- Watch evolving science in this area for “inside risks”.

2 to 10 Years

- May have more virus in their nasopharynx than adults.
- Half as likely to get infected as over 10 years old.
- A rise in infection rate seen with school attendance.
- May develop MIS-C – Multisystem Inflammatory Syndrome in Children. <21 years old, lab evidence of inflammation, >2 organ involvement. SEE CDC Case Description on CDC website.

10 to 30 Years

- Fastest growing infection group – more than 50%
- Super Spreaders due to social interaction.
- Over 30% of COVID positive Big 10 players have cardiac inflammation on cardiac MRI. SEE Evolving CNN Reports

30 to 50 Years

- Rapidly growing group of infections in later surge stage. Underlying conditions including obesity a factor.

50 to 65 Years

- Have higher incidence in underlying conditions putting them at higher risk for infections and harm.

Over 65 Years

- Age is a risk factor independent of underlying conditions and have them. Highest death rate.

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Survive & Thrive Guide: Protecting Your Family

STEP 2: Identify and Follow Local Coronavirus Threats

Outside Threats:

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

Inside Threats:

- Delayed Emergency Medical Care for of Children due to fear.
- Delayed Vaccines for Children due to fear.
- Depression in Children isolated at home.
- Threats to Immune Compromised Children.
- Inadequate Nutrition of Children.
- Lack of Exercise of Children and Adults.
- Adults with underlying at-risk illnesses.
- Seniors over 65 years of age at risk due to age.
- Delayed Emergency Medical Care for Adults due to Fear.
- Delayed or absent Screening for Adults and Seniors.
- Delayed Elective Medical Procedures for adults.
- Inadequate Disinfection of Hi Contact Surfaces.

Inside versus Outside Threats

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Survive & Thrive Guide: Protecting Your Family

Example Family Threat Profile Orange County CA

Daily COVID-19 Positive Cases per 100,000
5.6
(7-Day Average with 7-Day Lag)

Testing Positivity Percent
5%
(7-Day Average with 7-Day Lag)

Cumulative Cases to Date (includes deaths)	Daily COVID Positive Cases Received
49,142	317

At least 24K residents, ages 15-64, females, and 400 persons experiencing homelessness

Cumulative Tests To Date	Tests Reported Today
664,745	7,605

- Male over 65 years of age.
- Female in mid 50's with history of pulmonary infections & bronchitis.
- Mid-teen youth with recent cardiac surgery and hospitalizations for hyperimmune reactions to viral infections.
- Grandmother at 99 years of age in assisted living with history of lung disease.

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Survive & Thrive Guide: Protecting Your Family

Example Family Threat Profile Orange County CA

Daily COVID-19 Positive Cases per 100,000
18.6
(7-Day Average with 7-Day Lag)

Test Positivity Rate
6.8%
(7-Day Average with 7-Day Lag)

Cumulative Cases
277,845
(Includes Deaths, PCR Positive Cases)

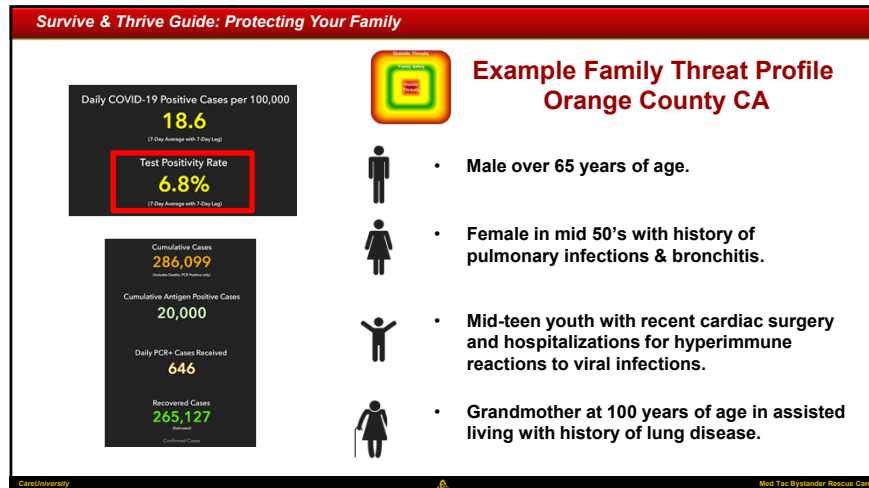
Cumulative Antigen Positive Cases
19,318

Daily PCR+ Cases Received
1,213

Recovered Cases
256,205
(Confirmed Cases)

- Male over 65 years of age.
- Female in mid 50's with history of pulmonary infections & bronchitis.
- Mid-teen youth with recent cardiac surgery and hospitalizations for hyperimmune reactions to viral infections.
- Grandmother at 100 years of age in assisted living with history of lung disease.

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Survive & Thrive Guide: Protecting Your Family

STEP 3: Develop a Family Safety Plan

Reduce Vulnerability

Reduce Vulnerability to Outside Threats:

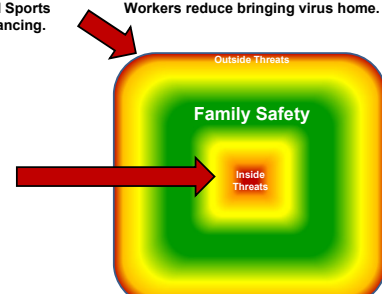
- Adjust behaviors depending on Background Community Infection and local infection trends.
- Base school decisions on Test, Trace, Treat, Isolate, and Quarantine Programs.
- Avoid Group Activities and Sports without Proper Social Distancing.

Reduce Vulnerability to Outside Threats:

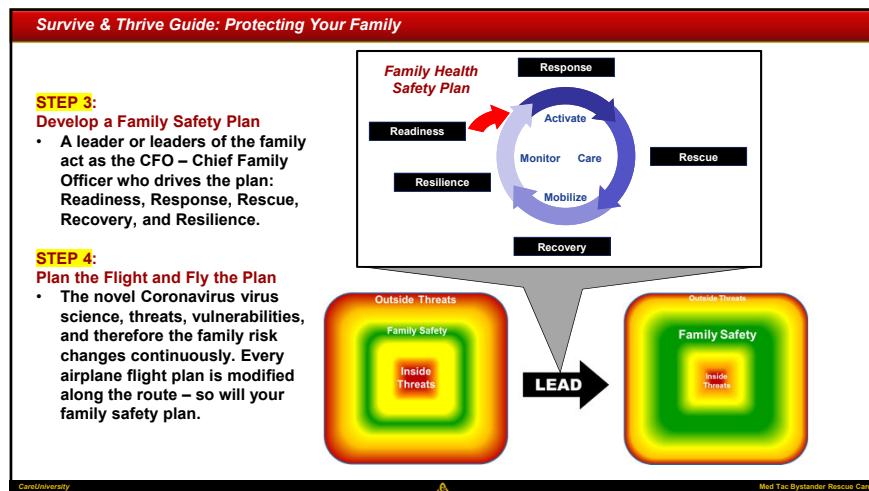
- Produce a Medical Care Emergency Plan for the Children and Adults (5 Rights of Emergency Care).
- Safely see Pediatricians to maintain Vaccines.
- Combat depression in Children with activities
- Protect Immune Compromised Children .
- Protect Adults with underlying at-risk illnesses.
- Protect Seniors over 65 years of age.
- Safely Pursue Regular Screening for Adults.
- Weigh Risks for Elective Medical Procedures.
- Assure Nutrition for children and adults in isolation.
- Pursue Regular Exercise during isolation/quarantine.
- Inadequate Disinfection of Hi Contact Surfaces.

Reducing Vulnerability to Outside Threats:

- Assure Mask Use by all exposed to family
- Monitor public health services including Test, Trace, Treat, Isolate, and Quarantine Programs and adjust behavior to it.
- Assure Critical Essential Infrastructure Workers reduce bringing virus home.



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Family Safety Plans

Essential Worker Toolbox:

1. Vaccines – Take the Shots
2. Coming Home Safe
3. Keeping the Family Safe
4. **Creating a Family Safety Plan**

Creating the Family Safety Plan



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Coronavirus Care

Community of Practice

Bystander Rescue Care

CareUniversity Series

Essential Workers Toolbox

A Survive & Thrive Guide™

Gregory H. Botz, MD, FCCM

Professor of Anesthesiology and Critical Care
 UT MD Anderson Cancer Center, Houston, TX
 Adjunct Clinical Professor, Department of
 Anesthesiology
 Stanford University School of Medicine,
 Stanford, CA

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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.

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

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."

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.

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.

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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.

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Family Health Safety Plans

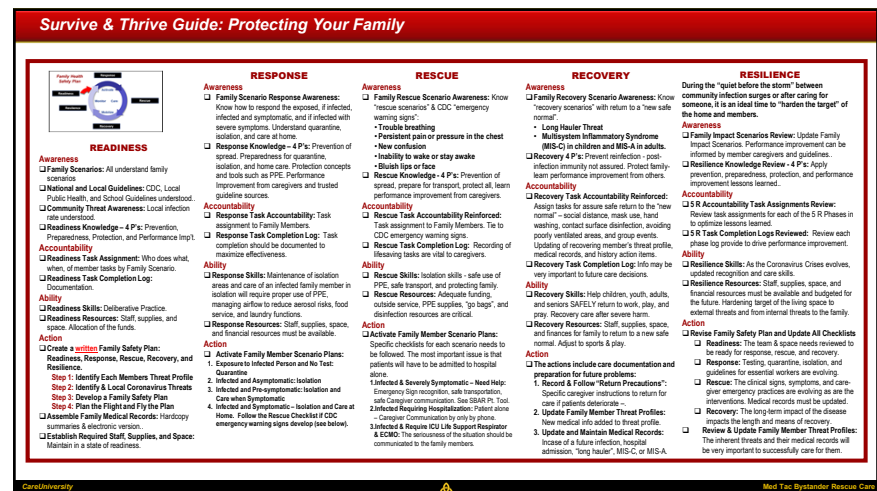
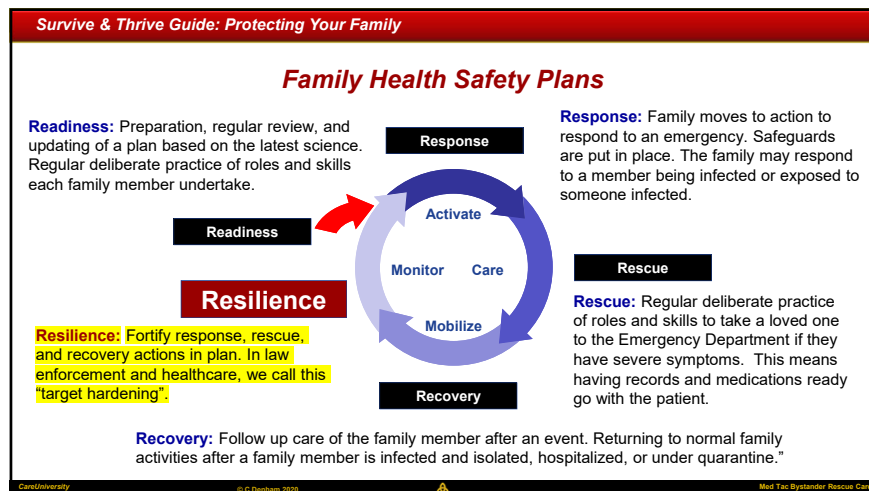
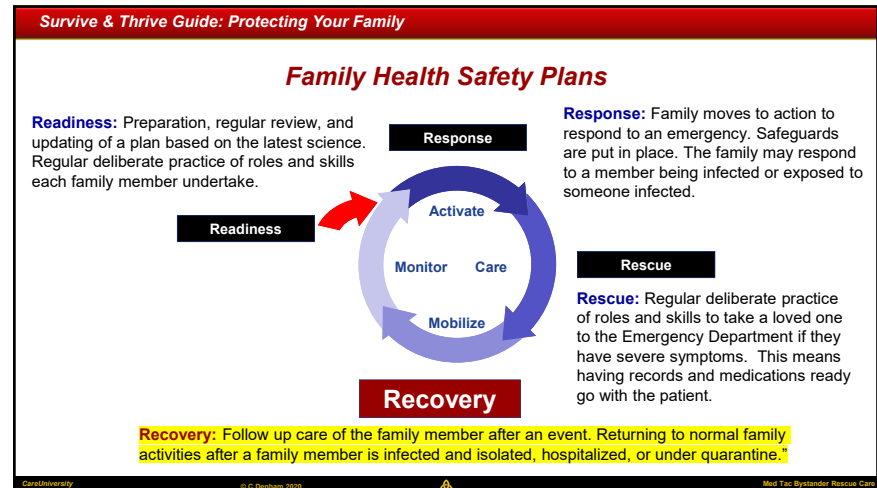
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Family Safety Plan					
Readiness → Response → Rescue → Recovery → Resilience					
Family Member Scenarios	Be ready for waves or new epidemics.	Response if someone in the home gets sick.	Care of loved on with severe symptoms.	Assistance safely to the "new normal".	Making the family "hardened" as a target
No Exposure No Test or Negative Test	Social distance, hygiene, cleaning, and masks. Protect high risk family members.	Recognize people with no exposure – no test are at risk for infections.	Know the triggers for emergency care. Have med records ready for family	Be very careful until vaccine, antivirals, or an immunity shield is can protect public.	Learn from others who are infected. Maintain medical records for family members.
Exposure to Infected Person and No Test	Know: what "exposure" is, what to if exposed, and if notified by a contact tracer.	Know where to get testing, maintain quarantine period, and how to protect family.	Know the triggers for emergency care. Have med records ready for family	If infected, be aware of the possible long-term consequences of infection.	Maintain prevention, testing, contact tracing, isolation and quarantine knowledge.
Infected & Asymptomatic – No Symptoms Ever	Family behaves as if they can infect someone. Protect "at risk" family members.	Isolate if test positive and contact tracers link infections to you.	Watch for the signs and symptoms triggering seeking emergency care.	Be aware of and watch for the long-term consequences of infection.	Maintain prevention, testing, contact tracing, isolation and quarantine knowledge.
Infected & Pre-symptomatic – Before Symptoms	Know: what "exposure is", what to if exposed or notified by a contact tracer.	Isolate if test positive and contact tracers link infections to you.	Watch for the signs and symptoms triggering seeking emergency care.	Be aware of and watch for the long-term consequences of infection.	Maintain prevention, testing, contact tracing, isolation and quarantine knowledge.
Infected & Symptomatic – Have Symptoms	Be ready for worsening symptoms and to maintain isolation per guidelines.	Isolate if test positive and contact tracers link infections to you.	Watch for the signs and symptoms triggering seeking emergency care.	Be aware of and watch for the long-term consequences of infection.	Maintain prevention, testing, contact tracing, isolation and quarantine knowledge.
Infected & Severely Symptomatic – Need Help	Choose ED Care site, have med records, meds, and a plan. Be ready for patient to be solo phone only contact.	Isolate if test positive and contact tracers link infections to you. Watch for worsening signals/symptoms	Seek emergency care immediately. Have medical records and medications for ED care providers.	Recognize probable long-term consequences after being infected. Be aware of "long haulers" scenario	Maintain latest knowledge of local testing, contact tracing, isolation process AND best emergency care location.
Infected & Requiring Hospitalization	Be ready for no contact with patient while at hospital. Be ready to give care at home following hospital discharge.	Be ready to respond to infections of others at home or in contact with patient.	Watch for triggers for emergency care of other family members who may get sick.	Recognize probable long-term consequences after being infected. Be aware of "long haulers" scenario	Maintain latest knowledge of local testing, contact tracing, isolation process AND ID best hospital care providers.
Infected & Require ICU Life Support Respirator & ECMO	Keep the family ready for a death. Prepare to deliver substantial care at home if the patient is discharged.	Be ready to respond to isolate and care for infected family members. Quarantine those in significant contact.	Watch for symptom triggers requiring emergency care visit if others in family get sick.	Recognize probable long-term consequences after being infected. Be aware of "long haulers" scenario	Maintain latest knowledge of local testing, contact tracing, isolation process AND ID best hospital care providers.

Family Safety Plan					
Readiness → Response → Rescue → Recovery → Resilience					
Family Member Scenarios	Be ready for waves or new epidemics.	Response if someone in the home gets sick.	Care of loved on with severe symptoms.	Assistance safely to the "new normal".	Making the family "hardened" as a target
No Exposure No Test or Negative Test	Social distance, hygiene, cleaning, and masks. Protect high risk family members.	Recognize people with no exposure – no test are at risk for infections.	Know the triggers for emergency care. Have med records ready for family	Be very careful until vaccine, antivirals, or an immunity shield is can protect public.	Learn from others who are infected. Maintain medical records for family members.
Exposure to Infected Person and No Test	Know: what "exposure" is, what to if exposed, and if notified by a contact tracer.	Know where to get testing, maintain quarantine period, and how to protect family.	Know the triggers for emergency care. Have med records ready for family	If infected, be aware of the possible long-term consequences of infection.	Maintain prevention, testing, contact tracing, isolation and quarantine knowledge.
Infected & Asymptomatic – No Symptoms Ever	Family behaves as if they can infect someone. Protect "at risk" family members.	Isolate if test positive and contact tracers link infections to you.	Watch for the signs and symptoms triggering seeking emergency care.	Be aware of and watch for the long-term consequences of infection.	Maintain prevention, testing, contact tracing, isolation and quarantine knowledge.
Infected & Pre-symptomatic – Before Symptoms	Know: what "exposure is", what to if exposed or notified by a contact tracer.	Isolate if test positive and contact tracers link infections to you.	Watch for the signs and symptoms triggering seeking emergency care.	Be aware of and watch for the long-term consequences of infection.	Maintain prevention, testing, contact tracing, isolation and quarantine knowledge.
Infected & Symptomatic – Have Symptoms	Be ready for worsening symptoms and to maintain isolation per guidelines.	Isolate if test positive and contact tracers link infections to you.	Watch for the signs and symptoms triggering seeking emergency care.	Be aware of and watch for the long-term consequences of infection.	Maintain prevention, testing, contact tracing, isolation and quarantine knowledge.
Infected & Severely Symptomatic – Need Help	Choose ED Care site, have med records, meds, and a plan. Be ready for patient to be solo phone only contact.	Isolate if test positive and contact tracers link infections to you. Watch for worsening signals/symptoms	Seek emergency care immediately. Have medical records and medications for ED care providers.	Recognize probable long-term consequences after being infected. Be aware of "long haulers" scenario	Maintain latest knowledge of local testing, contact tracing, isolation process AND best emergency care location.
Infected & Requiring Hospitalization	Be ready for no contact with patient while at hospital. Be ready to give care at home following hospital discharge.	Be ready to respond to infections of others at home or in contact with patient.	Watch for triggers for emergency care of other family members who may get sick.	Recognize probable long-term consequences after being infected. Be aware of "long haulers" scenario	Maintain latest knowledge of local testing, contact tracing, isolation process AND ID best hospital care providers.
Infected & Require ICU Life Support Respirator & ECMO	Keep the family ready for a death. Prepare to deliver substantial care at home if the patient is discharged.	Be ready to respond to isolate and care for infected family members. Quarantine those in significant contact.	Watch for symptom triggers requiring emergency care visit if others in family get sick.	Recognize probable long-term consequences after being infected. Be aware of "long haulers" scenario	Maintain latest knowledge of local testing, contact tracing, isolation process AND ID best hospital care providers.

Customize Your Family Checklists to the Real-life Scenarios that CAN HAPPEN to You!

Family Safety Plan	
Readiness → Response → Rescue → Recovery → Resilience	
Family Member Scenarios	
No Exposure No Test or Negative Test	
Exposure to Infected Person and No Test	
Infected & Asymptomatic – No Symptoms Ever	
Infected & Pre-symptomatic – Before Symptoms	
Every family or living unit needs to have a plan for each of these scenarios. They will drive the elements of your plan.	
	Infected & Symptomatic – Have Symptoms Infected & Severely Symptomatic – Need Help Infected & Requiring Hospitalization Infected & Require ICU Life Support Respirator & ECMO

Coronavirus Care Community of Practice

Bystander Rescue Care CareUniversity Series

Essential Workers Toolbox First Responder Perspective

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

Randy Styner
Director Emergency Management
University of California Irvine
Best Selling Author
Scout Leader

Paul Cross, MBA, FBINA 194th
Assistant Chief
The University of Texas Police at Houston


David M. Morris, PH.D., J.D.
President of Morris & McDaniel, Inc.
Law Enforcement and First ResponderExpert and Researcher

Family Safety Plans


Essential Worker Toolbox:

1. Vaccines – Take the Shots
2. Coming Home Safe
3. Keeping the Family Safe
4. Creating a Family Safety Plan
5. **Practicing the Family Safety Plan**

Practicing the Family Safety Plan




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**Coronavirus Care
Community of Practice**

**Bystander Rescue Care
CareUniversity Series**

Be Your Family Lifeguard & Holiday Huddle Checklist **During Delta**



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

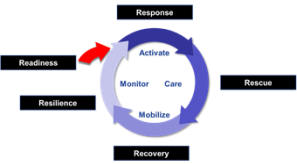
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MARCH 2017 - ISSUE
What Every Parent's Talking About
parentingOC
FOURTH ANNUAL
TOP 25 TEACHERS



Family Health Safety & Organization Security Plans



The Family CFO: Chief Family Officer



Thoughts for Families with Young Children:

- ❑ Review other Readiness Checklists. Use FEMA Emergency Preparedness Checklist (we use when we teach Med Tac Bystander Rescue Program).
- ❑ Make sure you have Personal Protective Equipment for everyone.
- ❑ Make sure you have a copy of everyone's Medical Records including lists of allergies and meds.
- ❑ Review the 5 Rights of Emergency Care video to be prepared for a new experience.
- ❑ Use Icons in your plan to make plan family friendly.
- ❑ Create plan sections for adults and children
- ❑ Create an "All Teach All Learn" Environment
- ❑ Play Date Simulations for being prepared.
- ❑ Gamify Readiness – we use FEMA as an example

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Family Lifeguard

Be Your Family Lifeguard

90% Prevention and 10% Rescue



Family Safety Plan

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

CareUniversity Med Tac Bystander Rescue Care

Family Lifeguard

Spring Break, Ski Week, and Vacations



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
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- ☐ 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



CareUniversity Med Tac Bystander Rescue Care

Family Lifeguard




CareUniversity Med Tac Bystander Rescue Care

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

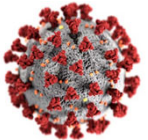
Essential Workers Toolbox

A Survive & Thrive Guide™



David Beshk

Med Tac Master Instructor
Award Winning Educator
Lower School Science Teacher



CareUniversity Med Tac Bystander Rescue Care

10 Best Practices for Re-opening

Essential Worker Toolbox:

1. Vaccines – Take the Shots
2. Coming Home Safe
3. Keeping the Family Safe
4. Creating a Family Safety Plan
5. Practicing the Family Safety Plan
6. **Providing Care at Home**

Providing Care At Home



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Teens, College Students, and Young Adults

An Infection Every Second... A Death Every 2 Minutes



A 13-year-old Missouri boy's on quarantine and last day of school was in late October. He died from Covid-19 days later



Long-haulers taking months to recover from multi-system symptoms – many develop it.



A 20-year-old dies on quarantine in her dorm room of pulmonary embolism. Test result "never delivered due to clerical error".

CoreUniversity

Med Tac Bystander Rescue Care

Checklists

Home Care Room Program Coronavirus Response CareUniversity Series

Select a Care Room Checklist:

- ☐ Select a room separated and away from the family traffic that ideally should be well ventilated to the outside.
- ☐ Identify the bathroom to be used by the loved one that can be used to wash hands and for personal hygiene.
- ☐ If a fully dedicated bathroom cannot be used, identify where supplies and dishes may be cleaned away from the family and other inhabitants.
- ☐ Make sure the Care Room has a door that can be closed.
- ☐ If you have no separate bedroom for the patient, use plastic sheets, or waterproof materials such as shower curtains or tents to wall off the area from others.
- ☐ Optimize ventilation. If the Care Room has an outside window that may be opened, it is optimal.
- ☐ If Heating and Air conditioning vents can be closed to separate ventilation from the rest of the dwelling, do so.
- ☐ Make decisions regarding allowing pets in the Care Room. It is optimal if pets are separated from the patient.

Care Room Set Up Checklist:

- ☐ Set Up Cleaning Station
- ☐ Equip Both Clean and Dirty
- ☐ Post Signs to Room
- ☐ Consider Signs
- ☐ Prepare a Daily Log
- ☐ Remove Hard to Clean Items
- ☐ Set up Personal Protective Equipment
- ☐ Set up a Contaminated Laundry Room
- ☐ Set up a Non-contaminated Laundry Room
- ☐ Set up a Contaminated Waste Can
- ☐ Set up a Non-contaminated Waste Can
- ☐ Materials in Care Room
- ☐ Place Safe Containers
- ☐ Injection Meds Up
- ☐ Keep Patient's Personal Hygiene
- ☐ Place Water Pitcher
- ☐ Personal Hygiene
- ☐ Keep dedicated Oximeters in Care Room
- ☐ Keep Reusable Supplies

Supplies Checklist:

- ☐ Eye Protection
- ☐ A Face Shield
- ☐ Reusable Gloves
- ☐ Rubber Gloves
- ☐ Disposable Hair Coverings
- ☐ N95 Mask or Medical Equivalent
- ☐ Aprons - single-use disposable
- ☐ Plastic Aprons
- ☐ Alcohol-based Hand Sanitizer
- ☐ Plain Soap
- ☐ Clean Single-use Paper Towels
- ☐ Safe Puncture Proof Containers
- ☐ Detergent for Cleaning
- ☐ Thermometer & Medical Supplies
- ☐ Mobile Phone

Home Care Team Checklists:

Laundry Processes:

- ☐ Disinfect Laundry Room after Every Wash
- ☐ Always Separate Contaminated Laundry from Non-contaminated Laundry
- ☐ Wash all regular and Non-contaminated laundry first
- ☐ Wash kitchen towels and bathroom hand towels daily.
- ☐ Wash all Contaminated Laundry last
- ☐ Disinfect Laundry Room while Contaminated Laundry are in the wash
- ☐ Move Formerly Contaminated Laundry from Washer to Dryer after Disinfecting Laundry Room

Cleaning the Home:

- ☐ Door knobs

Checklists

Home Care Room Program Coronavirus Response CareUniversity Series

Select a Care Room Checklist:

- ☐ Select a room separated and away from the family traffic that ideally should be well ventilated to the outside.
- ☐ Identify the bathroom to be used by the loved one that can be used to wash hands and for personal hygiene.
- ☐ If a fully dedicated bathroom cannot be used, identify where supplies and dishes may be cleaned away from the family and other inhabitants.
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- ☐ If Heating and Air conditioning vents can be closed to separate ventilation from the rest of the dwelling, do so.
- ☐ Make decisions regarding allowing pets in the Care Room. It is optimal if pets are separated from the patient.


September 2021 Update


- **Aerosol Risk is much greater than previously believed.**
- **Aerosol virus particles can linger in the air for a number of hours.**
- **Don't Dare Share Air is our motto now.**
- **Ventilation is ABSOLUTELY critical.**
- **Less Emphasis on High Contact Surfaces**
- **Less worry with pets than early in pandemic.**

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Med Tac Bystander Rescue Care

Checklists


Home Care Room Program


**Coronavirus Response
CareUniversity Series**


Care Room Set Up Checklist:


- ❑ Set Up Cleaning Station Outside Room
- ❑ Set Up Cleaning Station Inside Room
- ❑ Equip Both Cleaning Stations with Disinfectant Supplies
- ❑ Post Signs to Remind Everyone of Entry Instructions
- ❑ Consider Signs Outside Home
- ❑ Prepare a Daily Contact & Visitor Roster
- ❑ Remove Hard to Clean Furniture & Objects
- ❑ Set Up Personal Protective Equipment Storage
- ❑ Set up a Contaminated Waste Can
- ❑ Set up Waste Can Outside Room
- ❑ Set up a Contaminated Laundry Bag
- ❑ Set up a Non-contaminated Laundry Bag
- ❑ Put Waste Cans, Garbage Bags, and Waste Collection Materials in Care Room
- ❑ Place Safe Container for Needles for Diabetics & if Injection Meds Used
- ❑ Keep Patient's Personal Items to minimum
- ❑ Place Water Pitchers and Cups, Tissue Wipes, and Personal Hygiene Supplies, within Patient Reach
- ❑ Keep dedicated Thermometers & Devices such as Pulse Oximeters in Care Room
- ❑ Keep Reusable Supplies in Care Room
- ❑ Keep Reusable Dishes/Cutlery in Care Room
- ❑ Put Equipment Needing Disinfection in Clean Container with Lid outside the room
- ❑ Set Up Phones, Mobile Phones, and Chargers within patient's reach

September 2021 Update

- Aerosol Risk is much greater than previously believed.
- Less Emphasis on High Contact Surfaces
- ❑ **Keep dedicated Thermometers & Devices such as Pulse Oximeters in Care Room – important to use pulse oximeters to track status of the patients.**

Checklists


Home Care Room Program


**Coronavirus Response
CareUniversity Series**


Supplies Checklist:


- ❑ Eye Protection
- ❑ A Face Shield
- ❑ Reusable Gloves
- ❑ Rubber Gloves
- ❑ Disposable Hair Covers
- ❑ N95 Mask or Medical Procedure Mask
- ❑ Aprons - single-use long-sleeved fluid-resistant or reusable gowns.
- ❑ Plastic Aprons
- ❑ Alcohol-based Hand Rub
- ❑ Plain Soap
- ❑ Clean Single-use Paper Towels
- ❑ Safe Puncture Proof Containers
- ❑ Detergent for Cleaning Surfaces
- ❑ Thermometer & Med Devices
- ❑ Mobile Phone
- ❑ Waste Bags – Garbage
- ❑ Laundry Bags – Contaminated
- ❑ Laundry Bags – Non-contaminated
- ❑ Plates and Cutlery for Patient
- ❑ Collection Container for Supplies Needing Disinfecting

September 2021 Update

- Aerosol Risk is much greater than previously believed.
- Less Emphasis on High Contact Surfaces
- ❑ **Convert mask selection to N95 Mask and emphasize Filter, Fit, and Finish of masks. Surgical Medical Procedural masks are as good as well fitting N95.**
- ❑ **If KN95 Masks are used, make sure they are not counterfeit and are of the regulated and US medically approved type.**

Checklists


Home Care Room Program


**Coronavirus Response
CareUniversity Series**

Home Care Team Checklists:

Laundry Processes:

- ❑ Disinfect Laundry Room after Every Wash
- ❑ Always Separate Contaminated Laundry from Non-contaminated Laundry
- ❑ Wash all regular and Non-contaminated laundry first
- ❑ Wash kitchen towels and bathroom hand towels daily.
- ❑ Wash all Contaminated Laundry last
- ❑ Disinfect Laundry Room while Contaminated Laundry are in the wash
- ❑ Move Formerly Contaminated Laundry from Washer to Dryer after Disinfecting Laundry Room

Cleaning the Home:


- ❑ Door knobs
- ❑ Light switches and bedside lamp switches
- ❑ Bathroom Faucets and toilet flush handles
- ❑ Kitchen faucets, knobs/pulls, refrigerator handle, stove knobs, dishwasher & microwave buttons
- ❑ All TV Remote controls
- ❑ All phones, keyboards, and iPad and tablet screens
- ❑ Railings
- ❑ Desk surfaces
- ❑ Floors – Once daily.

Upon Returning Home:

- ❑ Disinfect Car steering wheel/door handles
- ❑ Remove Shoes Before Entry
- ❑ Leave Keys Outside Door Before Sanitizing
- ❑ Use Disinfection Station inside door
- ❑ Disinfect Hands On Entry
- ❑ Go To Bathroom Wash Hands
- ❑ Remove Clothes and place in Contaminated Laundry
- ❑ Shower or Bath before interacting with family


September 2021 Update

- Aerosol Risk is much greater than previously believed.
- Less Emphasis on High Contact Surfaces, however do not ignore them.
- ❑ **Make sure to be careful with contaminated masks after care of the patient or in high risk environments.**
- ❑ **First Responders and caregivers continue to maintain decontamination practices.**


**Coronavirus Care
Community of Practice**

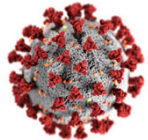
**Bystander Rescue Care
CareUniversity Series**

Essential Workers Toolbox A Survive & Thrive Guide™



Heather Foster RN BSN

Frontline Nurse
Infection Prevention Advisor
Patient Safety Advocate
Dolores Colorado



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10 Best Practices for Re-opening

Essential Worker Toolbox:

1. Vaccines – Take the Shots
2. Coming Home Safe
3. Keeping the Family Safe
4. Creating a Family Safety Plan
5. Practicing the Family Safety Plan
6. Providing Care at Home
7. **Emergency Rescue Skills**

Emergency Rescue Skills



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Coronavirus Care
Community of Practice

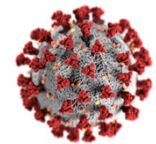
Bystander Rescue Care
CareUniversity Series

Essential Workers Toolbox A Survive & Thrive Guide™



Christopher Peabody, MD, MPH

Associate Professor,
Emergency Medicine
Director Innovation Center
University of California,
San Francisco UCSF



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Med Tac Bystander Rescue Care

Video Library

Med Tac Story

Med Tac Leadership Team

Adopt a Cove Program

5 Rights of Emergency Care

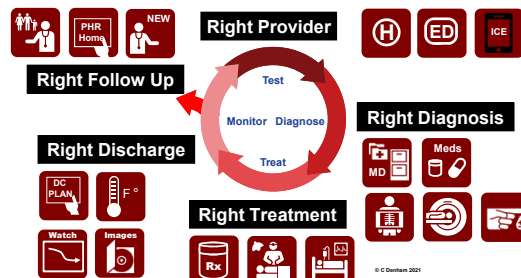
College and Youth Program

Surf & Lifeguard Program

3 Minutes & Counting Trailer

Opioid Overdose Briefing

The 5 Rights of Emergency Care™

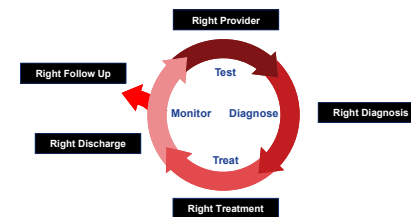


Source: Denham, CR

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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.

Source: Denham, CR

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TMIT



What to Do – They're in ICU

Essential Worker Toolbox:

1. Vaccines – Take the Shots
2. Coming Home Safe
3. Keeping the Family Safe
4. Creating a Family Safety Plan
5. Practicing the Family Safety Plan
6. Providing Care at Home
7. Emergency Rescue Skills
8. **What to Do – They're in ICU**

What to Do When They're in ICU

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Survive & Thrive Guide: Protecting Your Family

Short Video Topics

- Masks: Filter, Fit, and Finish
- Hand Washing & DISINFECTANTS
- CLEAN High Contact Surfaces
- Building a FAMILY SAFETY PLAN
- If we NEED Emergency Care
- Why ICU, Respirators, and ECMO
- Family Lifeguard Program
- Vaccination Conversation

ICU Care, Respirators, and ECMO

CardUniversity Med Tac Bystander Rescue Care

Long Haulers & COVID Recovery

Essential Worker Toolbox:

1. Vaccines – Take the Shots
2. Coming Home Safe
3. Keeping the Family Safe
4. Creating a Family Safety Plan
5. Practicing the Family Safety Plan
6. Providing Care at Home
7. Emergency Rescue Skills
8. What to Do – They're in ICU
9. **Long Haulers & COVID Recovery**

Long Haulers & COVID Recovery

PACS
Post-Acute COVID-19 Syndrome

MIS-C
Multisystem Inflammatory Syndrome in Children

MIS-A
Multisystem Inflammatory Syndrome in Adults

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THE CHIEF HEALTH SECURITY OFFICER

My Job is Organizational Health Security

- Clinical
- Operational
- Financial

Largest Long-term Study of COVID Patients

- More than 2/3 have symptoms at 6 months
- Almost half have symptoms at 12 months
- Most common symptom fatigue
- Almost 1/3rd have breathing difficulty at 12 months
- 20% of non-hospitalized patients persist with symptoms

THE LANCET

TIME

The 4 P's at the New Normal

Essential Worker Toolbox:

1. Vaccines – Take the Shots
2. Coming Home Safe
3. Keeping the Family Safe
4. Creating a Family Safety Plan
5. Practicing the Family Safety Plan
6. Providing Care at Home
7. Emergency Rescue Skills
8. What to Do – They're in ICU
9. Long Haulers & COVID Recovery
10. **The 4 P's at the New Normal**

The 4 P's at the New Normal

Prevention Performance Improvement

Preparedness Protection

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Survive & Thrive Guide

The New Normal & The 4 P's

Prevention Performance Improvement

Preparedness Protection

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Med Tac Bystander Rescue Care

Survive & Thrive Guide™ Program Road Map

Survive & Thrive Guide Series: Coming Home Safety

Keeping Our Kids Safe

Creating Your Family Safety Plan

Safety Plan Templates for Everyone

Providing Care at Home

Your 2021 Family Safety Plan

Emergency Rescue Skills

What To Do – They're in the ICU

Vaccines, Variants, and Victory

Long Haulers & Severe COVID Recovery

10 Best Practices for Reopening

The New Normal & The 4 P's

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10 Best Practices for Re-opening

Our Survive & Thrive Guide Updates

10 Best Practices:

1. Vaccines – Take the Shots
2. Coming Home Safe
3. Keeping the Family Safe
4. Creating a Family Safety Plan
5. Practicing the Family Safety Plan
6. Providing Care at Home
7. Emergency Rescue Skills
8. What to Do – They're in ICU
9. Long Haulers & COVID Recovery
10. The 4 P's at the New Normal

CardinalUniversity © TMF Global 2021 Med Tac Bystander Rescue Care

Survive & Thrive Guides: Prevention, Preparedness, Protection, and Performance Improvement

CardinalUniversity Med Tac Bystander Rescue Care

Survive & Thrive Guide: Protecting Your Family

Who is Your CHSO & Family CFO?

PUBLIC HEALTH OFFICERS

THE CHIEF HEALTH SECURITY OFFICER

THE CFO CHIEF FAMILY OFFICER

THEY HAVE TO TAKE CHARGE NOW!

Source: C Denham

CardinalUniversity Med Tac Bystander Rescue Care

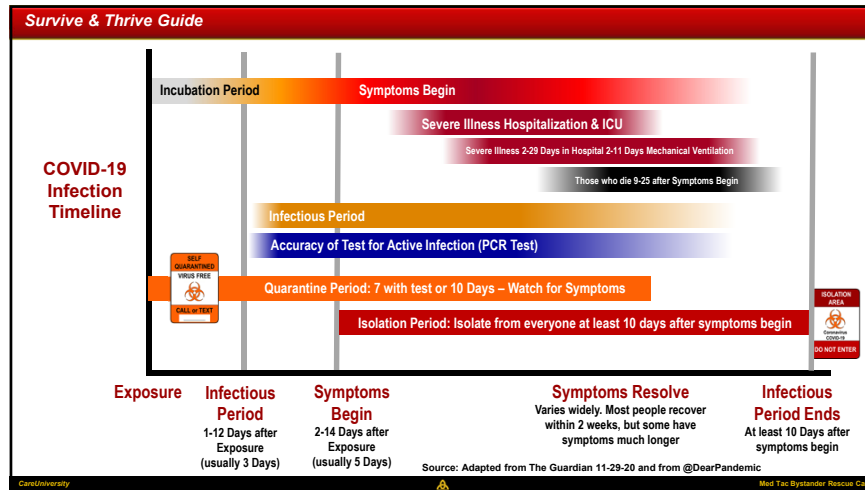
Family Safety Plan

Readiness → **Response** → **Rescue** → **Recovery** → **Resilience**

Family Member Scenarios	
No Exposure No Test or Negative Test	<p>Every family or living unit needs to have a plan for each of these scenarios. They will drive the elements of your plan.</p>
Exposure to Infected Person and No Test	
Infected & Asymptomatic – No Symptoms Ever	
Infected & Pre-symptomatic – Before Symptoms	

Infected & Symptomatic – Have Symptoms
Infected & Severely Symptomatic – Need Help
Infected & Requiring Hospitalization
Infected & Require ICU Life Support Respirator & ECMO

CardinalUniversity Med Tac Bystander Rescue Care



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

Speakers & Reactors

The grid lists the following individuals:

- William Adcox
- Paul Cross
- Randy Styner
- Dr. Gregory Botz
- Heather Foster RN
- Charlie Denham III
- Jennifer Dingman
- Dr. C Peabody
- David Morris
- Jaime Yrastorza
- Paul Bhatia EMT
- David Beshk
- Dr. C Denham

MED + TAC Global **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

Fight the Good Fight

Finish the Race

Keep the Faith

Additional Resources

High Impact Care Hazards to Patients, Students, and Employees



<https://www.medtacglobal.org/>

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

Bystander Care Training is a critical need in all communities. The preventable deaths we see in the news are the tip of the iceberg. Our program is a Good Samaritan support system to help everyone learn life-saving actions that will save lives.

High Impact Care Hazards are conditions that are frequent, severe, preventable, and measurable. We have identified the leading causes of death that strike children, youth, and those in their workforce years. We provide evidence-based bystander care training that can have the greatest impact.

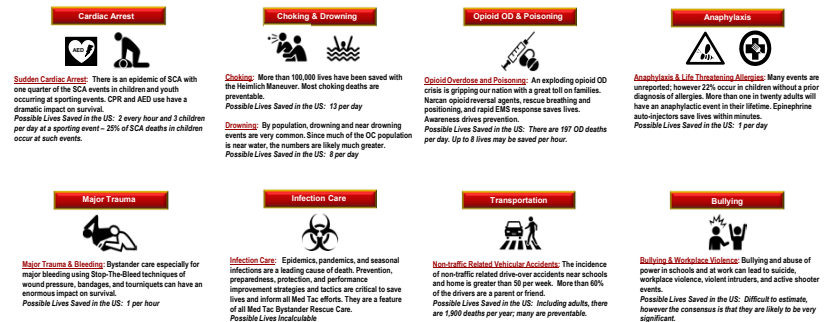
Bystander Rescue Skills are the competencies that bystanders can learn that will save lives in the few precious minutes before the professional first responders arrive. Such behaviors can be learned by children, adults, and entire families. We have programs for children, adults, law enforcement, educators, lifeguards, and caregivers.

Med Tac is the only integrated program addressing the top causes of death of otherwise healthy children, youth, and adults in the workforce. Med Tac partners with terrific on-site trainers from great organizations who are already in the community.

The Solution: Bystander Rescue Care




The Solution: Bystander Rescue Care



Med Tac Bystander Rescue Care

Cardiac Arrest





Sudden Cardiac Arrest: There is an epidemic of SCA with one quarter of the SCA events in children and youth occurring at sporting events. CPR and AED use have a dramatic impact on survival.


Possible Lives Saved in the US: 2 every hour and 3 children per day at a sporting event – 25% of SCA deaths in children occur at such events.


COVID-19 and Adult CPR


If an adult's heart stops and you're worried that they may have COVID-19, you can still help by performing Hands-Only CPR.




Step 1

 Phone 9-1-1 and get an AED.

Step 2

 Cover your own mouth and nose with a face mask or cloth.

Step 3

 Cover the person's mouth and nose with a face mask or cloth.

Step 4

 Perform Hands-Only CPR. Push hard and fast on the center of the chest at a rate of 100 to 120 compressions per minute.


Step 5

 Use an AED as soon as it is available.

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Choking & Drowning



Choking: More than 100,000 lives have been saved with the Heimlich Maneuver. Most choking deaths are preventable.

Possible Lives Saved in the US: 13 per day

Drowning: By population, drowning and near drowning events are very common. Since much of the OC population is near water, the numbers are likely much greater.


Possible Lives Saved in the US: 8 per day



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Opioid OD & Poisoning







Opioid Overdose and Poisoning: An exploding opioid OD crisis is gripping our nation with a great toll on families. Narcan opioid reversal agents, rescue breathing and positioning, and rapid EMS response saves lives. Awareness drives prevention.

Possible Lives Saved in the US: There are 197 OD deaths per day. Up to 8 lives may be saved per hour.

SAVE A LIFE. GET NALOXONE.

Naloxone stops an overdose caused by opioid pain medication, methadone or heroin. People at risk for overdose and their family and friends can learn to spot an overdose and respond to save a life.

To get naloxone, present this card to the pharmacy staff.

A	B	C	D
			
MULTI-STEP NASAL SPRAY	SINGLE-STEP NASAL SPRAY	INTRAMUSCULAR INJECTION	AUTO-INJECTOR
DIRECTIONS: Spray 1 mL (half of the syringe) into each nostril.	DIRECTIONS: Spray full dose into one nostril.	DIRECTIONS: Inject 1 mL in shoulder or thigh.	DIRECTIONS: Use as directed by voice prompt. Press black side firmly on outer thigh.
NO BRAND NAME/Generic	BRAND NAME: Narcan	NO BRAND NAME/Generic	BRAND NAME: Evzio
COST: \$-\$\$	COST: \$\$\$	COST: \$-\$\$	COST: \$\$\$\$

For ALL PRODUCTS, repeat naloxone administration after 2-3 minutes if there is no response.

Most insurance will cover at least one of these options, or you can pay cash. All products contain at least two doses.


For more on opioid safety, videos on how to use naloxone, or to get help for addiction, go to [PrescribeToPrevent.org](https://www.PrescribeToPrevent.org)

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Anaphylaxis



Anaphylaxis & Life Threatening Allergies: Many events are unreported; however 22% occur in children without a prior diagnosis of allergies. More than one in twenty adults will have an anaphylactic event in their lifetime. Epinephrine auto-injectors save lives within minutes.
Possible Lives Saved in the US: 1 per day

How To Use An EpiPen

EpiPen is used for severe life-threatening allergic reactions.




Signs & Symptoms

- Lungs: Chest tightness, cough that will not stop, Wheezing or shortness of breath.
- Heart: Lightheaded feeling, fainting, weak pulse, or low blood pressure.
- Throat: Tightness of throat, hoarse/scratchy throat or drooling.
- Mouth: Swollen tongue or lips.
- Skin: Swelling or severe itching or hives.

References:
www.nationwidechildrens.org
www.pharmacydirect.co.uk/epipen-what-is.html


Med Tac Bystander Rescue Care

Major Trauma



Major Trauma & Bleeding: Bystander care especially for major bleeding using Stop-The-Bleed techniques of wound pressure, bandages, and tourniquets can have an enormous impact on survival.
Possible Lives Saved in the US: 1 per hour

STOP THE BLEED SAVE A LIFE



1 APPLY PRESSURE WITH HANDS

2 APPLY DRESSING AND PRESS


3 APPLY TOURNIQUET

WRAP WIND SECURE TIME

CALL 911


Med Tac Bystander Rescue Care

Infection Care



Infection Care: Epidemics, pandemics, and seasonal infections are a leading cause of death. Prevention, preparedness, protection, and performance improvement strategies and tactics are critical to save lives and inform all Med Tac efforts. They are a feature of all Med Tac Bystander Rescue Care.
Possible Lives Incalculable

CLEAN A CUT – SAVE A LIFE



1 CLEAN ONLY WITH SOAP AND WATER

2 APPLY ANTIBIOTIC OINTMENT TO CUT


3 BANDAGE TO WOUND KEEP CLEAN

4 IF HURTS MORE ON DAY 2 - SEE DOCTOR


Clean A Cut – Save A Life: The pathogens of today are very resistant to antibacterial agents and can progress to life-threatening sepsis. So minor cuts and scrapes must be treated immediately and watched closely. Such wounds need to be cleaned quickly, only with soap and water. Alcohol or hydrogen peroxide will harm healing and they harm the infant cells critical to closing the wound.

Med Tac Bystander Rescue Care

Transportation



Non-traffic Related Vehicular Accidents: The incidence of non-traffic related drive-over accidents near schools and home is greater than 50 per week. More than 60% of the drivers are a parent or friend.
Possible Lives Saved in the US: Including adults, there are 1,900 deaths per year; many are preventable.



Med Tac Bystander Rescue Care

Bullying



Bullying & Workplace Violence: Bullying and abuse of power in schools and at work can lead to suicide, workplace violence, violent intruders, and active shooter events.

Possible Lives Saved in the US: Difficult to estimate, however the consensus is that they are likely to be very significant.

