



# LEADING MEDICINE: A TOWN HALL CONVERSATION WITH DR. MARC BOOM

Town Hall Conversation XXIII

We will begin at 10 a.m.



# Houston Methodist Urology

Kathleen C. Kobashi, MD, FACS

Chair, Department of Urology



## A little history

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HMH founded in 1919

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>2200 bed multispecialty tertiary referral medical center

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>2000 physicians

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7-hospital system

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Tremendous trajectory in 15 years

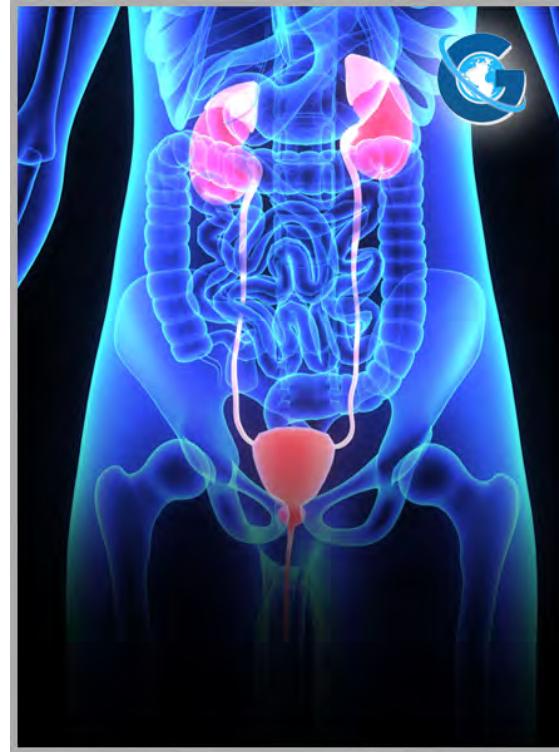
# Who is Urology?

- 18 Surgeons
- 15 Residents
- 3 Fellows
- 2 Advanced Practitioners



# What is Urology?

- Surgical subspecialty
- Addresses issues of the urinary tract
- Male and female
- Adults and children
- Spans broad range





*Serve our patients*



Clinical excellence



Coordinated service delivery across enterprise



Innovative research



Exceptional education



*World-Class Urology Department*

# Forward-thinking



Top-notch team



Leading in each  
subspecialty



Multi-  
disciplinary  
relationships

Outcomes,  
service, and  
innovation

# Urology Service Lines



- **Urologic Oncology**
  - Prostate, Bladder, Kidney, Testis
- **Stone Center**
- **Men's Health Center**
  - Andropause, Sexual medicine
- **Pelvic Floor Medicine/Functional Urology**
  - Voiding dysfunction
  - Prostate health
  - Neurogenic bladder
- **Women's Urology Center**
  - Incontinence, prolapse

# Scope of Urology

## Oncology

- Prostate
- Bladder
- Kidney
- Testis

## Kidney stones

## Women's Health and Pelvic Medicine

- Stress incontinence
- Overactive bladder
- Pelvic prolapse

## Men's Health

- Sexual function
- Prostate health
- Infertility

## Functional urology

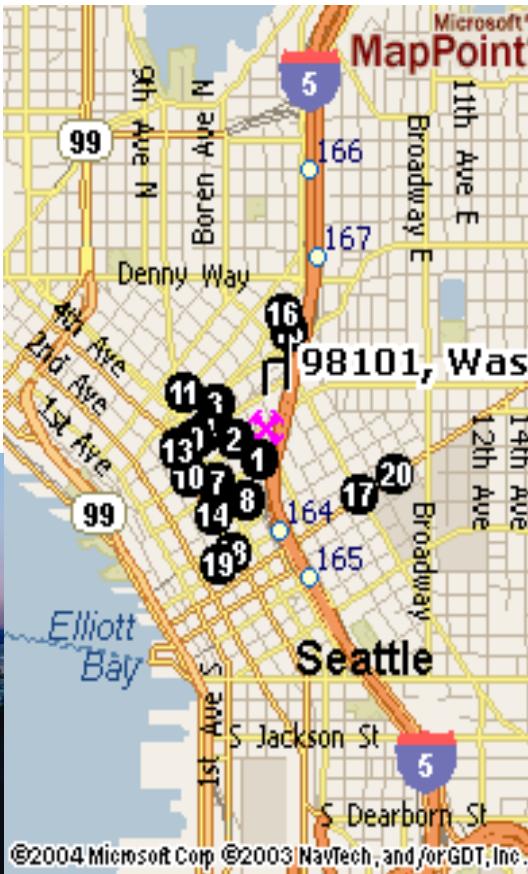
- Neurogenic bladder
- Transitional medicine

# “Functional Urology”

## Female Urology and Pelvic Medicine

# It's all about perspective

20 Starbucks or 20  
bathrooms?



# Prevalence

- Any leak in the past year (25-45%)<sup>1</sup>
- Increases with age<sup>2</sup>
  - 12% in women 60-64
  - 21% in women  $\geq 85$
  - 58% of women living in nursing homes
- 20% of continent women aged  $\geq 60$  develop incontinence within a year



1. Buckley BS, Lapitan MC. Urology 2010; 76(2):265-70

2. Anger JT et al. 2006; 175: 601

- Under-reported and under-treated
  - < 50% of women with significant symptoms seek treatment<sup>1</sup>
- Burgio & colleagues
  - 1,104 community-dwelling elderly persons who self-reported urinary incontinence
  - **62% had not mentioned UI to any provider<sup>2</sup>**

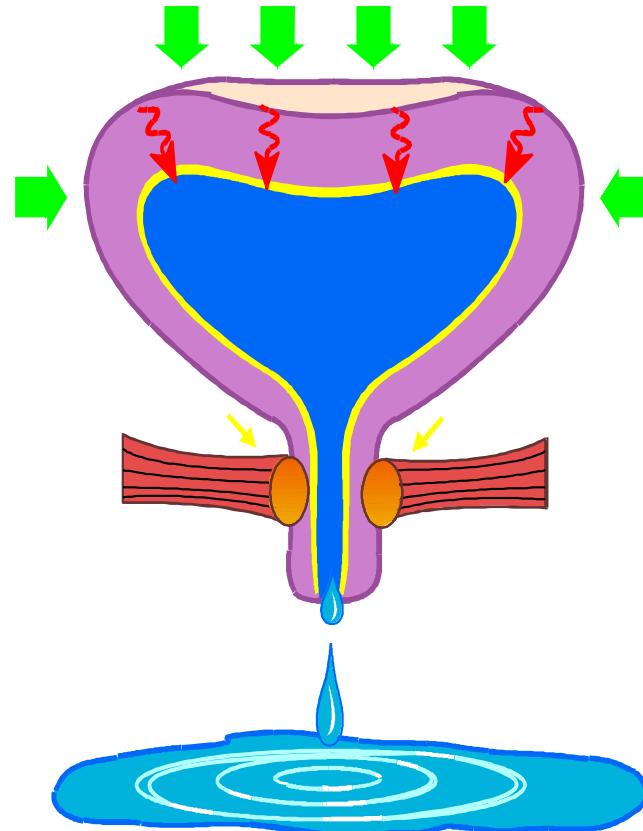
1. Branch LG et al., J Am Geriatr Soc. 1994; 42(12):1257-62

2. Burgio et al: J Am Geriatr Soc. 1994; 42(2):208-12

# Bladder responsibilities

- Store urine
- Empty completely

*(And don't leak!)*



# Types of Urinary Incontinence<sup>1</sup>

## OVERACTIVE BLADDER (OAB) SYNDROME

- Urinary urgency, usually accompanied by frequency and nocturia, with or without urgency urinary incontinence, in the absence of urinary tract infection or other obvious pathology

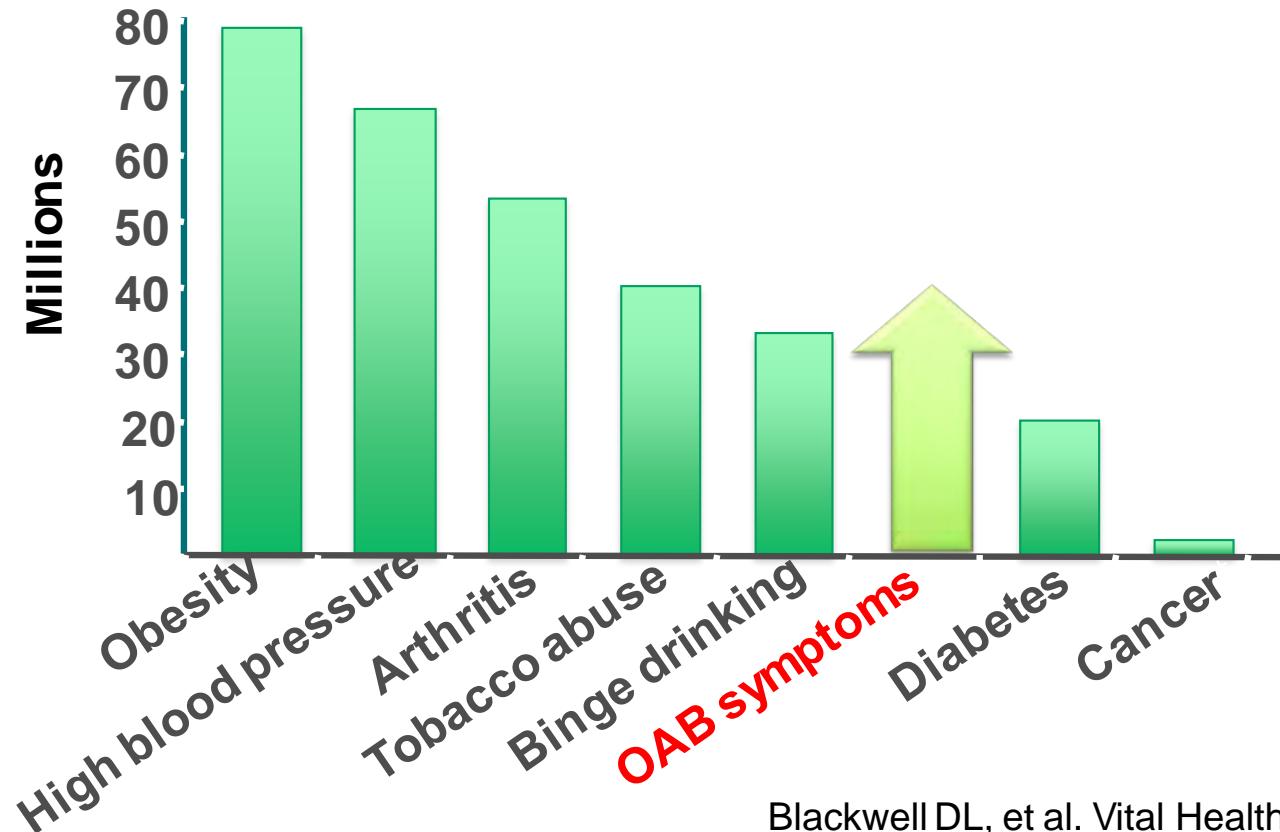
## STRESS URINARY INCONTINENCE

- Complaint of involuntary loss of urine on effort or physical exertion, or on sneezing or coughing

## OTHER TYPES

- Mixed (stress and urgency incontinence)
- Continuous
- Insensible
- Postural

# Prevalence of Chronic Conditions in US



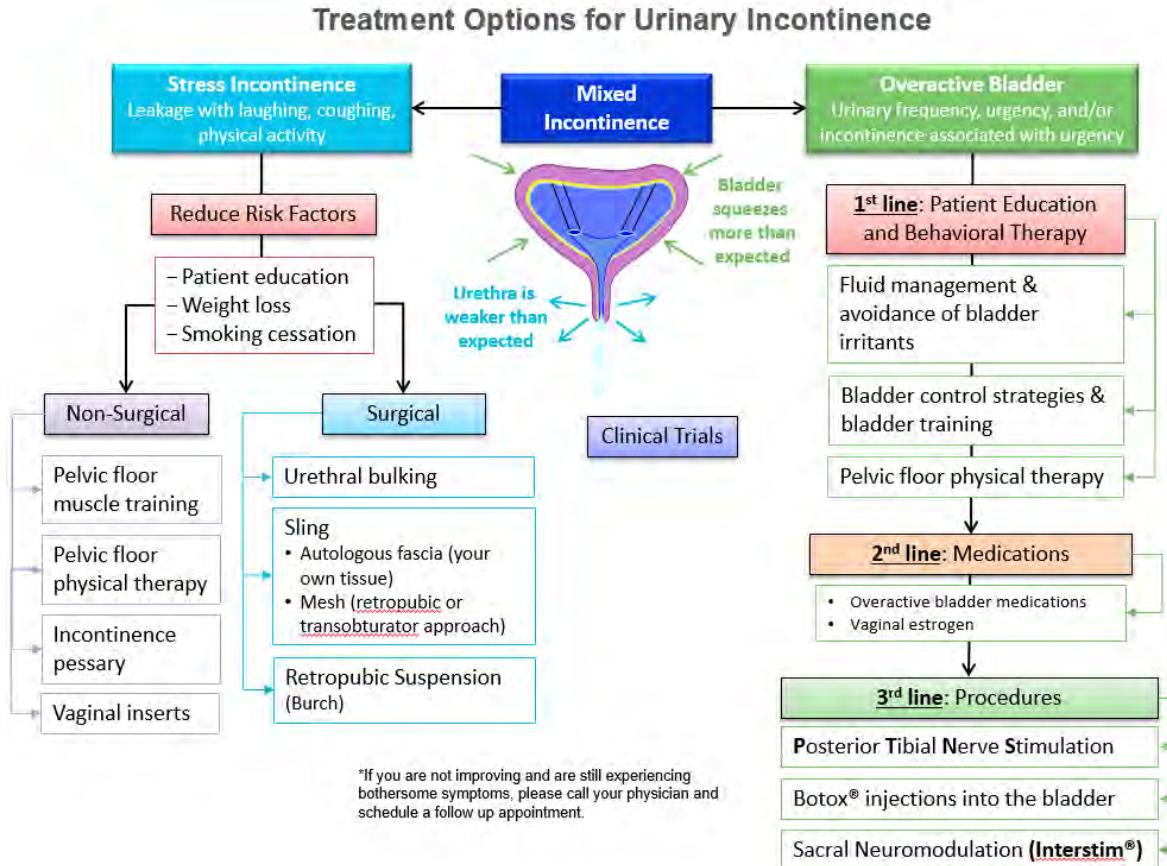
# Paying the Price

Total OAB costs in the US ~\$66 billion<sup>1</sup>

- \$49 billion direct medical
  - Diagnostic evaluation
  - Medications
  - Procedures
- \$2.3 billion direct non-medical
  - Absorbent products
  - Bedside commodes
- \$14.6 billion indirect
  - Lost productivity (OAB related work loss)

1. Ganz ML, et al. Urology 2010; 75:526-32

# Partnering with our patients



## **Surgical Treatment of Female Stress Urinary Incontinence: AUA/SUFU Guideline**

Kathleen C. Kobashi, Michael E. Albo, Roger R. Dmochowski, David A. Ginsberg,  
Howard B. Goldman, Alexander Gomelsky, Stephen R. Kraus, Jaspreet S. Sandhu,  
Tracy Shepler, Jonathan R. Treadwell, Sandip Vasavada and Gary E. Lemack

*From the American Urological Association Education and Research Inc., Linthicum, Maryland and the Society of Urodynamics,  
Female Pelvic Medicine & Urogenital Reconstruction, Schaumburg, Illinois*

### **The AUA/SUFU Guideline on Adult Neurogenic Lower Urinary Tract Dysfunction**

Panel Members: David A. Ginsberg, MD; Timothy B. Boone, MD PhD; Anne P. Cameron, MD; Angelo Gousse, MD; Melissa R. Kaufman, MD; Erick Keays; Michael J. Kennelly, MD; Gary E. Lemack, MD; Eric S. Rovner, MD; Lesley H. Souter, PhD; Claire C. Yang, MD; Stephen R. Kraus, MD

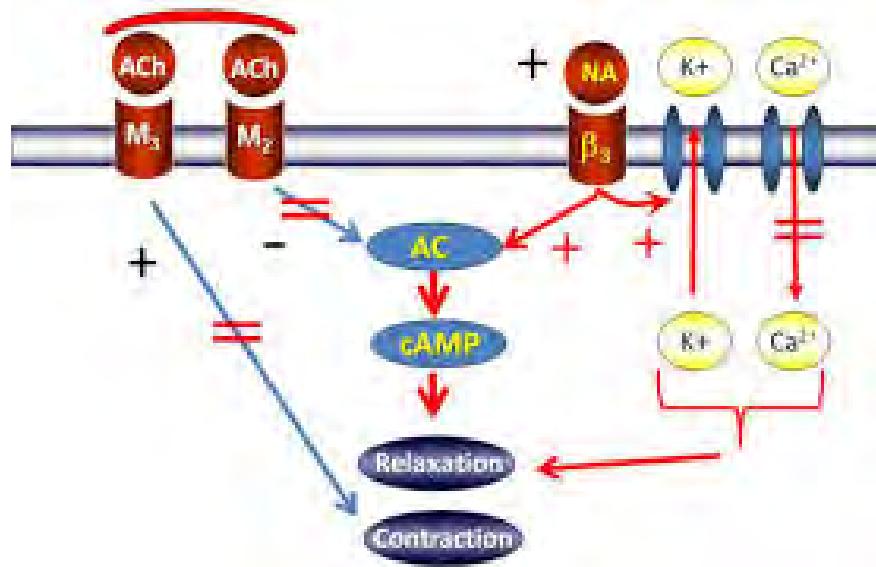
### **AUA/SUFU Guideline**

### **ADULT URODYNAMICS: AUA/SUFU GUIDELINE**

J. Christian Winters, Roger R. Dmochowski, Howard B. Goldman, C.D. Anthony Herndon, Kathleen C. Kobashi, Stephen R. Kraus, Gary E. Lemack, Victor W. Nitti, Eric S. Rovner, Alan J. Wein

# Overactive Bladder

# Medications



- Muscarinic receptors:
  - M1-5
  - M1-M2: CNS
  - M3: eyes, mouth, bowel
  - M3, M2: bladder → contraction
- Beta 3 adrenergic receptors
  - Present in bladder
  - Mediate relaxation via AC and K<sup>+</sup> transport

**But what if meds  
don't work?**



Percutaneous tibial nerve stimulation



Botox® injection in the bladder



Sacral nerve stimulation (bladder pacemaker)

- PTNS (percutaneous tibial nerve stimulation)
- Simple office procedure
- 6-12 weekly treatments



*Urgent PC Neuromodulation System uses retrograde electrical stimulation of the sacral nerve plexus to treat OAB.*

# PTNS (“Acupuncture”)

- 34-gauge needle
- 3-5 cm cephalad to medial malleolus
- Placement confirmed
  - Great toe plantar flexion
  - Sensation on plantar aspect of foot



- Improvement in global response assessment (GRA)
- PTNS vs sham
  - PTNS vs sham: 58.3 vs 21.9%
- PTNS vs tolterodine
  - 79.5% vs 54.8%
- At 36 months 77% had sustained moderate/  
marked improvement<sup>1</sup>

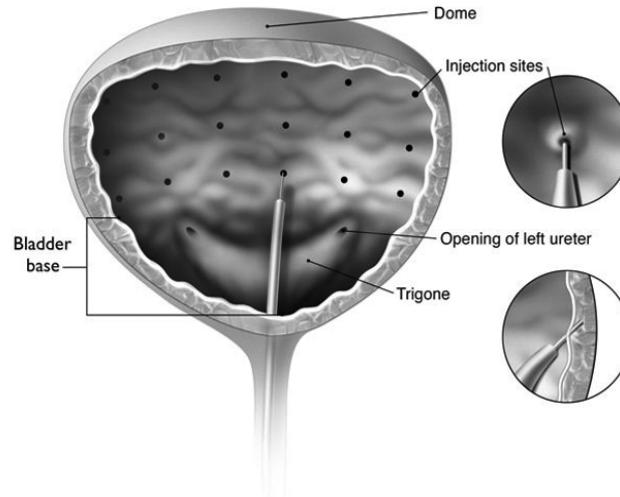
Peters KM, et al.: J Urol 2010;183(4):1438-43.

Peters KM, et al.: J Urol 2009;182(3):1055-61.

Peters KM, et al.: J Urol;189(6):2194-2201 24

# Botox® in the Bladder

- 100-200 units
- Local anesthetic in the office
- 5-minute procedure
- Drive yourself
- 1-2 times a year
- Success: 80%



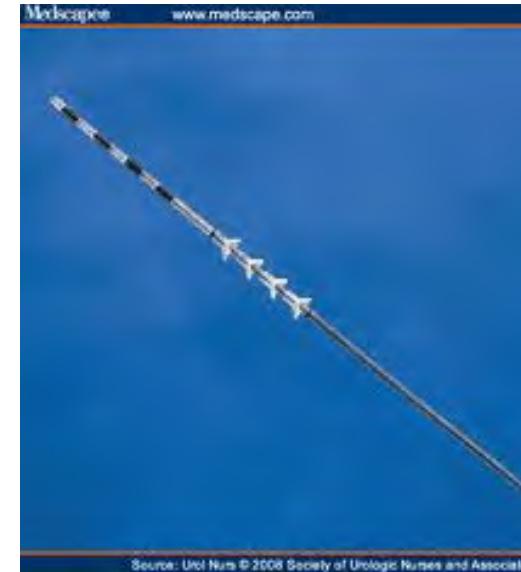
# Interstim (“Pacemaker”)



- Outpatient
- In operating room or office
- Lead in lower back
- Stimulator under skin

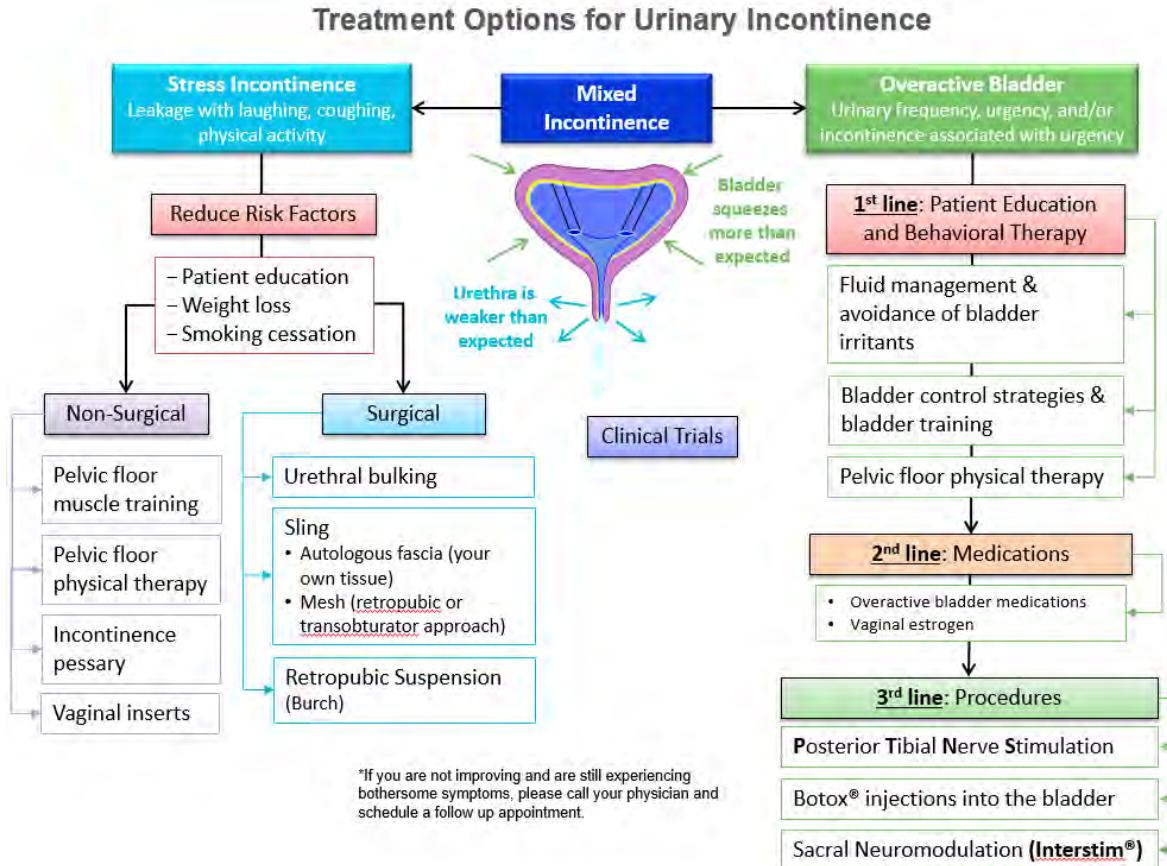
# Interstim test drive

- Two stages
- “Colonoscopy sedation”
- Success ~90%



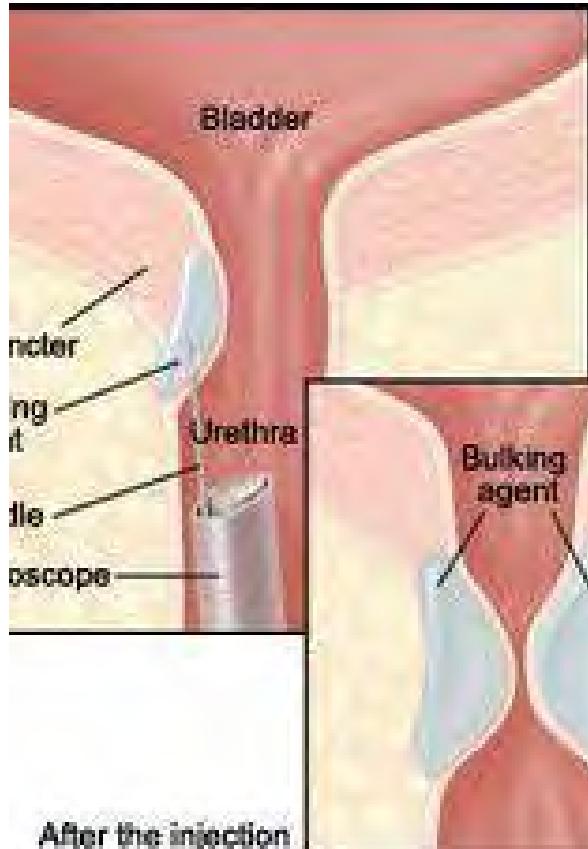
# Stress incontinence

# Educating our patients



# Surgical Options

## Urethral bulking injections

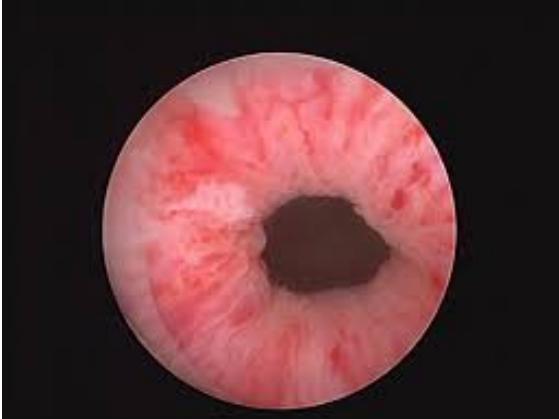


- Urethral bulking injections
- Increase urethral resistance
- Enhance mucosal seal
- Increase sphincter strength?
- Increase sarcomere length?

# Surgical Options

Urethral bulking injections

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Success of 70% up to 7 years

# Surgical Options

## Slings

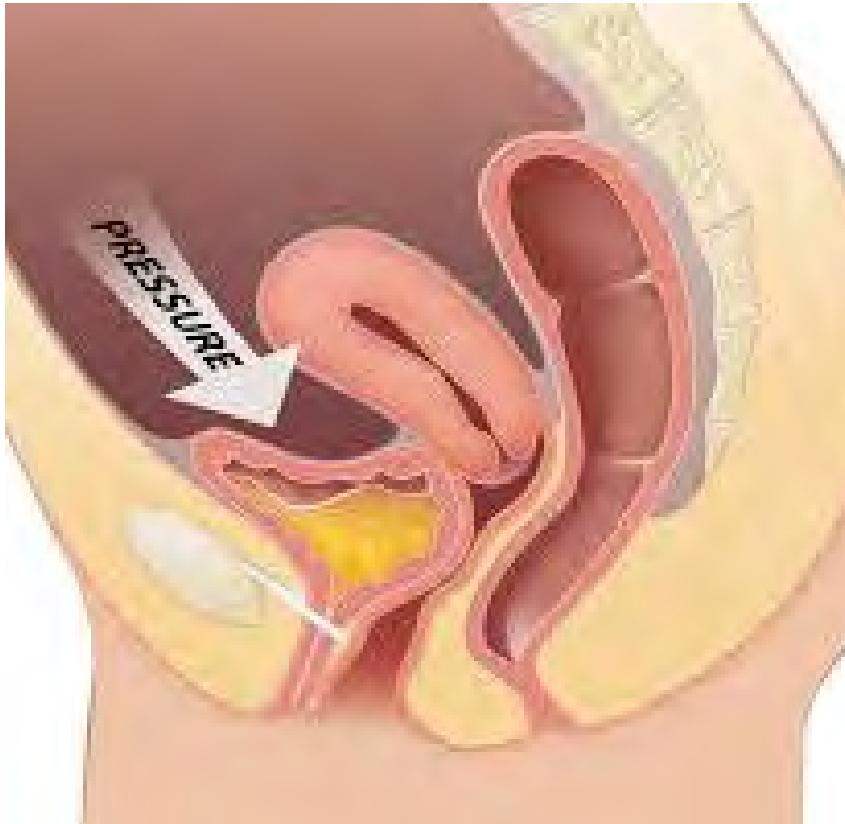
- Hammock beneath the urethra
- Outpatient
- <30-minute procedure
- Can use your own tissue or polypropylene



The placement of the retropubic sling is like a U

# Surgical Options

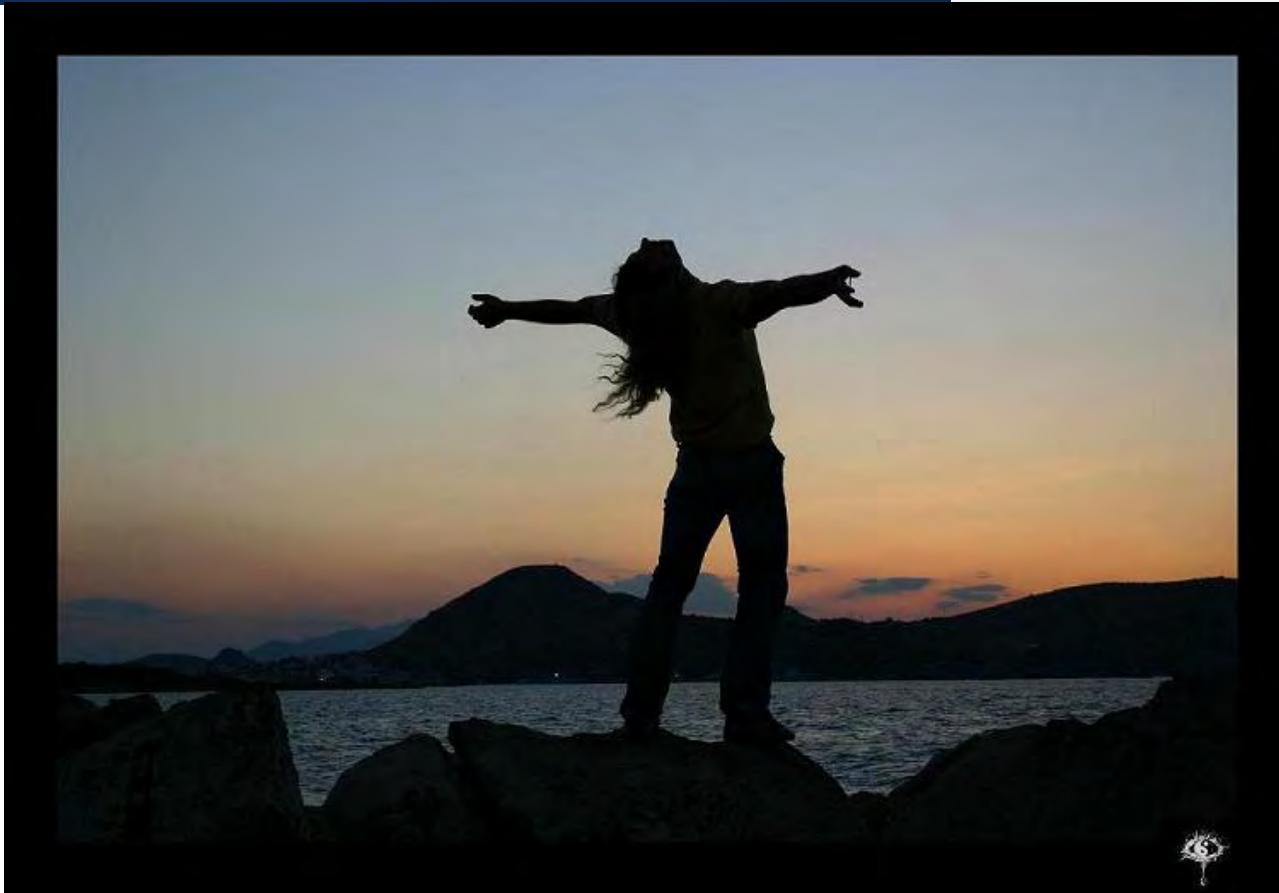
## Slings



- Backstop supports urethra
- Success rates in the 80-85% range

# Quality of Life

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Due to their large file size, the slides of Drs. Ricardo R. Gonzalez and Rose Khavari cannot be posted. Please email [foundation@houstonmethodist.org](mailto:foundation@houstonmethodist.org) to receive a copy of the slides.

# Houston Methodist Update

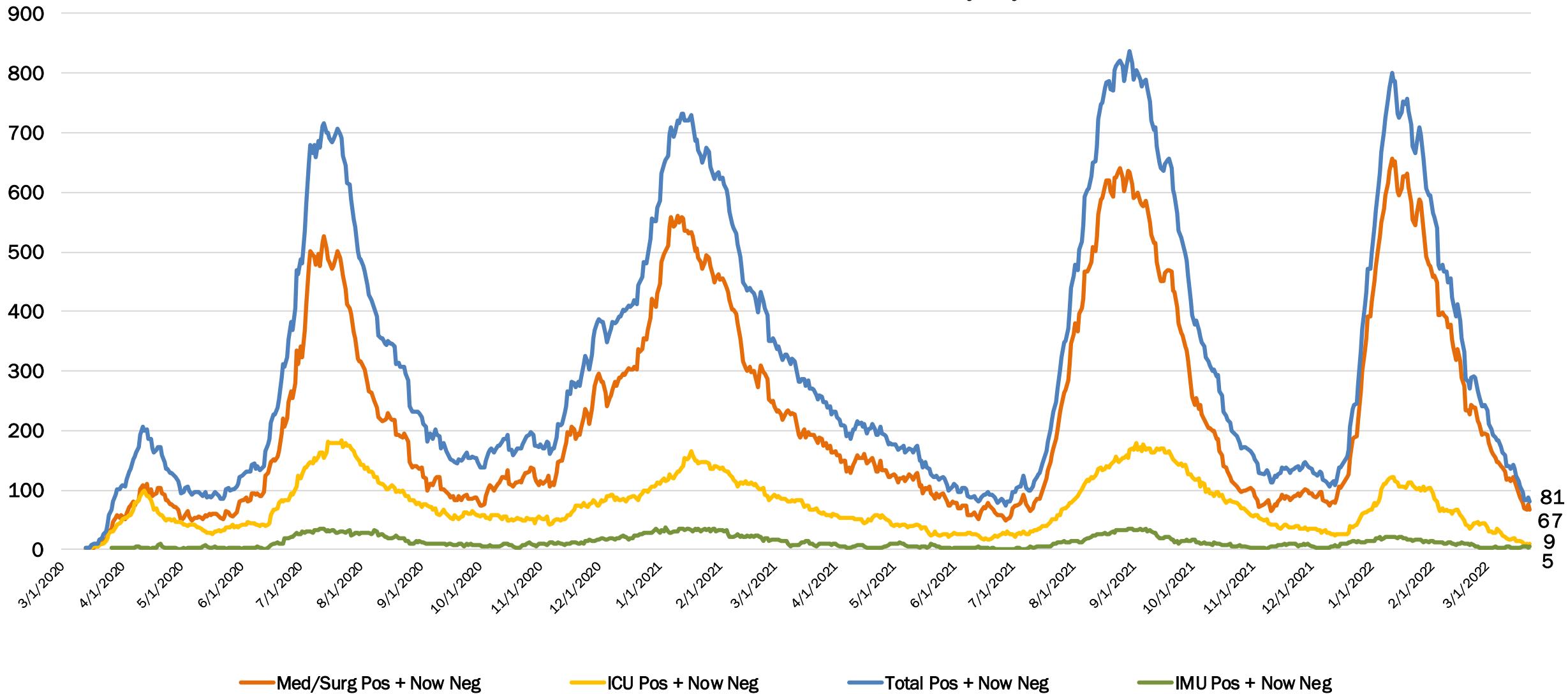
Marc L. Boom, MD  
March 24, 2022



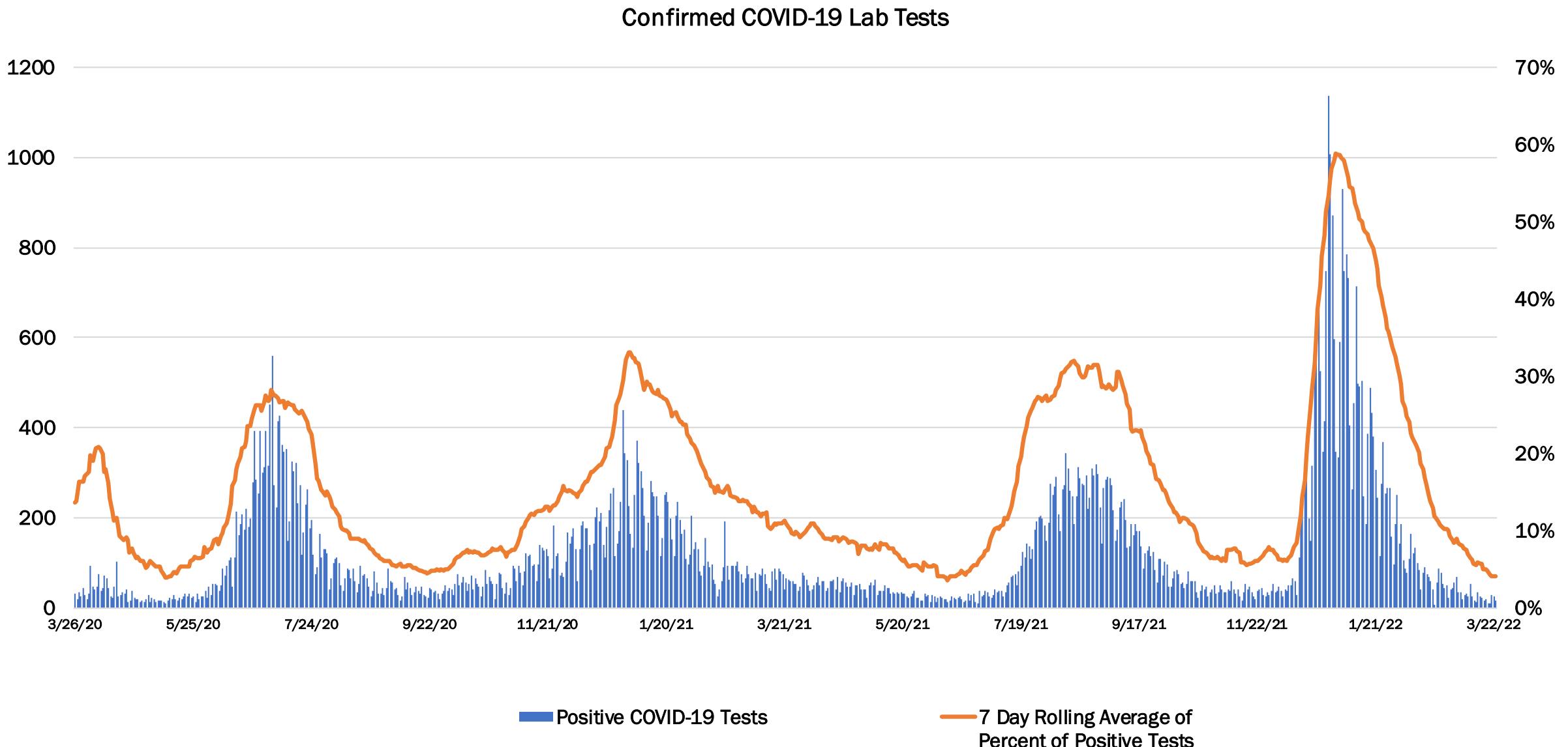
# Houston Methodist COVID-19 Cases By Day



Houston Methodist COVID-19 Patients by Day



# Houston Methodist Testing Trend



# COVID-19 Viral Load Detected in City of Houston Wastewater

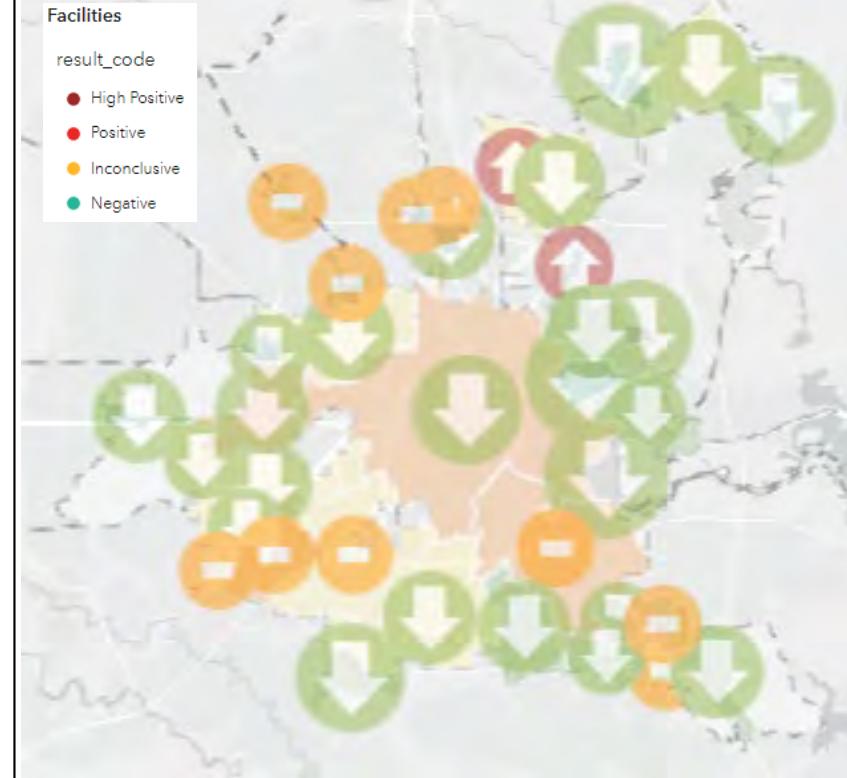
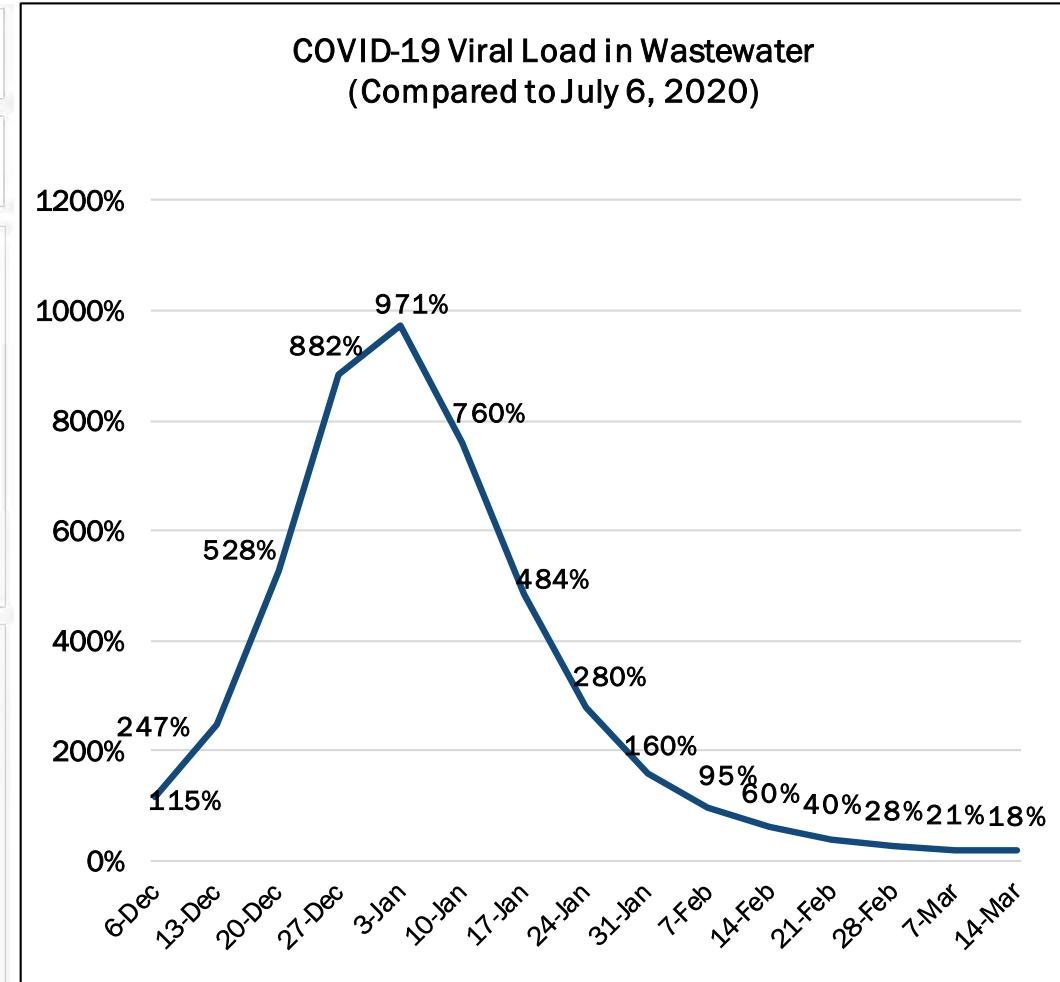
HOUSTON

March 14, 2022

Viral Load:  
**18%**

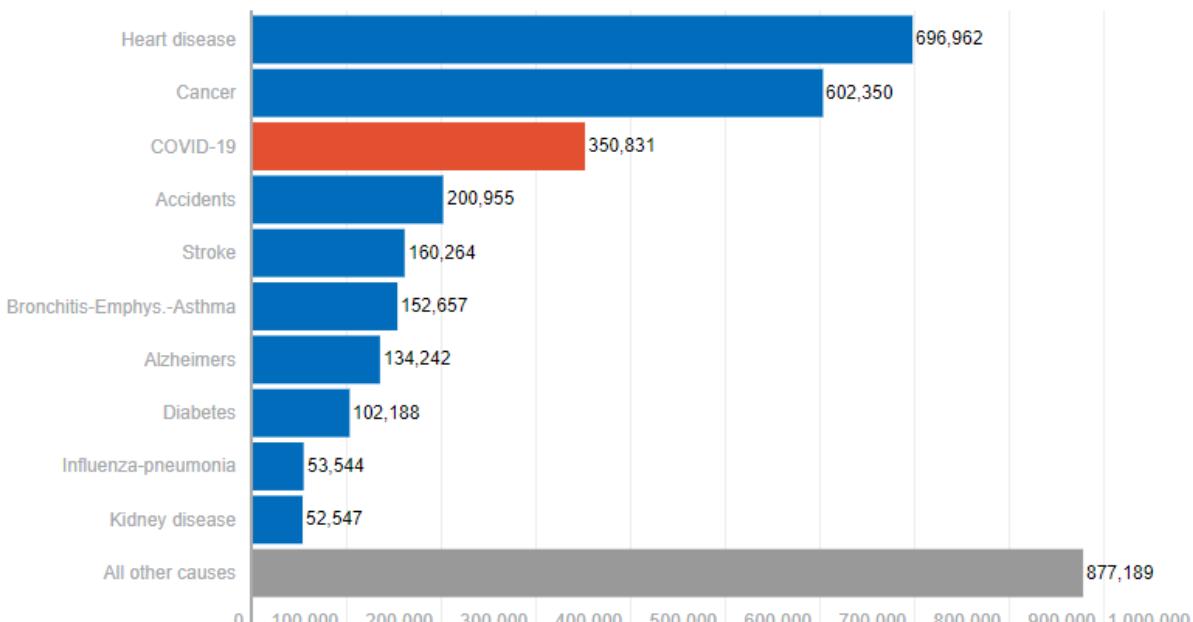
In comparison to July 6, 2020

Positivity Rate:  
**2%**



# Deaths from COVID-19 in the U.S.

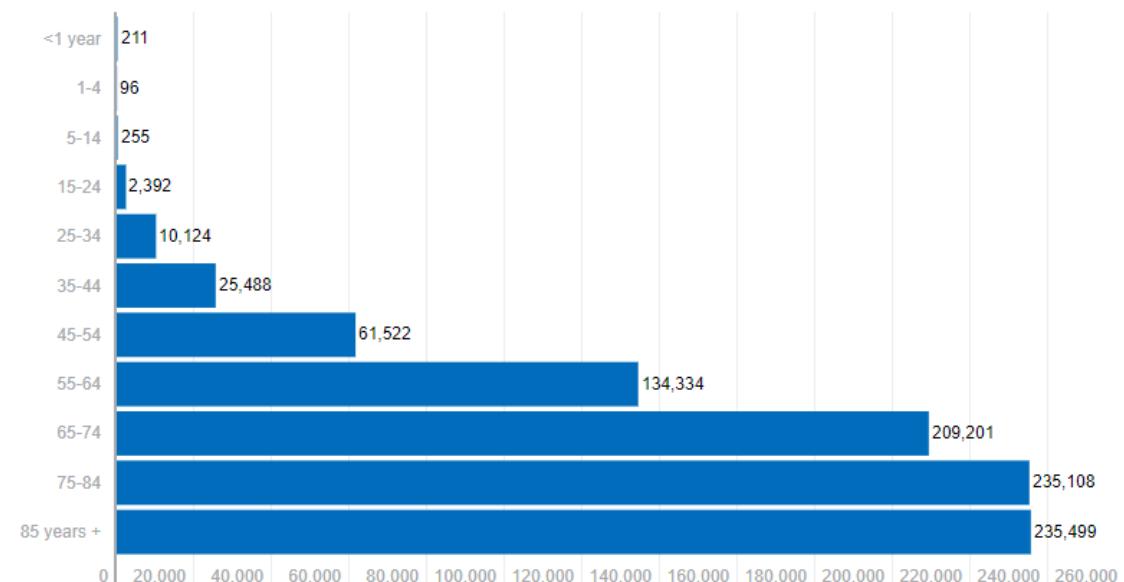
**COVID-19 was the third-leading cause of death in the U.S. in 2020**



Source: Centers for Disease Control and Prevention

**Older Americans accounted for most COVID-19 deaths**

Number of coronavirus deaths by age group in the United States, from the start of the pandemic through Feb. 12, 2022.

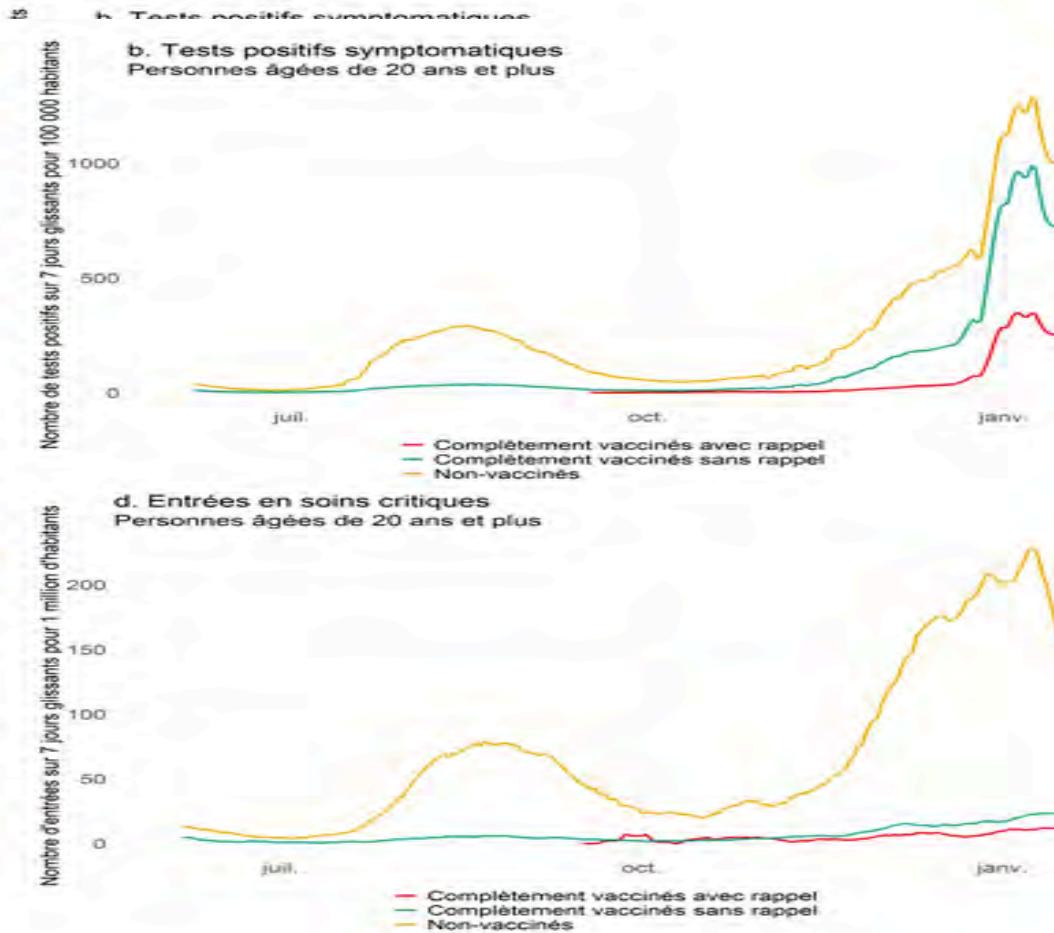
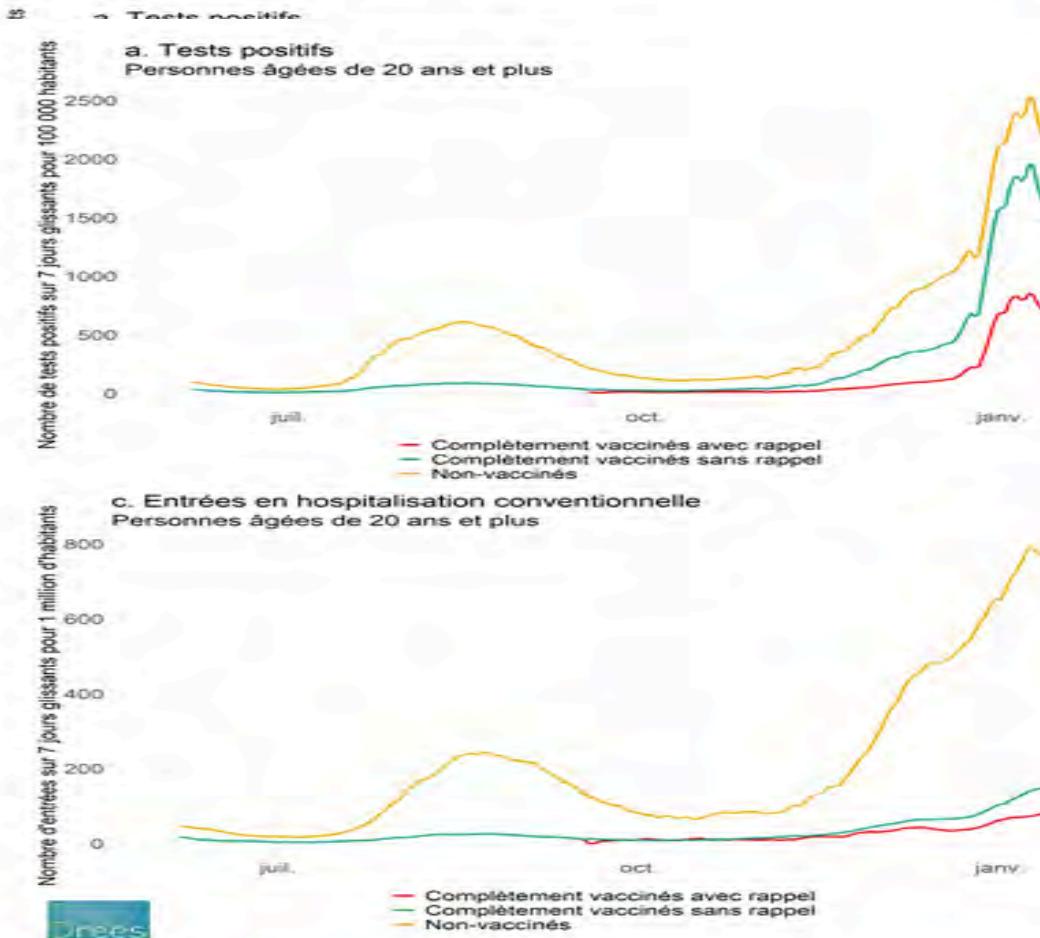


Source: Centers for Disease Control and Prevention

# Omicron in France: Risks by Vaccine and Booster Status

Cases, Hospitalizations, ICU admissions Per 100,000 Population

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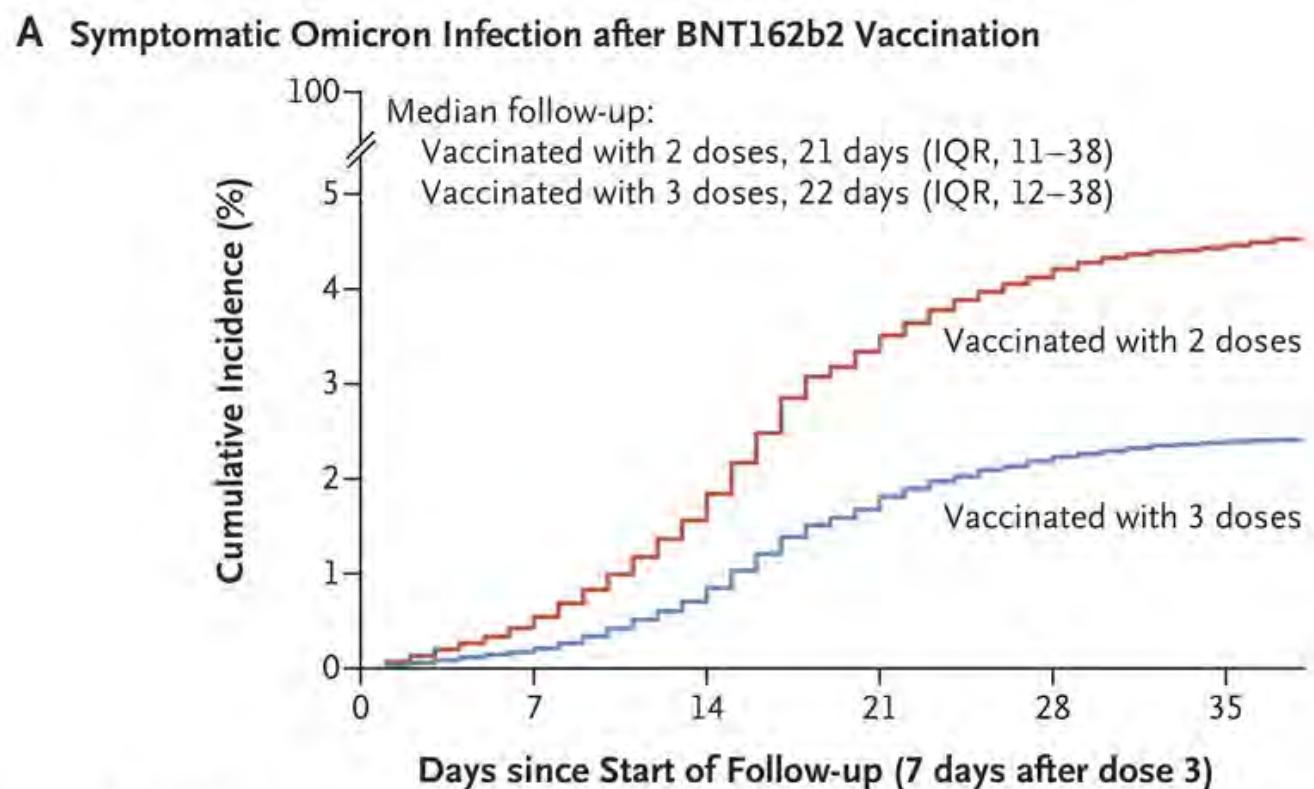


- Vaccination reduces rate of positive tests, symptomatic infection, hospitalization and ICU admission
- Booster reduces all of these risks further

# Effectiveness of Vaccination vs. Booster

Abu-Raddad et al NEJM March 10, 2022

- Retrospective cohort study of people who had two or three doses of mRNA vaccine
- Compared effectiveness against symptomatic infection, hospitalization or death
- Vaccination effectiveness three doses compared to two doses – omicron
  - 49.4% for infection
  - 76.5% for severe disease
- Vaccination effectiveness three doses compared to two doses – delta
  - 76.5% for infection
  - 86.1% for severe disease



| No. at Risk             | 189,483 | 162,896 | 131,625 | 97,210  | 74,544 | 59,598 |
|-------------------------|---------|---------|---------|---------|--------|--------|
| Vaccinated with 2 doses | 189,483 | 162,896 | 131,625 | 97,210  | 74,544 | 59,598 |
| Vaccinated with 3 doses | 189,483 | 163,851 | 135,279 | 103,404 | 81,558 | 66,302 |



# GET YOUR FREE COVID-19 BOOSTER

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# Houston Chronicle Series: Transplanted

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TRANSPANTED

## CLINGING TO HOPE

A young father fights a COVID infection so catastrophic he needs a lung transplant



By Julian Gill STAFF WRITER  
and Godofredo A. Vásquez STAFF PHOTOGRAPHER

### Chapter 1: The diagnosis

A doctor shouts a greeting to a weary Jesus Ceja Ceja, whose lungs have shriveled into scarred and stagnant red flats of tissue. He sucks in just enough air to squeeze out a response from his hospital bed, in the middle of a spacious yet lonely room in a Houston Methodist Hospital Intensive Care Unit.

"Somebody ... somebody speak Spanish?" he asks, piecing together the little English he knows in his whispery voice.

It is Sept. 17, 2021. Nearly six weeks after 29-year-old Jesus was admitted to Houston Methodist with a catastrophic COVID-19 infection, his muscles, once bulging from long days of hard labor, have withered under heavy sedation. A life-support machine pulls blood from his 5-foot-7-inch body and pushes it back through the tubes that crown his head and snake deep inside his heart.

His 28-year-old wife, Perla Munguia Ceja, enters the room

### TODAY

**Chapter 1: The diagnosis**  
"We had so many plans."  
With his wife's support, Jesus Ceja Ceja works to become listed for a lung transplant and piece together his life.

### MONDAY

**Chapter 2: The match**  
"What's it meant for me will be there for me."  
Jesus needs to find a donor match quickly. But how long can he wait?

### TUESDAY

**Chapter 3: Recovery**  
"A new man."  
Jesus grapples with a new challenge: rebuilding his identity.

Jesus Ceja Ceja needs at least six medical workers accompanying him during physical therapy at Houston Methodist Hospital in October 2021.

To visit the man she met eight years ago in Cota de la Paz in the Mexican state of Michoacán, where they grew up on ranches on opposite sides of the small city.

Jesus Ceja Ceja's head is broken: the strong, solid worker who frequently traveled from Cota to Baytown for temporary jobs insulating pipes at chemical plants and oil refineries throughout the Gulf Coast region. The family often visits the U.S., where they one day hope to live permanently, but still considers Cota home.

Two months ago, Jesus, a lawful permanent resident in the U.S., left Cota for a job at a Louisiana gas plant while Perla and the kids stayed behind in Mexico. Now it's up to Perla, a U.S. citizen who speaks limited English, to ask

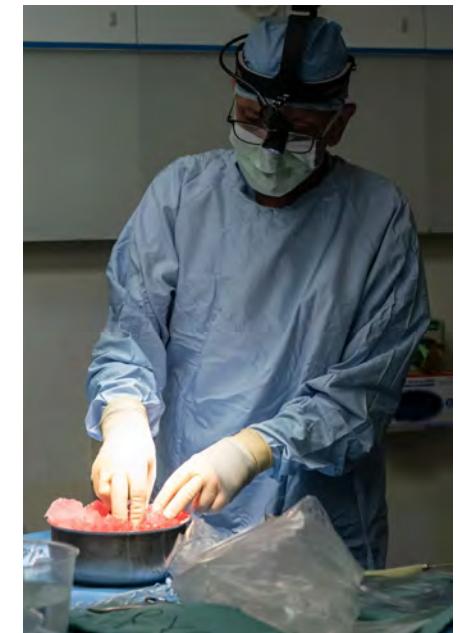
*Diagnosis continues on A2*

Read all three chapters of this series at [houstonchronicle.com/transplanted](http://houstonchronicle.com/transplanted)



# 10-Way Successful Kidney Transplant Swap

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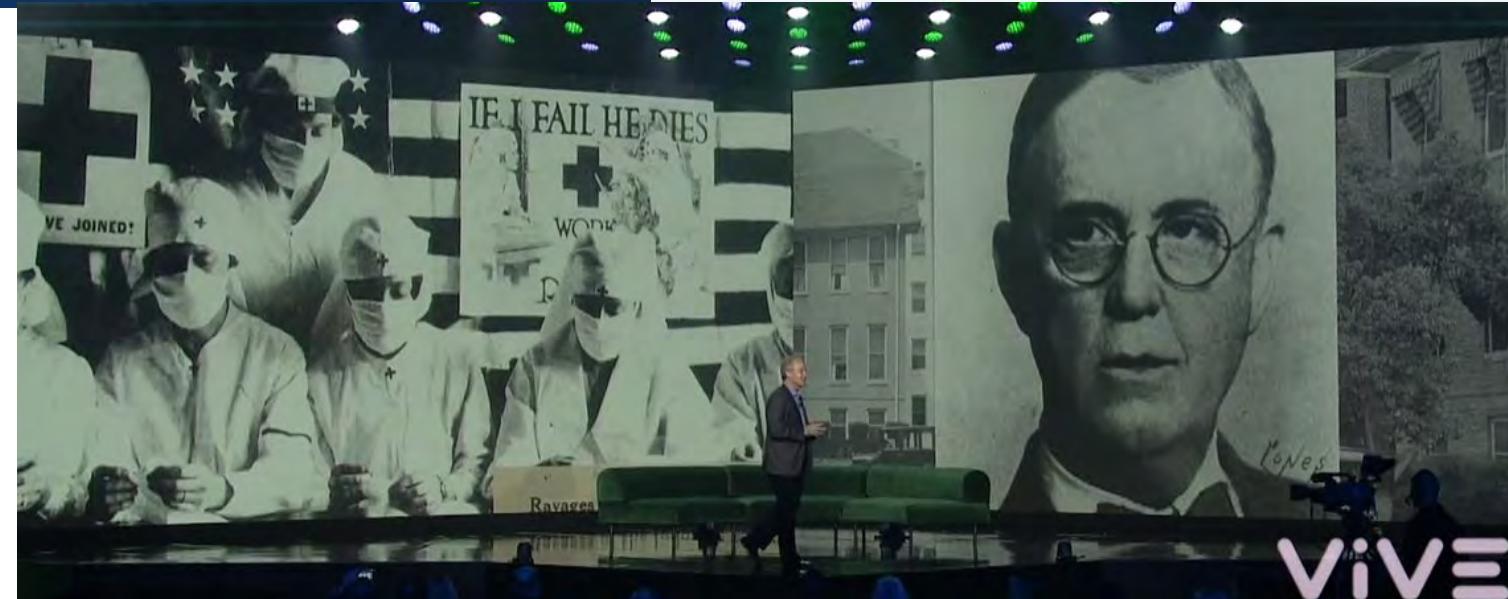


# External Presentation: ViVE



GENERAL SESSION

## Smart Future, All In: Making Bets for the Hospital of the Future



# Awards and Accolades

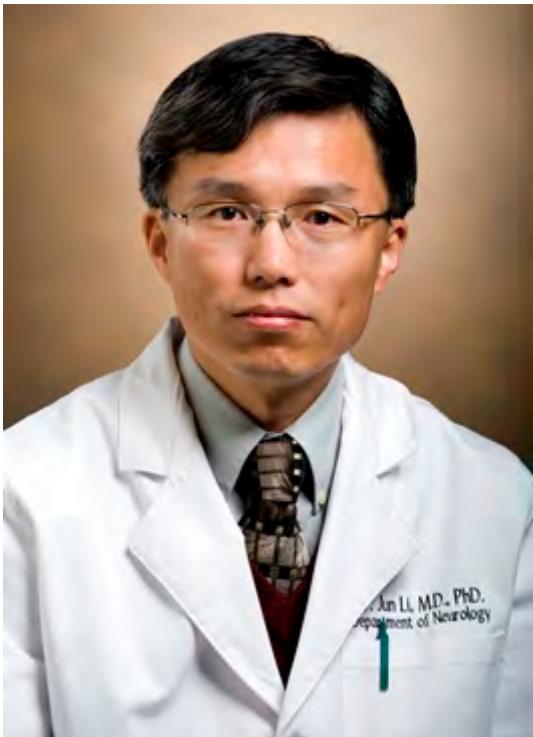


## Healthgrades Releases Top 24 Hospitals Leading Early COVID Care

by Jasmine Pennic 03/07/2022 [Leave a Comment](#)



# Leadership Update



**Dr. Jun Li is joining Houston Methodist as the Chair of the Stanley H. Appel Department of Neurology at the Houston Methodist Neurological Institute, effective June 1.**



# THANK YOU FOR ATTENDING OUR TOWN HALL CONVERSATION

If you would like more information about Urology at Houston Methodist or the Urology Task Force, please contact Shu Muthyala at

**[ssmuthyala@houstonmethodist.org](mailto:ssmuthyala@houstonmethodist.org)**

*Take care and be well*