Welcome to the Front Lines of the Fight Against COVID-19

A TOWN HALL CONVERSATION

We will begin at 10 a.m.
Providing Unparalleled Nursing Care

Liisa Ortegon, DrBA, MAA-OD, BSN
Senior Vice President Operations and Chief Nursing Executive

September 11, 2020
Providing Unparalleled Care

Nursing Knowledge

Employee Morale

Patient Assessment

Individualized Plan of Care
What It Takes to Be An HMH Nurse Today

• The Best and the Brightest

• Bachelor of Science in Nursing (BSN) – Minimum Requirement

• High-Level Critical Thinking and Judgement
HMH Diverse Nursing Team
To Serve Our Diverse Community

Age of RNs

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>&lt; 30</td>
<td>20%</td>
</tr>
<tr>
<td>30-39</td>
<td>33%</td>
</tr>
<tr>
<td>40-49</td>
<td>23%</td>
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<tr>
<td>50-65</td>
<td>22%</td>
</tr>
<tr>
<td>65+</td>
<td>3%</td>
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</table>

Ethnicity of RNs

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>Asian</td>
<td>36%</td>
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<tr>
<td>Caucasian</td>
<td>28%</td>
</tr>
<tr>
<td>African-American</td>
<td>24%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>10%</td>
</tr>
<tr>
<td>Other</td>
<td>2%</td>
</tr>
</tbody>
</table>

Education of RNs

- **92%** have a Bachelor’s Degree  
  *National Benchmark – 71.1%*
- **7%** have a Master/Doctoral Degree  
  *National Benchmark – 5.1%*
Patient Assessment

Nursing Knowledge

Employee Morale

Patient Assessment

Individualized Plan of Care
Patient Assessment

COVID: Information Overload

OVERWHELMED?
Patient Assessment
Pandemic Reactions and Behavioral Symptoms

Figure 1: Reactions and Behavioral Symptoms in Disasters

Adapted from the Substance Abuse and Mental Health Services Administration (SAMHSA) 13

Data from the Washington State Department of Health: COVID-19 Behavioral Health Group Impact Reference Guide (Published June 2020)
Patient Assessment
Communication and Observation

- Apathetic (Not/Ignore Environment)
- Moody Facial Expression
- Does Not Want to Take Care of Themselves
- Lack of Personal Hygiene
- Decreased Activity
- Lack of Self-Esteem
Patient Assessment
Loneliness and Social Isolation

Anxiety

Family Responsibilities

Financial

Home School
Individualized Plan of Care

Nursing Knowledge

Employee Morale

Patient Assessment

Individualized Plan of Care
Individualized Plan of Care (COVID Toolbox)

Understand Plan of Care
- Telerounding
  - MD to Patient
- RN Commit to Sit
- Spiritual Care Support

Connect to Family or Significant Other
- iPads
  - Patient/Family Video Calls via Google Duo, Zoom, or WebEx
  - My Chart Bedside
  - Food Ordering Capabilities

Calming Techniques
- Echo Dots
  - Musical Entertainment
- Movies (Personal Device)
- Relax Therapy
- Pictures of Family/Friends in Room
Individualized Plan of Care
COVID Toolbox: End of Life

- Early Palliative Care
- Frequent Communication with Healthcare Team
- In-person Visits (Limited)
- Technology
- Music Therapies
- Spiritual Care Support
- Support Groups
Employee Morale

Nursing Knowledge

Employee Morale

Patient Assessment

Individualized Plan of Care
Employee Morale
Interventions

• Leadership Visibility
• Annual Shipt Memberships
• Thank You Cards
• Door Dash DashPasses
• Meal Donations
• Hero Day Bonus

Medical ICU: Wall of Gratitude
Employee Morale
Medical Executive Committee Nursing Proclamation

For the past 150 years, the Nursing Staff at Houston Methodist Hospital has provided outstanding and empathetic care to all patients on the floors and critical care units. Over the past six months of the coronavirus pandemic, there has been extraordinary uncertainty, fear, stress, and anxiety about the health of your patients, your co-workers, yourselves, and your families. HHH nurses work diligently and selflessly on the frontlines of the COVID-19 pandemic in hand-to-hand combat with the virus. Your contributions to the health and well-being of our patients and our entire community are remarkable and wonderful. The physician staff of HHH wishes to celebrate and recognize the extraordinary women and men who devote themselves to this honorable profession.

Nursing is a special profession devoted to the compassionate service of others, especially in times when the need is the highest. Throughout the 100-year history of HHH, during floods, hurricanes, economic downturns, and epidemics, our nurses have rushed in regardless of danger, discomfort and personal jeopardy to provide help, healing, and comfort to our sickest patients.

At no other time in our history have the ICU values of our nurses been demonstrated more than during the COVID-19 outbreak. In the midst of this emergency, HHH nurses have exhibited incredible examples of unselfish commitment, sacrifice, and kindness as they have cared for their fellow Houstonians and in many cases have saved lives.

In spite of fatigue and the ever-present danger to their own health, our nurses carry on and persevere in combat against this microscopic enemy. Often the first to touch our patients, nurses provide critical support to doctors, alleviating problems throughout the healthcare system. They are capable of overcoming unbelievable hardships, stress, extended shifts, and emotional exhaustion to alleviate their patients' suffering. Nurses are amazing and truly worthy of our admiration and heartfelt thanks.

Therefore, in recognition of the exceptional, compassionate, and truly miraculous care of our patients and their families, the Medical Executive Committee of Houston Methodist Hospital-on behalf of all the attending physicians, hereby officially recognizes our nursing partners. We call upon all members of the Houston Methodist Hospital family to express their thanks to the nursing staff with declarations of gratefulness and appropriate ceremonies.

Signed on July 28, 2020

Houston Methodist
Leading Medicine
COVID-19 Impact on Behavioral Health

Ben Weinstein, MD

September 11, 2020
The COVID-19 pandemic has massive impact

- 1 in 1700 Americans have died
- 1 in 53 Americans have been infected
- 1 in 13 of American jobs are lost
- 1 in 8 Americans report substance abuse
- 1 in 3 Americans report depression and anxiety
- 1 in 10 Americans have considered suicide
- Calls to local hotlines are up 1600%
- Meadows Mental Health Policy Institute predicts 1500 additional Texans will die from suicide and overdose
- Antidepressant, anxiety medication, and alcohol sales are up 50%
The recipe for psychological distress...

- Isolation is the enemy of health
  - Live in a virtual world: work from home, schools closed
  - Avoid social gathering

- Fraying of society
  - Economy is unstable
  - Families fear losing loved ones, homelessness, hunger
  - Communities are divided and polarized
  - Lack of trust and faith
  - Information, misinformation, and disinformation
  - When will this end?
Impact on Healthcare workers

- Prior to COVID, 46% of physicians had at least one symptom of burnout
  - emotional exhaustion, cynicism, depersonalization, and low personal accomplishment
- Moral injury due to limited resources
- Fear of infection, fear of transmitting to loved ones, death of peers
- Up to 50% of people taking care of COVID-19 patients show signs of post traumatic stress
- Up to 50% show signs of depression
- Up to 70% report significant distress
- Anecdotal increase in suicide among nurses and physicians
COVID-19 infection’s impact on our brain and mind

• Viral infection of brain, hypoxia, inflammation, stroke, medical interventions
• Short term
  – Encephalopathy and Delirium
  – Dysexecutive syndrome
• Intermediate term
  – 1 in 3 with COVID will experience psychological effects
  – “COVID fog,” fatigue, traumatic memories, anxiety, depressed mood, irritability, insomnia, cognitive deficits in attention, concentration, and memory
  – Anxiety and mood disorder 15%, PTSD 32%
• Long term unknown
E Pluribus Unum
“Out of many, one”

• We are in this together
• Restore a sense of unity
• Connect with friends and loved ones even if virtually
• Physical distance NOT social distance
• Re-connect with yourself
  – Who are you?
  – What do you believe?
  – What matters to you?
Opere et veritate

“In action and truth”

• Slow Down
  – You cannot do everything at the same time
• Be present
  – Use mindfulness to connect to the moment
• Be open
  – To experiences good and bad, accept what we cannot control
• Do what matters
  – Act in accordance with your values
  – Show kindness and gratitude
• Self Care
  – Sleep, eat well, and exercise
I CARE Values: Integrity, Compassion, Accountability, Respect, Excellence

- Emergency rooms and Inpatient Psychiatry are open
- Hospitalized patients have access to psychiatrists, therapists, and music therapists
- Virtual care for intensive programs of care
- Integrating behavioral health services into primary care clinics
- Working to improve access to care by partnering with the community
- Taking care of our doctors, nurses, and staff
- Actively collecting data on psychological impact following COVID hospitalization – in Houston and internationally
- Planning studies on inflammation and brain function
If you are a patient or family member or friend in need of immediate assistance:

- **Disaster Distress Helpline**
  Call 800-985-5990 or text TalkWithUs to 66746

- **National Suicide Prevention Lifeline**
  Call 800-273-8255

- **Physician Support Line**
  Call 888-409-0141

- **Crisis Textline**
  Text TALK to 741741

- **Veterans Crisis Line**
  Call 800-273-8255 or text 838255

- **Texas COVID-19 Mental Health Support Line**
  Call 833-986-1919

- [ACTMindfully](#) free Mindfulness MP3 downloads
- [Doing What Matters in Times of Stress](#) from WHO
Research in Treatments & Vaccines

H. Dirk Sostman, MD FACR

Town Hall September 11, 2020
Controlling Infectious Disease

- Control of Disease
- Treatment
- Testing
- Vaccination
Meta-Analysis: Steroids and 28 Day Mortality
JAMA, August 2020

- Dexamethasone: 3 RCT’s, 1,282 patients
- Hydrocortisone: 3 RCT’s, 374 patients
- Methylprednisolone: 1 RCT, 47 patients

Overall: 3 RCT’s

Odds ratio (95% CI)
HM Clinical Trials – Anti-Viral Antibodies
Convalescent Plasma Meta-Analysis medRxiv August 2020

2 RCT, 10 cohort trials

Convalescent plasma not recommended to treat COVID-19, government panel says

The National Institutes of Health issued the statement shortly after the FDA authorized use of blood plasma for hospitalized patients.

FDA Issues Emergency Use Authorization for Convalescent Plasma as Potential Promising COVID-19 Treatment, Another Achievement in Administration's Fight Against Pandemic
HM Clinical Trials – Anti-Viral Antibodies

• Monoclonal Antibodies
  – Regeneron – inpatient study recruiting, outpatient starting soon
  – Lilly – outpatient study recruiting, inpatient starting soon

Both of these are randomized controlled trials
• **ACCT3**: NIH sponsored RCT
  – remdesivir + beta - interferon
  – Interferons are broad spectrum anti-viral proteins
  – Also used to treat cancer, MS, hepatitis
  – Covid-19 seems to suppress this defense mechanism
• Favipiravir
• AT-527
• MK-4482 / EID-2801
• All inhibit viral RNA polymerase
• Oral medications – could be given to outpatients; outpatient trials may begin soon
• Lots of other targets yet to explore!
A Few Words About Immunity & Vaccines
• Fraction needed to be immune depends upon Rt of virus
  – \( H = (1 - \frac{1}{Rt}) \)
  – Measles: \( Rt = 18 \)
    - \( H = (1 - \frac{1}{18}) = 94\% \)
  – Covid-19: \( Ro = 3 \)
    - \( H = (1 - \frac{1}{3}) = 67\% \)
  – Covid-19: \( Rt = 1.1 \)
    - \( H = (1 - \frac{1}{1.1}) = 8\% \)

• Rt depends upon many factors – especially behavior

• Ro is a special case, when
  – no one has been vaccinated
  – no one has had the disease before
  – there’s no way to control the spread of the disease
Antibodies After Covid-19 Infection
Humoral Immune Response to SARS-CoV-2 in Iceland; NEJM 2020

Red = during hospital admission
Blue = After discharge
Immunity without Infection or Vaccination?

• Karolinska Covid-19 Study Group
  – Patients with asymptomatic or mild Covid-19
  – Antibody negative or antibody positive – had robust T cell immunity

• Mateus et al Science 2020
  – 24% of SARS-CoV-2 patients had T cells reactive to endemic HCoV (human common cold coronaviruses)
  – HCoV-OC43, HCoV-HKU1, HCoV-NL63, HCoV-229E

• Le Bert et al Nature 2020
  – T cell reactivity in 100% of recovered Covid-19 and 100% of SARS patients
  – T cell cross-reactivity to SARS-CoV-2 in 53% of non-exposed individuals

• Grifoni et al Cell 2020
  – CD4+ and CD8+ T cells in 100% and 70% of convalescent COVID patients
  – T cell cross-reactivity to SARS-CoV-2 also detected in 36% of non-exposed individuals
### Vaccine Progress – Antibody and T Cell Responses

<table>
<thead>
<tr>
<th>Vaccine</th>
<th>Antibody Response</th>
<th>T Cell Response</th>
<th>Species</th>
<th>N of Doses</th>
<th>Protection (Monkeys)</th>
<th>EUA Target</th>
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</thead>
<tbody>
<tr>
<td>Moderna</td>
<td>100% (2x – 8x CP)</td>
<td>100%</td>
<td>Human</td>
<td>2</td>
<td>Infection</td>
<td>December 2020</td>
</tr>
<tr>
<td>Pfizer / BioNTech</td>
<td>100% (5x – 30x CP)</td>
<td>94%</td>
<td>Human</td>
<td>2</td>
<td></td>
<td>October 2020</td>
</tr>
<tr>
<td>J &amp; J</td>
<td>100%</td>
<td>83%</td>
<td>Monkeys</td>
<td>1</td>
<td>Infection</td>
<td>Q1 2021</td>
</tr>
<tr>
<td>Oxford / Astra Zeneca</td>
<td>100% (= CP)</td>
<td>100%</td>
<td>Human</td>
<td>2</td>
<td>Disease</td>
<td>September 2020 PAUSED</td>
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<tr>
<td>Novavax</td>
<td>100% (2x CP)</td>
<td>100% (subgroup)</td>
<td>Human</td>
<td>2</td>
<td></td>
<td>December 2020</td>
</tr>
</tbody>
</table>

CP = convalescent plasma
Vaccine Scenarios

• Scenario 1
  – Vaccine 90% effective, few side effects
  – “Silver Bullet”

• Scenario 2
  – Vaccine 50% - 60% effective, few side effects
  – Useful, but need to pair with testing, treatment, precautions

• Scenario 3
  – Vaccine < 50% effective
  – Need to wait for next generation of vaccines
  – Need to pair with testing, treatment, precautions

• Scenario 4
  – Vaccine has side effects
  – Need to wait for next generation of vaccines
  – Safety testing will take much longer
  – Need to pair with testing, treatment, precautions
Winter is Coming

STAY HOME

WINTER IS COMING

#COVID-19
• Humidify indoor air (40% - 60% relative humidity at 70 - 75 F)
• Ventilation of indoor air
• Wear face mask to keep nose warm and moist
• Vitamin D supplements if levels low *(Meltzer et al, JAMA September 2020)*
• Wash hands to prevent indirect contact transmission
• Get plenty of sleep

**• Get your flu shot!**
COVID-19 Update

September 11, 2020
AVERAGE DAILY NEW COVID-19 POSITIVE CASES BY WEEK (MONDAY-SUNDAY)

# Daily average new cases in Greater Houston Area

1. Austin, Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery and Waller
Houston Methodist Testing Trend

Confirmed COVID-19 Lab Tests

- Positive COVID-19 Tests
- 7 Day Rolling Average of Percent of Positive Tests
TMC DAILY NEW COVID-19 HOSPITALIZATIONS

ICU & Med Surg hospitalizations

Monitoring threshold:
Threshold is exceeded by the occurrence of a positive daily growth rate, averaged over 7 days

Current status: 1.5% daily growth rate (averaged over 7 days) in the COVID-19 daily hospital admissions trend

Notes:
While new daily cases may fluctuate for a variety of reasons (e.g., testing), the daily hospitalization trend shows an objective view of how COVID-19 impacts hospital systems
Houston Methodist Current COVID-19 Stats

COVID-19 related patients through Houston Methodist as of September 10, 2020

Total Positive: 17,237

- Total Hospitalized: 5,982
- Currently Hospitalized: 191
- Discharged: 5,249
- Deaths: 542

Key Messages

- Houston Methodist has served 5,982 COVID-19 related in-patients to date.
- 5,249 patients have been successfully discharged.

Data as of Sept. 10, 2020 at 7:00 pm
IS IT CONCEIVABLE THAT THE COVID SPIKE IN HOSPITALIZATIONS THAT WE SAW IN JULY REPRESENTED THE SECOND PEAK THAT WAS PREDICTED TO COME IN THE FALL, AND IT JUST CAME EARLIER, AND, THEREFORE, THERE MAY BE HOPE FOR THE FUTURE?

HOW WORRIED ARE YOU ABOUT A RESURGENCE OF COVID IN THE FALL OF 2020?

IF OR WHEN THERE IS ANOTHER WAVE OF THE VIRUS, WILL WE HAVE THE NECESSARY CAPACITY? I'M INTERESTED TO KNOW ABOUT BEDS, EQUIPMENT AND PPE, BUT AM VERY CONCERNED THAT WE MAY HAVE BURNED OUT OUR HIGHLY DEDICATED AND PROFESSIONAL HEALTH CARE PROVIDERS, THE PEOPLE AND EXPERTISE THAT ARE ESSENTIAL TO MAKING IT ALL WORK.
“Whichever scenario the pandemic follows (assuming at least some level of ongoing mitigation measures), we must be prepared for at least another 18 to 24 months of significant COVID-19 activity, with hot spots popping up periodically in diverse geographic areas.”

Can you clarify the current CDC conversation about 94% of COVID deaths involving co-morbidity and only 6% being "COVID only"?

What are your thoughts about the CDC announcement that of the 182,000 plus deaths, only 6% of the death certificates list it as the cause of death, and that 94% show other health conditions as factors? If this is accurate, why is this the case?

Will you speak to the recent CDC restatement in the # of COVID deaths from 180K to 9.5K? I have heard from a lot of people that this reinforces the COVID hoax theory. I believe I understand what they are doing but believe that the general audience needs to hear it from someone like Houston Methodist that can speak to the facts.

Is there any way to estimate how many COVID deaths were inevitable because of other conditions? That is, would 100,000 of the 180,000 COVID deaths, for instance, have died within a year because of their underlying conditions? Could this be an opportunity to highlight how important diet and exercise are? Could this be a great opportunity to highlight wellness as a lifestyle?
Two-thirds of death certificates contain more than one cause of death which can be used to explore disease interactions. Chronic diseases such as Diabetes and Hypertension have the most number of multiple causes of death.

If COVID-19 contributed to the death, it should be listed on the death certificate and counted as a COVID-19 death, even if there were other factors associated with the death.
Excess Deaths from All Causes

Estimated deaths above normal, March 1 to July 25

**South** 57,000 total excess deaths
+6,000 more weekly deaths than expected

**West** 29,000 total excess deaths

**Midwest** 38,000 total excess deaths

**Northeast** 95,000 total excess deaths

Deaths above normal in the South

- **Texas**: Peak: July 19 (1.6x Normal)
- **South Carolina**: 1.6x, July 19
- **Mississippi**: 1.5x, July 19
- **Alabama**: 1.3x, July 19
- **Tennessee**: 1.2x, July 19
- **Oklahoma**: 1.2x, July 19
- **Florida**: 1.4x, July 12
- **Georgia**: 1.3x, July 12
- **Kentucky**: 1.2x, July 5
- **Arkansas**: 1.2x, June 14
- **North Carolina**: 1.1x, May 17
- **Virginia**: 1.3x, April 26
- **Louisiana**: 1.7x, April 5

Excess Deaths from All Causes

MORE THAN EXPECTED
One way to gauge the toll of the coronavirus pandemic is to count the number of deaths that exceed what is seen in typical years. This metric, called excess deaths, varies by country and hints strongly that lock downs had a significant impact on deaths from COVID-19 and other causes.

Deaths attributed to COVID-19
Deaths attributed to other causes
Expected deaths

United States

About 25% of US excess deaths are not attributed to COVID-19, although they might be indirectly linked to the pandemic.

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Dementia and Alzheimer’s disease
Hypertension
Asthma
Diabetes
Other non-COVID causes of death

Undiagnosed COVID-19 or disrupted routines in care homes could underlie the spike in deaths from dementia and Alzheimer’s disease.
“I wanted to thank you for publicly encouraging people to do their routine medical appointments and that it was safe to visit HM facilities to do them. After hearing you speak, I went ahead and scheduled my mammogram — which was about a month late. Turns out I have breast cancer — which was caught early because you said disease doesn’t wait. I am so lucky to be part of the Houston Methodist family as I was able to get in quickly with great doctors and have all the confidence in them. I wanted you to know that you helped save my life by encouraging me to do the routine mammogram.”
Hospitalizations and deaths from COVID-19 apparently peaked in Texas in late July and have fortunately fallen off quite dramatically since then by approx. 50-60%. What, if anything, did we do right in Texas/Houston to get control of this explosion of the virus or did we just get lucky?
Houston Methodist COVID-19
Cases by Day

Houston Methodist COVID-19
Patients by Day

- State-Wide Stay-at-Home Order
- State-Wide Mask Order for All
- Harris County Mask Order for Businesses

Graph showing daily COVID-19 positive and negative cases by category and state orders.
ARE FACE SHIELDS ALONE SUFFICIENT OR SHOULD MASKS BE WORN UNDER A FACE SHIELD?
Efficacy of Masks

Average distance traveled by airborne droplets (in inches)

<table>
<thead>
<tr>
<th>Material</th>
<th>Distance</th>
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</thead>
<tbody>
<tr>
<td>Uncovered</td>
<td></td>
</tr>
<tr>
<td>Bandana (Elastic T-shirt material)</td>
<td></td>
</tr>
<tr>
<td>Folded handkerchief (Cotton)</td>
<td></td>
</tr>
<tr>
<td>Off-the-shelf cone style mask (Unknown)</td>
<td></td>
</tr>
<tr>
<td>Stitched mask (Quilting cotton)</td>
<td></td>
</tr>
</tbody>
</table>

Folded handkerchief

- Leaked from the top: 0.5 sec. After the start of the emulated cough.
- Leaked through the mask: 2.27 sec.

Efficacy of Face Shields

Moving Personal Protective Equipment into the Community

Face shields and containment of COVID-19

Face shields, which can be quickly and affordably produced, should be included as part of strategies to safely and significantly reduce transmission in the community, targeting a wide range of personal protective equipment design. A 2020 study found that face shields were effective in reducing the spread of respiratory droplets.

There is consensus among health care providers that face shields be used in addition to other personal protective equipment (PPE) to protect against respiratory infections.

The benefits of using face shields are well documented.

...no studies have evaluated the effects or potential benefits of face shields on source control, i.e., containing a sneeze or cough, when worn by asymptomatic or symptomatic infected persons.

COVID-19 Transmission in the Community

The transmission of respiratory viral aerosols, such as those caused by COVID-19, is thought to be primarily driven by droplet transmission. Studies have shown that droplets can travel up to 3 meters, allowing them to contaminate the environment and infect others. Face shields are designed to prevent the spread of droplets and can help reduce the risk of cross-contamination.

Face shields are particularly effective in preventing the transmission of respiratory viruses, such as those caused by COVID-19. Studies have shown that wearing face shields can significantly reduce the risk of infection for both the wearer and those around them.

The use of face shields can substantially reduce the short-term exposure of health care workers to larger infectious aerosol particles and can reduce contamination of their respirators. They are less effective against smaller particles, which can remain airborne for extended periods and can easily flow around a face shield to be inhaled.

Efficacy of Face Shields Against Cough Aerosol Droplet from a Cough Simulator

References


Efficacy of Face Shields Against Cough Aerosol Droplet from a Cough Simulator

Abstract

The use of face shields can substantially reduce the short-term exposure of health care workers to larger infectious aerosol particles and can reduce contamination of their respirators. They are less effective against smaller particles, which can remain airborne for extended periods and can easily flow around a face shield to be inhaled.
As flu season is approaching, is it possible to get the flu and COVID-19 at the same time? I can sense people will begin to panic.

With respect to the flu, might there be a silver lining in all this, i.e. could our coronavirus precautions help suppress the progression of the 2021 flu season? Assuming we do not see a drop off in flu vaccinations compliance.

Does having taken the pneumonia shots give any additional protection against COVID?
GET YOUR FLU SHOT!!!!!
When should schools open in-person?

Any further guidance on in-person schooling and youth sports since last town hall?

How are COVID cases in children from school openings compared to what the expectations were? Is it skewed toward certain ages of children?
Returning To School

"...the AAP strongly advocates that all policy considerations for the coming school year should start with a goal of having students physically present in school."
TMC Control Metrics

THREE METRICS TO GAUGE OUR PROGRESS

**R(t): Effective Reproduction Rate**
- **Harris County**
- Sep 6: 0.86 (3 Days < 1.0)
- Community Control: <1.0 for 14-days

**Daily New Cases**
- **Greater Houston 9-County Area**
- Today: 1,176
- Community Control: <200 for 14-days

**Test Positivity Rate (%)**
- **TMC Hospital Systems**
- Today: 4.7% (4 Days < 5%)
- Community Control: <5% for 14-days

Rt measures how effective our collective behaviors (e.g., social distancing and mask wearing) are in slowing the growth of the virus. If R(t) is above 1.0, the virus spread is increasing; if R(t) is below 1.0, the virus spread is slowing.

When the number of new daily cases is over 200, it is difficult to effectively trace and help isolate further spread of the virus.

Community Control: < 200 cases/day for 14-days

A low positivity rate may indicate declining spread of the virus.

Community Control: < 5% for 14-days
County Risk Level Assessment

- **COVID RISK LEVEL: GREEN**
  - Less than one case per 100,000 people
  - On track for containment
  - Monitor with viral testing and contact tracing program

- **COVID RISK LEVEL: YELLOW**
  - 5-9 cases per 100,000 people
  - Community spread
  - Rigorous test and trace programs advised

- **COVID RISK LEVEL: ORANGE**
  - 10-24 cases per 100,000 people
  - Accelerated spread
  - Stay-at-home orders and/or rigorous test and trace programs advised

- **COVID RISK LEVEL: RED**
  - 25+ cases per 100,000 people
  - Tipping point
  - Stay-at-home orders necessary

https://globalepidemics.org/key-metrics-for-covid-suppression/
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<tr>
<th>School Districts</th>
<th>Reopening Date</th>
<th>In-Person Reopening Date</th>
<th>Student Population</th>
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<tr>
<td>HISD</td>
<td>September 8</td>
<td>October 19</td>
<td>213,528</td>
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<tr>
<td>CyFair</td>
<td>September 8</td>
<td>September 8</td>
<td>116,138</td>
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<tr>
<td>Katy</td>
<td>August 19</td>
<td>September 8</td>
<td>77,331</td>
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<tr>
<td>Fort Bend</td>
<td>August 17</td>
<td>October 12</td>
<td>74,957</td>
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<tr>
<td>Aldine</td>
<td>August 17</td>
<td>Staggered September 21</td>
<td>67,234</td>
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<tr>
<td>Conroe</td>
<td>August 12</td>
<td>September 8</td>
<td>61,323</td>
</tr>
<tr>
<td>Pasadena</td>
<td>August 18</td>
<td>September 8</td>
<td>54,520</td>
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<tr>
<td>Klein</td>
<td>August 19</td>
<td>September 8</td>
<td>52,896</td>
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<tr>
<td>Alief</td>
<td>August 6</td>
<td>TBD</td>
<td>46,223</td>
</tr>
<tr>
<td>Humble</td>
<td>August 11</td>
<td>Phased August 17 – August 24</td>
<td>42,301</td>
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<td>Clear Creek</td>
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<td>Phased August 31 – Sept. 14</td>
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<td>Spring</td>
<td>August 17</td>
<td>September 14</td>
<td>36,079</td>
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<td>Spring Branch</td>
<td>August 24</td>
<td>September 8</td>
<td>34,975</td>
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<td>Lamar</td>
<td>August 24</td>
<td>August 24</td>
<td>32,051</td>
</tr>
<tr>
<td>Alvin</td>
<td>August 24</td>
<td>August 24</td>
<td>24,755</td>
</tr>
</tbody>
</table>
Resuming Youth Sports

- LOWER RISK
  - Skill-building drills at home
  - Team practice
  - Within-team competition

- HIGHER RISK
  - Competition with teams from your area
  - Full competition from different areas

- Keep space between players in practice areas
- Wear masks when able
- Encourage players to bring their own equipment
- Encourage players to focus on building individual skills

How often are you seeing long lasting health effects in people who have recovered from COVID? A recent interview stated 1 in 3 people who have had COVID still fight existing health issues they believe are results from having had the virus including blood clotting, brain fog, depression, numbness in body parts, etc. This seems like a very high percentage so I just wanted to know what the medical community is noticing thus far.

My wife and I both tested positive for COVID-19 in mid-March. It's been almost 6 months and we both continue to have side-effects with physical and mental issues that we did not have previously. As "long haulers," does Methodist have any plans to establish "long term" or "post-COVID-19" treatment centers within or outside of its existing facilities?
COVID-19 Surveillance & Outcomes Registry (CURATOR)

All Patients Tested for SARS-CoV-2 within Houston Methodist System
(Inpatient and Outpatient)

- Total Patients Tested for SARS-CoV-2: 116,162
- SARS-CoV-2 Positive: 17,117
  - Admitted: 5,929
  - Not Admitted: 11,188
- SARS-CoV-2 Negative: 99,045
  - Admitted: 16,188
  - Not Admitted: 82,857

Data Elements
Demographics, Vitals, Lab Values, Medications, Procedures, Outcomes
INTEGRATED COVID CLINICAL AND RESEARCH PROGRAM

- **SURVEYS**
  - RECOVERY
  - SOCIAL DETERMINANTS OF HEALTH
  - QUALITY OF LIFE

- **COVID RECOVERY CLINIC**
  - LUNG FUNCTION
  - COGNITIVE TESTING
  - IMAGING (HEART/BRAIN)

- **BIOBANKING**
THANK YOU FOR ATTENDING OUR TOWN HALL CONVERSATION

If you would like more information about Nursing, Behavioral Health, or The Society for Leading Medicine, please contact foundation@houstonmethodist.org

*Take care and be well*

[Houston Methodist Logo]