

COVID-19: Pulmonary & Geriatric Outpatient Considerations

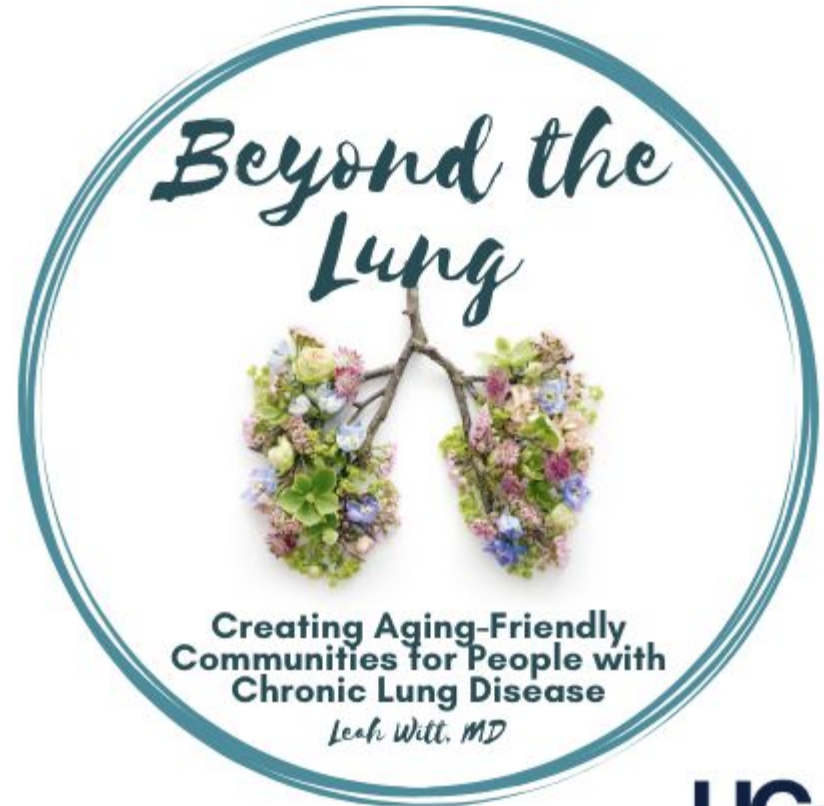
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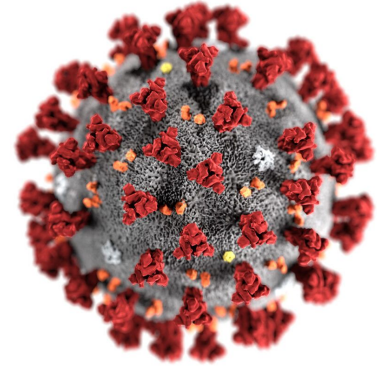
Divisions of Geriatrics & Pulmonary, Critical
Care, Allergy and Sleep Medicine



UCSF

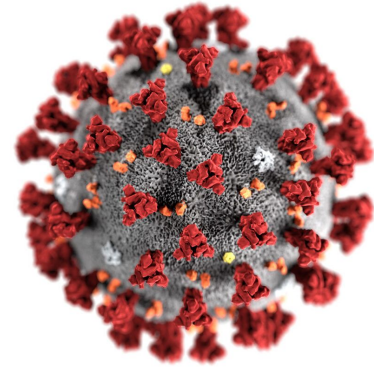
Outline

- COVID-19 Epidemiology
- Vulnerable Populations
- Illness Trajectory
- What to do NOW in clinic
- Resources

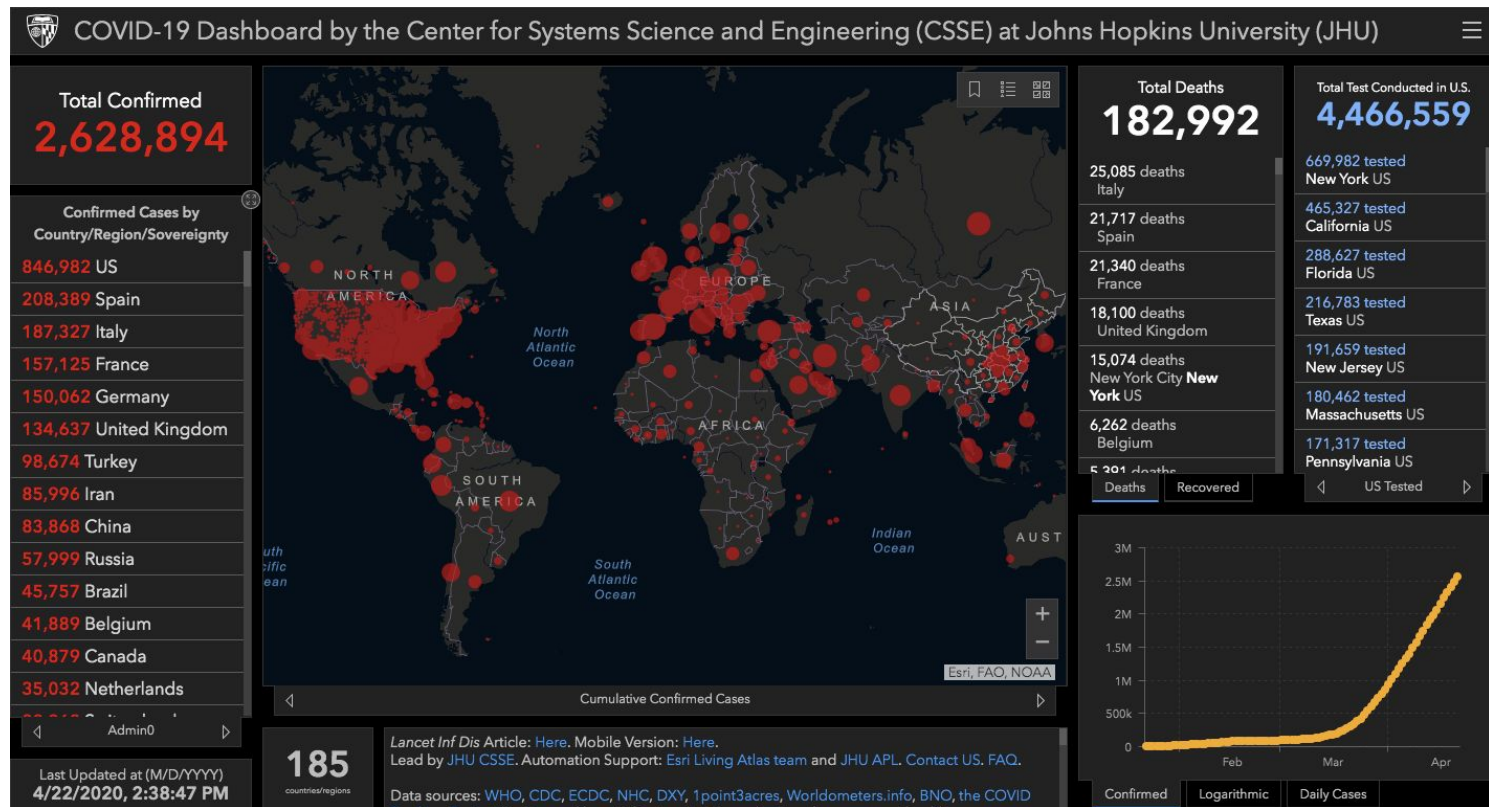


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Worldwide Covid-19 Cases



<https://coronavirus.jhu.edu/map.html>

Total reported cases per 100,000 people

+10

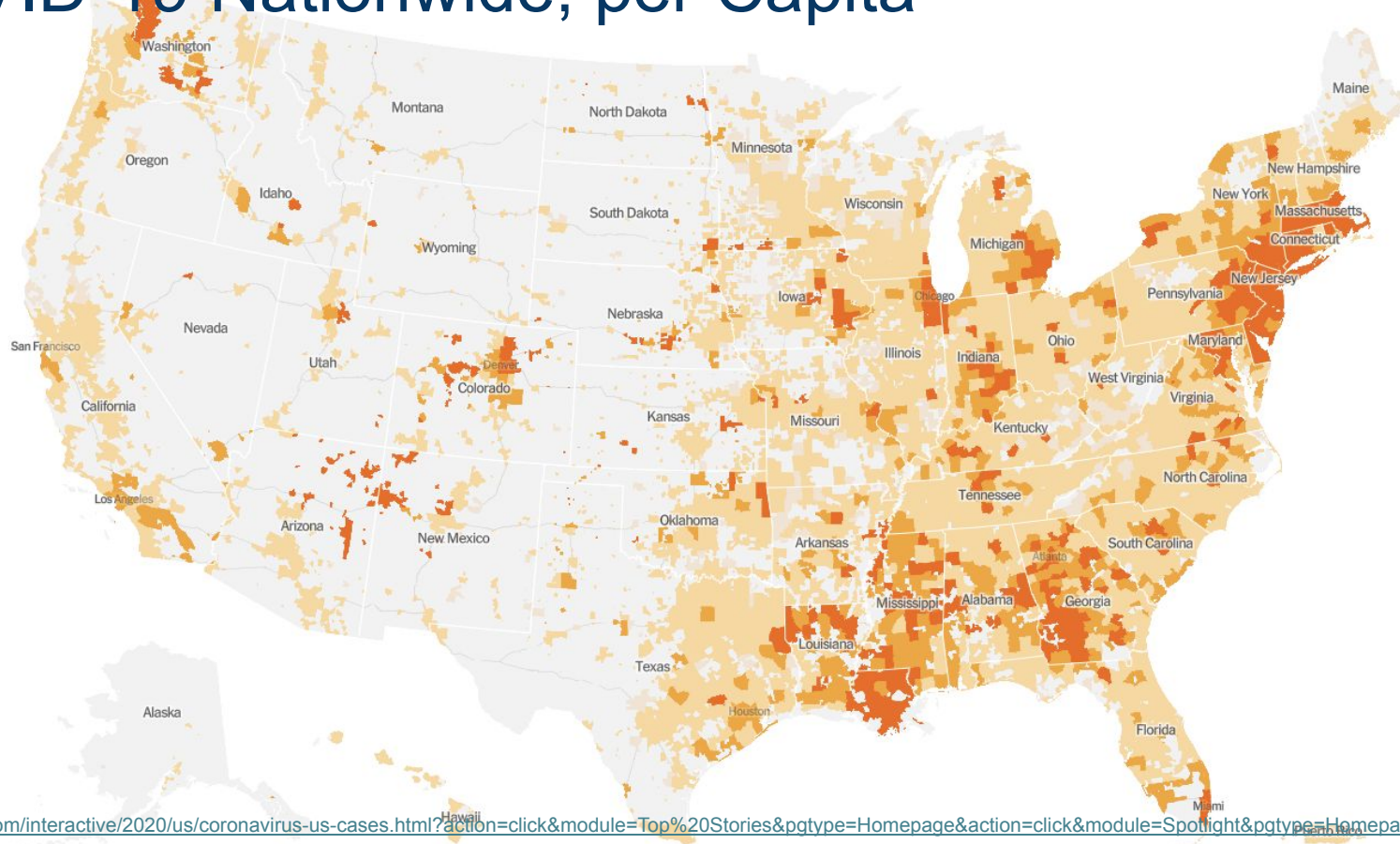
+100

+200

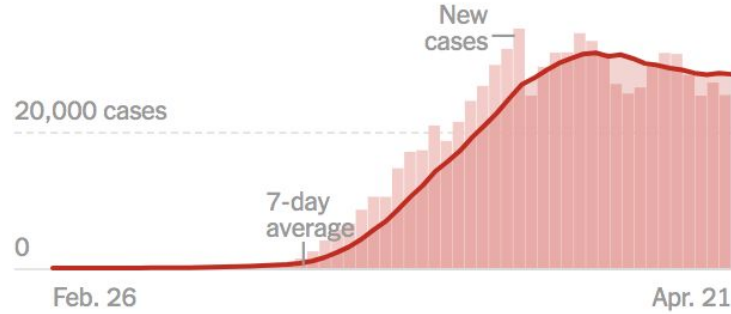
No cases
reported

Double-click to zoom into the map.

COVID-19 Nationwide, per Capita



COVID-19 Cases & Deaths Nationwide



TOTAL CASES

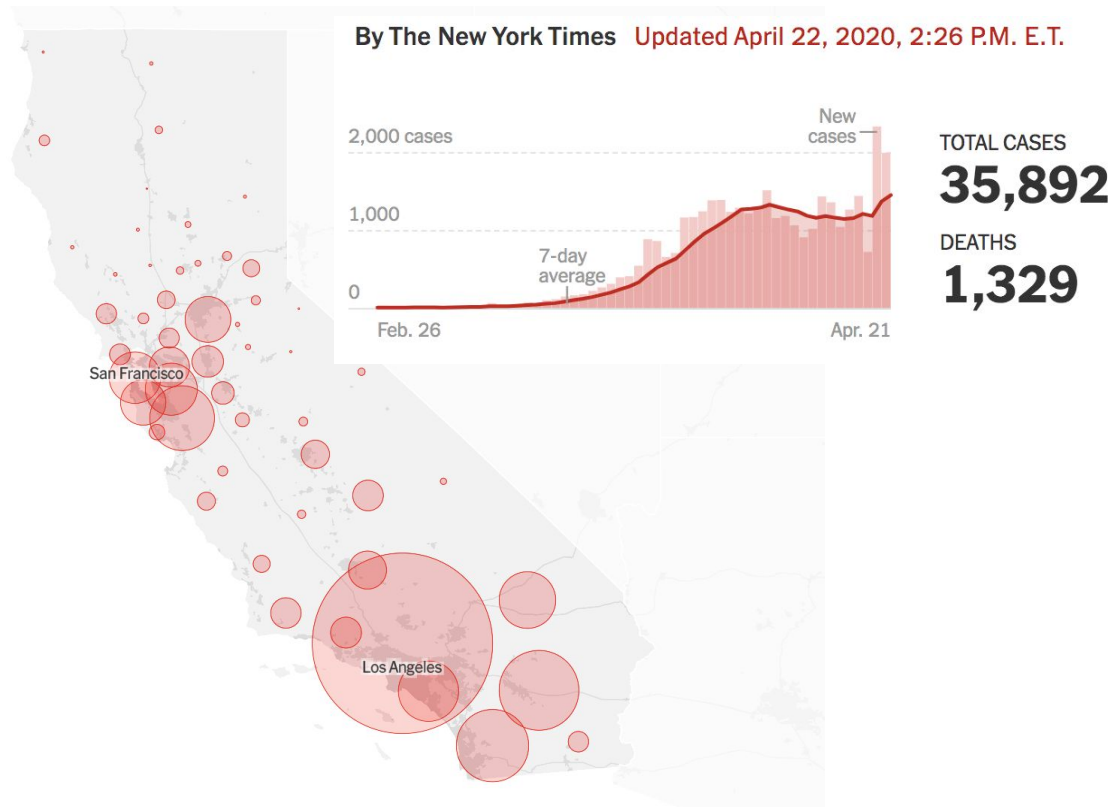
816,039

DEATHS

41,194

COVID-19 in California

	▼ CASES	PER 100,000 PEOPLE	DEATHS	PER 100,000 PEOPLE	SLOWER	FASTER
					CASE GROWTH RATE	
California	35,892	91	1,329	3		
Los Angeles	15,140	150	663	7		
Riverside	2,960	124	93	4		
San Diego	2,434	74	87	3		
Santa Clara	1,946	101	89	5		
Orange	1,691	53	33	1		
San Bernardino	1,489	70	67	3		
Alameda	1,260	77	43	3		
San Francisco	1,234	142	21	2		
Sacramento	971	64	36	2		
San Mateo	958	125	39	5		
Contra Costa	749	66	22	2		
Kern	671	76	3	<1		
San Joaquin	460	63	20	3		
Ventura	443	52	13	2		
Tulare	436	95	22	5		
Santa Barbara	429	97	5	1		
Fresno	371	38	7	<1		
Stanislaus	236	44	4	<1		
Marin	200	79	10	4		



COVID-19 in San Francisco

Total COVID-19 Test
Results Reported

12,054

Total COVID-19 Positive
Cases Reported

1,233

Total
Deaths

21

Data as of 4/21/2020

Gender Distribution of Positive Cases

Female

39%

Male

60%

Unknown

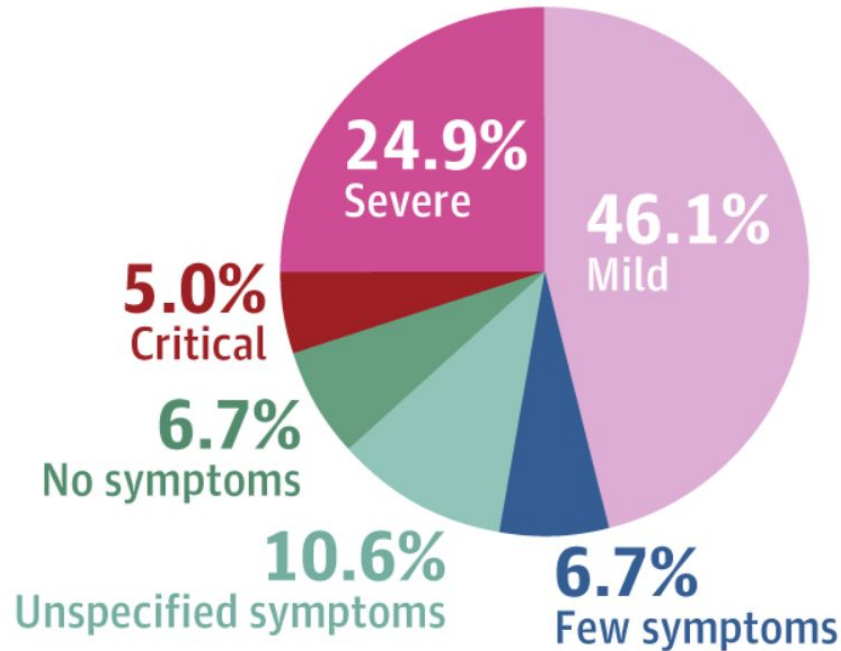
1%

*To date, no cases have been reported among trans women or trans men.

10.2% positivity rate

How sick do people get with COVID-19?

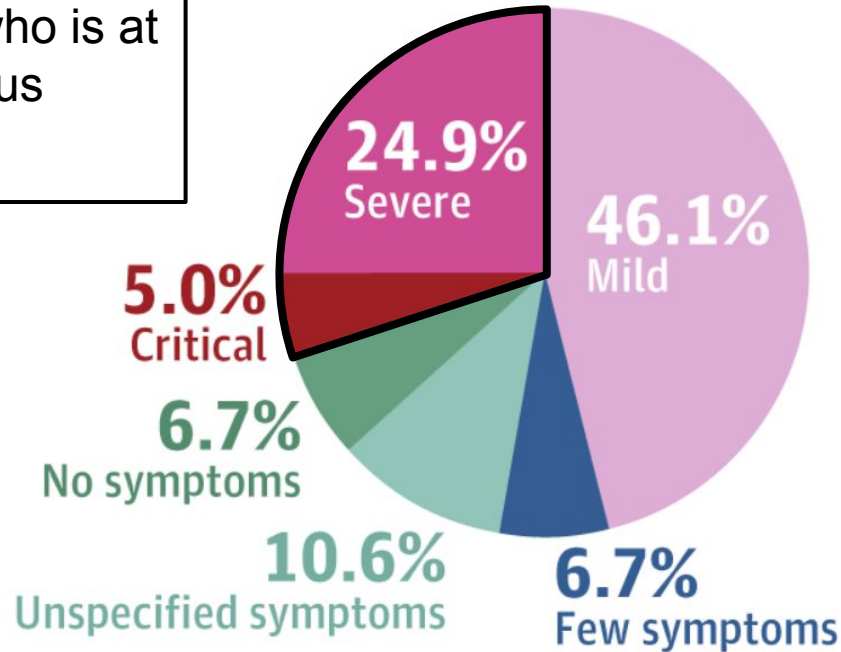
Cases by severity



How sick do people get with COVID-19?

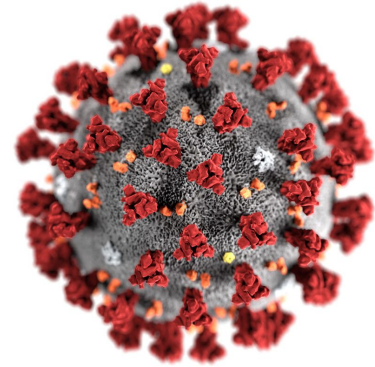
Cases by severity

Can we identify who is at high risk for serious illness?



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Who is at high risk?

- Increasing age (CDC says > 65 years old)
- Congregate living (e.g. SNF, assisted living, prisons)
- Underlying medical conditions, particularly if not well controlled:
 - Chronic lung disease (COPD, ILD), moderate to severe asthma?
 - Serious heart conditions
 - Immunosuppression (e.g. cancer treatment, h/o transplant, HIV/AIDS)
 - Severe obesity (BMI \geq 40)
 - Diabetes
 - CKD on dialysis
 - Liver disease

Comorbidities & Case-Fatality Rate

Comorbidity	Case-Fatality Rate
Cardiovascular disease	10.5%
Diabetes	7.3%
Chronic respiratory disease	6.3%
Hypertension	6.0%
Cancer	5.6%
No comorbidities	0.9%

Case-Fatality Rate

- # of deaths ÷ # of cases
- probability of dying if infected

Asthma?

- May be lower risk than previously assumed
- Only 5% prevalence in NY state's fatal COVID-19 cases
- Top Co-morbidities in NY:
 - Hypertension, DM, high cholesterol, CAD, dementia, AF
 - COPD is 7th

Asthma Is Absent Among Top Covid-19 Risk Factors, Early Data Shows

Despite warnings that asthmatics were at higher risk for severe illness from the coronavirus, asthma is showing up in only about five percent of New York State's fatal Covid cases.



Age & Case-Fatality Rate

	Case Fatality Rate (CFR)	
Age	China	ITALY (as of March 17 th , 2020)
0–9	0.0%	0%
10–19	0.18%	0%
20–29	0.19%	0%
30–39	0.02%	0.3%
40–49	0.44%	0.4%
50–59	1.3%	1.0%
60–69	3.6%	3.5%
70–79	8.0%	13%
≥80	15%	20%

↑ age →
↑ case-fatality rate

Older Adults & COVID-19

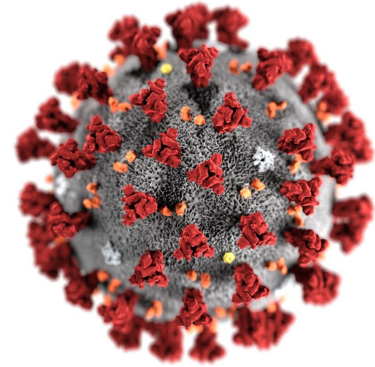
For patients age 75 year or older affected by Covid:

- ~ 50% will be ok at home
- ~ 50% will require admission to the hospital
- ~ 25% will require intensive care



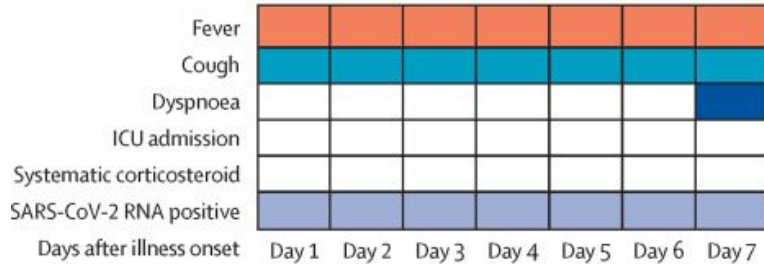
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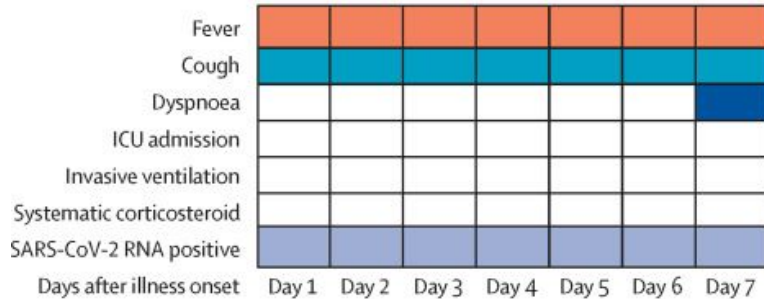


Illness Trajectory: Week One

Survivors

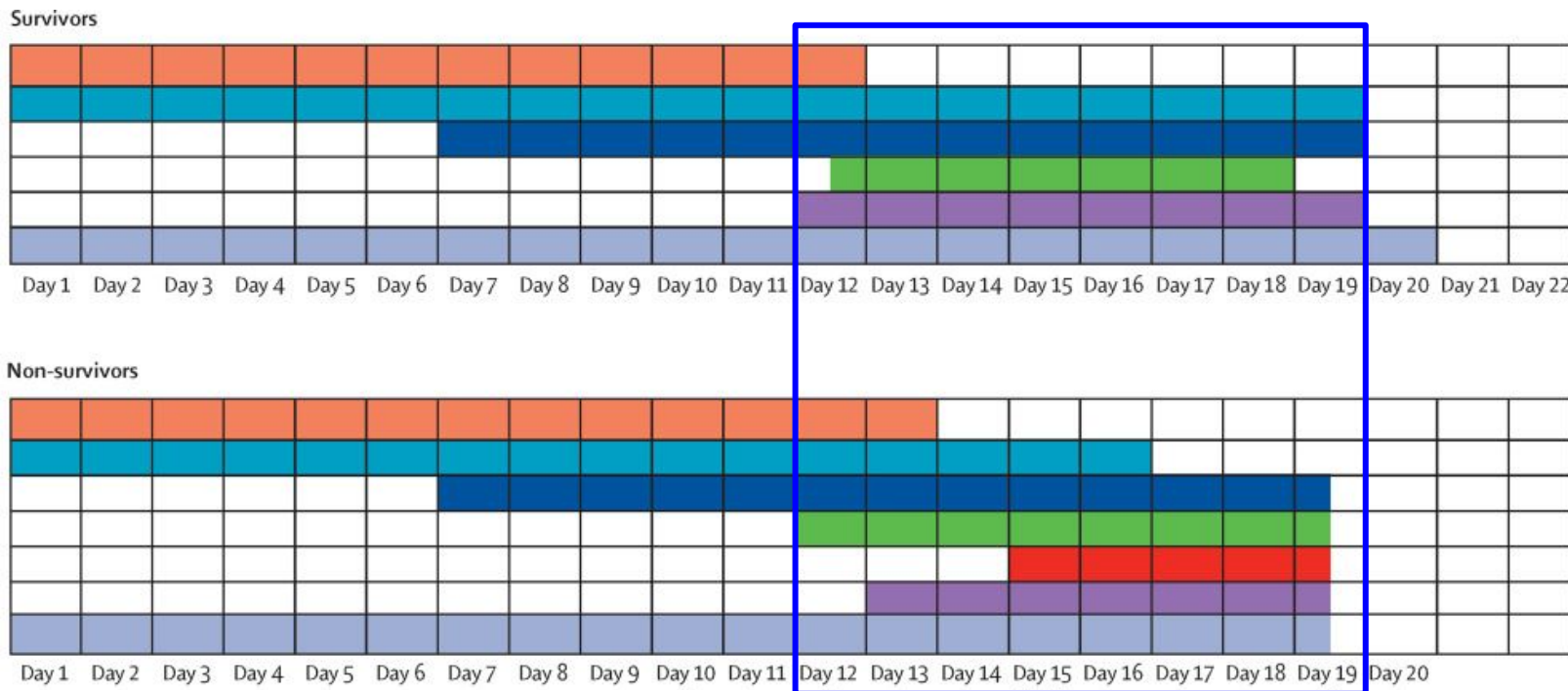


Non-survivors

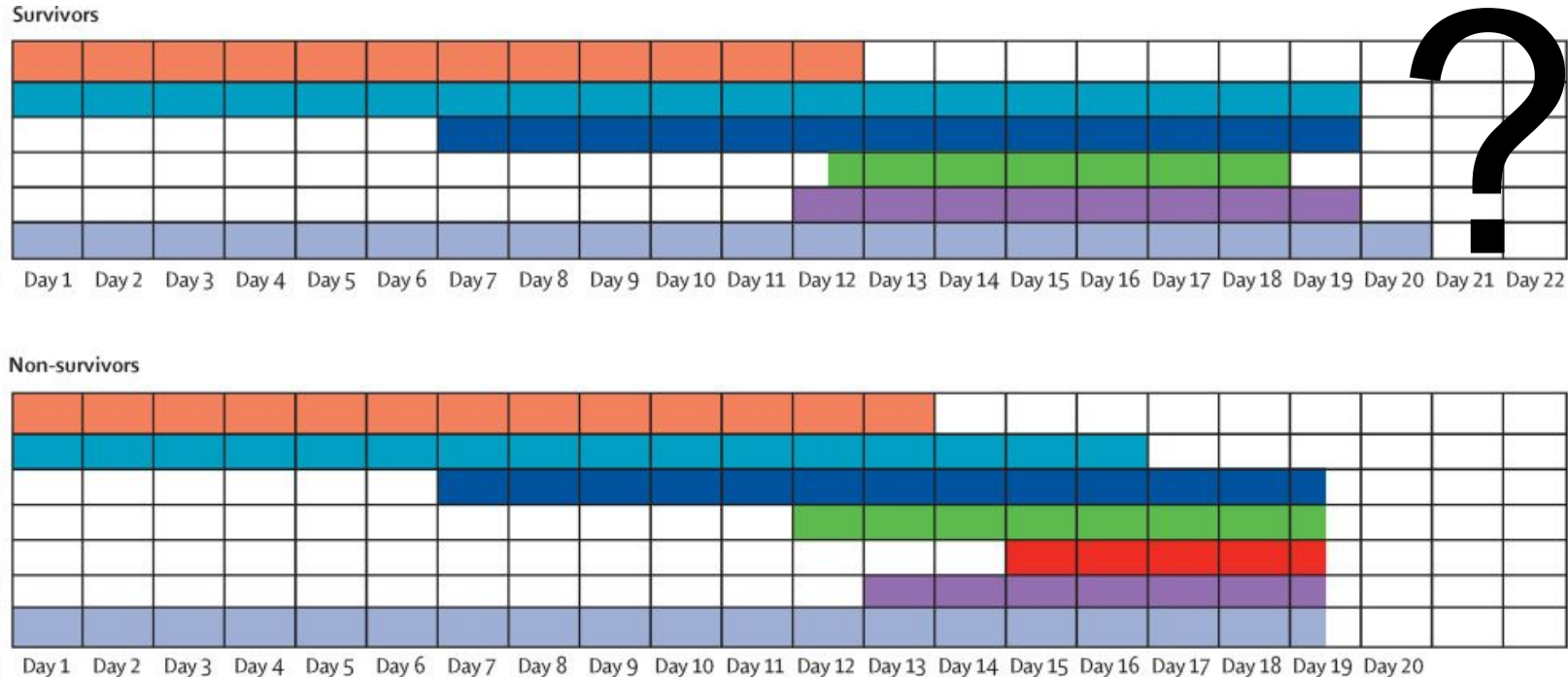


Zhou F, Yu T, Du R, et al. Clinical course and risk factors for mortality of adult inpatients with COVID-19 in Wuhan, China: a retrospective cohort study. *The Lancet*. 2020;395(10229):1054-1062. doi:10.1016/S0140-6736(20)30566-3

Illness Trajectory: Week Two +



Illness Trajectory: What happens after recovery?



Zhou F, Yu T, Du R, et al. Clinical course and risk factors for mortality of adult inpatients with COVID-19 in Wuhan, China: a retrospective cohort study. *The Lancet* 2020;395(10229):1054-1062. doi:10.1016/S0140-6736(20)30566-3

Caring for COVID-positive Patients at Home

Mrs. L is a 86 YO F with a history of advanced dementia T2DM, and HTN who lives with her daughter, who is her DPOA. She recently tested positive for COVID and her daughter is clear that she does not want to go to the hospital.

She currently only has a mild cough, but her daughter wonders what options are available to support her at home.

Bay Area Home Health and Hospice Agencies

Updated list of **home health agencies** who can admit COVID+ patients:

<https://drive.google.com/file/d/1kYSR8nrcQ3BJH5dMvQ-hY70XB7b4uXwV>

Updated list of **home hospice agencies** who can admit COVID+ patients:

<https://drive.google.com/file/d/1QBh--2e8ZHWjqjtox8RpAuSMLtJPmmXr/view?usp=sharing>

Outpatient management

- **Treatments**-- supportive management = standard of care. All others still investigational and NOT standard of care (do not recommend these are prescribed)-- recent NIH recommendation
 - Azithromycin & Hydroxychloroquine-- QTc prolongation risk
 - Steroids (except perhaps asthma/COPD exacerbation)
- Role of imaging? [ACR](#): CXR/CT for dx inappropriate
- Role of home pulse oximetry?
- Role of temperature monitoring?



NON-COVID patients High concern for delayed medical care given COVID fears-- important to encourage appropriate use of outpatient and urgent/ER visits

ACR guidelines on imaging in suspected COVID-19:

<https://www.acr.org/Advocacy-and-Economics/ACR-Position-Statements/Recommendations-for-Chest-Radiography-and-CT-for-Suspected-COVID19-Infection>

[Kim H, Hong H, Yoon SH. Diagnostic Performance of CT and Reverse Transcriptase-Polymerase Chain Reaction for Coronavirus Disease 2019: A Meta-Analysis. Radiology. 2020 Apr 17;201343.](#)

[Hope MD, Raptis CA, Shah A, Hammer MM, Henry TS. A role for CT in COVID-19? What data really tell us so far. The Lancet. 2020 Mar 27.](#)

<https://www.npr.org/sections/coronavirus-live-updates/2020/04/21/840341224/nih-panel-recommends-against-drug-combination-trump-has-promoted-for-covid-19>

In the hospital...

- Course can be **variable and unpredictable**, that is why close follow up post-hospitalization is critical
- Management is **supportive** (oxygenation, maintaining fluid status)
- In the ICU: **standard ARDS management**
 - Conservative tidal volume strategy
 - Proning
 - Careful monitoring of fluid status
- **Investigational:** use of prednisone, azithromycin, HCQ, remdesivir, etc (not standard of care)



Post-hospitalization

- Post-hospitalization/ICU risks
 - Weakness
 - Delirium
 - PTSD
 - Unknown end-organ complications?
- Close follow-up for delayed complications
- Telemedicine, home health, phone calls



**PROMOTE
WAKEFULNESS**



 Shades up. Lights on.	 Write date and staff names on board to orient patient.	 Patient out of bed to chair for all 3 meals. Ask for assistance if you need help.	 Walk patient 3x/day. Engage patient in conversation.
 Hi, my name is... Each visit introduce yourself, remind patient where they are, what day and time it is.	 Patient is wearing hearing aids/glasses (if needed) to hear and see appropriately.	 Provide activities like games and reading materials to keep patient's mind active while awake.	 Make sure your patient has water within reach at all times. Dehydration is the #1 complaint in the hospital!
 Make sure family members have been provided the pamphlet about delirium and discuss any questions they have. It is ok to refer to the nurse or doctor if you are unsure.		 Discuss with the nurse at each shift if the patient truly needs the following: nasal cannula on their nose, foley catheter, telemetry, and CPO. These "tethers" make it difficult for the patient to move and can contribute to confusion.	

Ambulatory Follow-Up for COVID-19: The OPTIMAL clinic

(pOst-covid/PosT-Icu MultidisciplinAry cLinic)



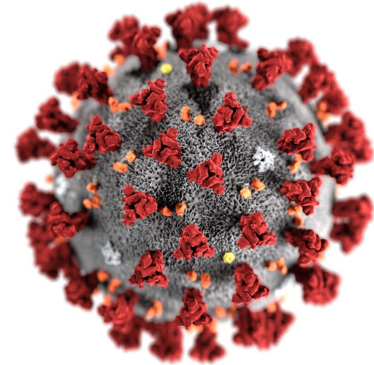
- New at UCSF-- multidisciplinary: pulmonary, geriatrics & psychiatry
- Integrated clinical follow-up and research arms
- Will see patients 1-2 weeks post-discharge (telemedicine), 1 mo, 3 mo, 6 mo, 9 mo, 12 mo post-discharge
- Please refer any patients post-ICU or with persistent pulmonary symptoms (dyspnea, hypoxia, cough)

Questions? Contact
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@ucsf.edu



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- **What to do NOW in clinic**
- Resources for Caring for Patients



The COVID-19 talk families need to have now

Health care experts say all adults should think about their end-of-life wishes to make things easier on themselves, their families and doctors and nurses who might see them in the E.R.

2



**FIGHT
ALZHEIMER'S
ON THE DAY
WITH THE
MOST LIGHT.**

THE LONGEST DAY
alzheimer's association

lections

The Washington Post
Democracy Dies in Darkness

Get 1 year for \$29

Do your loved ones a favor. Find out now how they want to die.

I'm an ER doctor, and we need to know what matters most to your family member.

RONALD O. PERELMAN
Center for Emergency Services

EMERGENCY WALK-IN



cisco

You can't predict
the future.
But by modernizing
your UCS servers
you can lead it.



It's Time to Talk About Death

The coronavirus pandemic highlights how much we need to have conversations about end-of-life care.

By Sunita Puri, M.D.

Dr. Puri is the author of "That Good Night: Life and Medicine in the Eleventh Hour."



Advance Care Planning in the context of COVID-19

Mr. C is a 78yo M with heart failure and COPD who lives with his spouse. He has had two hospitalizations for heart failure exacerbations in the past year, and relies on his spouse for help with his IADLS.

You're having a routine visit, and he brings up his worries about COVID-19.

If you have **five** minutes

**Advance Care
Planning in the
context of COVID-19**

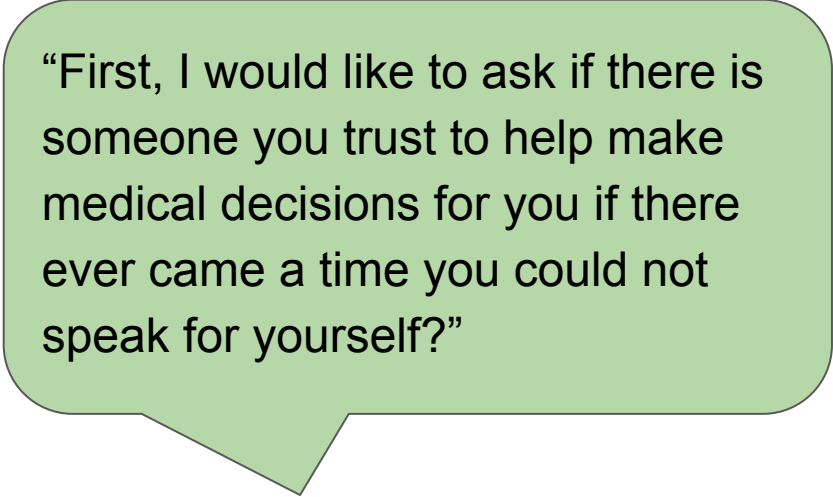


How to start to the conversation

“We just have a few minutes, but I wanted to take a moment to talk to you about advance care planning. This involves choosing an emergency contact and the medical care that is important to you.”

“During COVID-19, it is more important than ever that we know what is important to you.”

Ask about surrogate decision maker



“First, I would like to ask if there is someone you trust to help make medical decisions for you if there ever came a time you could not speak for yourself?”

If you have **fifteen** minutes

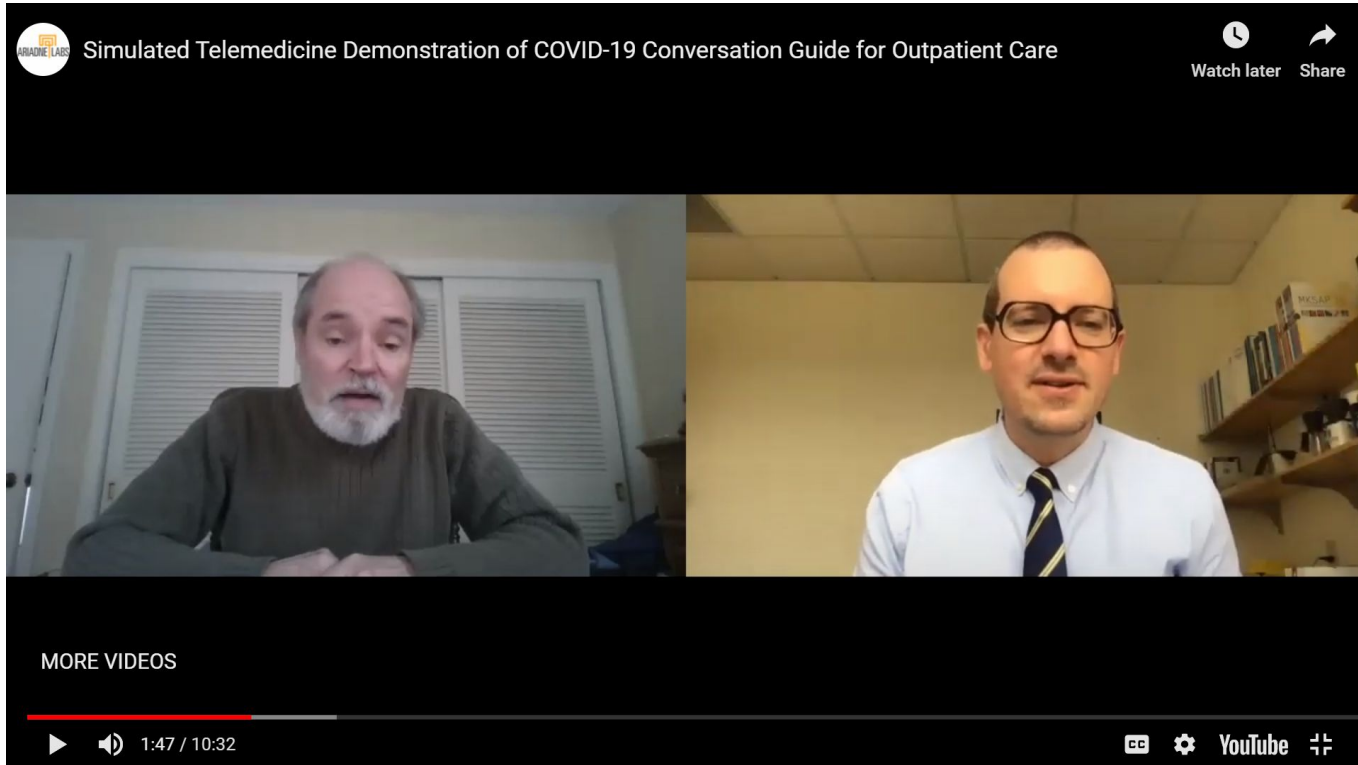
**Advance Care
Planning in the
context of COVID-19**



Conversation Guide to Discuss Planning for COVID-19

Proactive Planning	What to say
C - Check in	"I want to take a moment to see how are you doing with all of this?"
A - Ask about COVID-19	"What have you been thinking about COVID and your situation?" "What do you understand about the complications of COVID-19 given your medical condition(s)?"
L - Lay out the issues	"Because of your health issues, you are at high risk of getting really sick, and even dying, if you got COVID."
M - Motivate to choose a proxy and talk about what matters most	"If things took a turn for the worse, what you say now can help your family / loved ones?" Choose a surrogate: "Who is your backup person—who helps us make decisions if you can't speak? Who else? " What matters: "We're in an extraordinary situation. Given that, what matters to you?" "What worries you most?"
E - Expect emotion	Name the emotion: "It can be scary to think about what may happen." Understand and support: "I know this is a lot to take in all at once. I want to support you anyway I can."
R - Recommend a plan	"Based on what I've heard, I'd recommend [this]. What do you think?"
R - Record	Document conversation

COVID-19 Conversation Guide for Outpatient Care



<https://www.ariadnelabs.org/coronavirus/clinical-resources/covid-conversations/>

Document the conversation

1. **Document** conversation in EMR
2. Complete a **POLST** form
 - Important if patient does not elect full treatment
 - Fill out by phone or video with patient
 - Send original and copy to patient to cosign
3. Website for patients to complete their advance directive:

<https://prepareforyourcare.org/covid-19>

HIPAA PERMITS DISCLOSURE OF POLST TO OTHER HEALTH CARE PROVIDERS AS NECESSARY

Physician Orders for Life-Sustaining Treatment (POLST)

First, follow these orders, then contact Physician/NP/PA. A copy of the signed POLST form is a legally valid physician order. Any section not completed implies full treatment for that section. POLST complements an Advance Directive and is not intended to replace that document.

EMSA #111 B (Effective 1/1/2018)

Patient Last Name:	Date Form Prepared:
Patient First Name:	Patient Date of Birth:
Patient Middle Name:	Medical Record #: (optional)

A CARDIOPULMONARY RESUSCITATION (CPR): If patient has no pulse and is not breathing, if patient is NOT in cardiopulmonary arrest, follow orders in Sections B and C.

Check One

☐ Attempt Resuscitation/CPR (Selecting CPR in Section A requires selecting Full Treatment in Section B)

☐ Do Not Attempt Resuscitation/DNR (Allow Natural Death)

B MEDICAL INTERVENTIONS: If patient is found with a pulse and/or is breathing.

Check One

☐ Full Treatment – primary goal of prolonging life by all medically effective means. In addition to treatment described in Selective Treatment and Comfort-Focused Treatment, use intubation, advanced airway interventions, mechanical ventilation, and cardioversion as indicated.

☐ Selective Treatment – goal of treating medical conditions while avoiding burdensome measures. In addition to treatment described in Comfort-Focused Treatment, use medical treatment, IV antibiotics, and IV fluids as indicated. Do not intubate. May use non-invasive positive airway pressure. Generally avoid intensive care.

☐ Comfort-Focused Treatment – primary goal of maximizing comfort. Relieve pain and suffering with medication by any route as needed; use oxygen, suctioning, and manual treatment of airway obstruction. Do not use treatments listed in Full and Selective Treatment unless consistent with comfort goal. Request transfer to hospital only if comfort needs cannot be met in current location.

Additional Orders:

PREPARE for your care

PREPARE COVID-19 Resources »

PREPARE is a step-by-step program with video stories to help you:

- Have a voice in YOUR medical care
- Talk with your doctors
- Give your family and friends peace of mind
- Fill out an advance directive form to put your wishes in writing.

Click the video above to learn more.

[Click Here to Start PREPARE](#)
It has video stories and can help you fill out an advance directive.

Español

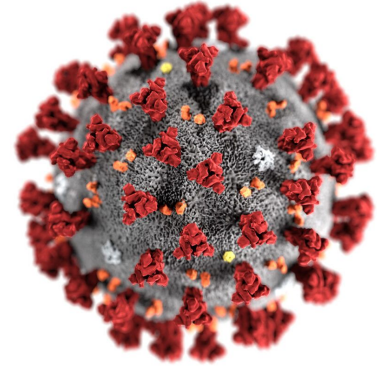
Address social isolation/loneliness

- Social isolation and loneliness negatively impacts health
- Everyone is at high risk due to shelter in place and social distancing
- Older adults and those with many medical problems are at particular risk
- Ask about this at office visits and offer connection resources--- see upcoming slides



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- **Resources**



Advance Care Planning Resources

- **Center to Advance Palliative Care**
<https://www.capc.org/toolkits/covid-19-response-resources/>
- **VitalTalk COVID Ready Communication Playbook**
<https://www.vitaltalk.org/guides/covid-19-communication-skills/>
- **Ariadne Labs Serious Illness Care Program COVID-19 Response Toolkit**
<https://www.ariadnelabs.org/coronavirus/clinical-resources/covid-conversations/>
- **PREPARE For Your Care**
<https://prepareforyourcare.org/covid-19>

Loneliness/Social Isolation/Activity Resources

- **Institute on Aging** offers a free 24/7 Friendship Hotline: 1-800-971-0016.
- **Covia Well-Connected:** <https://covia.org/services/well-connected/>
- **Little Brothers Friends of the Elderly** (social calls): <http://littlebrotherssf.org/>
- **Alzheimer's Association** Caregiving Resources:
[https://www.alz.org/help-support/caregiving/coronavirus-\(covid-19\)-tips-for-dementia-care](https://www.alz.org/help-support/caregiving/coronavirus-(covid-19)-tips-for-dementia-care)
- **DownDog Yoga app**-- chair yoga and multiple languages
- **Yoga Works**-- offers many high quality, free classes each day, including a wide range of yoga styles, pilates, toning classes, and classes for children:
<https://www.yogaworks.com/classes/live/>
- **"Yoga with Adriene"** provides free online yoga for a range of abilities and bodies: <https://www.youtube.com/user/yogawithadriene>

Anxiety/Stress Resources

- **Headspace:** Two-week free trial for the general public.
- **Calm:** Seven-day free trial. A meditation, sleep, and relaxation app that also provides resources specifically for coping with COVID-19 anxiety.
- **Stop, Breathe & Think:** Always free, and includes recordings for children.
- **10% Happier:** Free and paid options available.
- **UCLA Mindful App:** Free and has meditations led by Diana Winston, Director of Mindfulness Education at UCLA's Mindful Awareness Research Center.
- **Ziva Meditation:** Two-week introductory course led by Emily Fletcher designed to help you develop a daily, independent meditation practice. This is a paid online course that is 50% off for the general public and free for health care professionals during the pandemic.

Clinician Education Resources

- **American Thoracic Society:**
<https://www.thoracic.org/covid/covid19-clinician-resources.php>
- **ATS Toolkit for Caring for Older Adults**
<https://www.thoracic.org/professionals/clinical-resources/critical-care/critical-care-research/ats-toolkit-for-older-adults.php>
- **The Curbsiders Internal Medicine Podcast**
 - (multiple COVID podcasts): <https://thecurbsiders.com/>
- **GeriPal, A Geriatrics & Palliative Care Blog and Podcast**
 - (multiple COVID interviews): <https://www.geripal.org/>
- **UCSF Resources:** <https://coronavirus.ucsf.edu/>

Favorite Lay Press Articles

- [**Ageism Is Making the Pandemic Worse**](#) (Atlantic--Louise Aronson, MD)
- [**ICU physician thanks San Franciscans for helping curb coronavirus**](#) (SF Chronicle--Richard Wang, MD)
- [**Meeting the Care Needs of Older Adults Isolated at Home During the COVID-19 Pandemic**](#) (JAMA-- Michael Steinman, MD, Laura Perry, MD, Carla Perissinotto, MD, MHS)