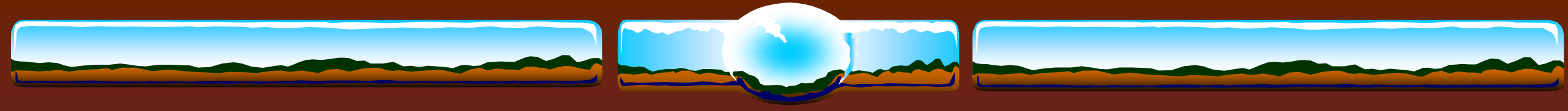




COVID-19 Clinical Update

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Disclosures



Epidemiology

CDC COVID 19 Forecasts (CDC.gov: November 30/2020)

- ❖ CDC received forecasts of new reported COVID-19 cases over next 4 weeks from 25 modeling groups
 - ❖ Predict 1.1 million to 2.5 million new cases during the week ending December 19, 2020
- ❖ CDC received forecasts of COVID-19 deaths over the next 4 weeks from 36 modeling groups
 - ❖ Predict 10,600 to 21,400 deaths during the week ending December 19, 2020
 - ❖ A total of 294K-321K cumulative deaths will be reported by this date

<https://www.cdc.gov/coronavirus/2019-ncov/cases-updates/forecasts-cases.html>

<https://www.cdc.gov/coronavirus/2019-ncov/covid-data/forecasting-us.html>



Clinical Presentation

BMI and Risk for Intubation or Death in SARS-CoV-2 Infection

Anderson et al, Ann Intern med 2020

- ❖ 2466 adults hospitalized with Severe COVID-19 over a 45-day period at an academic medical center and community hospital in NYC
 - ❖ 533 (22%) patients were intubated over a median hospital length of stay of 7 days
 - ❖ 627 (25% died)
 - ❖ 59 (2%) were still hospitalized
- ❖ Hazard Ratio for intubation or death was 1.6 for Obese compared with Overweight
- ❖ This association was primarily observed for persons less than 65 years of age and not in elders ($P = 0.042$)



Treatment

Convalescent Plasma in Covid-19 Simonovich et al, NEJM, 2020

- ❖ From the PlasmAr Study Group in Buenos Aires, Argentina
 - ❖ Assigned adults with COVID-19 pneumonia to get convalescent plasma or placebo (2:1 ratio) with median titer of 1:3200
 - ❖ Primary outcome was clinical status at day 30 (Six point ordinal scale from recovery to death)
 - ❖ 228 received plasma and 105 received placebo
 - ❖ There was no significant outcome differences between the plasma and placebo groups (OR 0.83)
 - ❖ Mortality was 10.96 vs 11.43% in the two groups
- ❖ Conclusion: NO BENEFIT



Treatment

FDA EUA for Casirivimab/Imdevimab

- ❖ FDA granted EUA for Regeneron's Casirivimab/Imdevimab infused together to **reduce COVID-19 related hospitalization or emergency room visits** in patients with high risk for progression to severe COVID-19
- ❖ Indicated for outpatients only with mild to moderate illness
- ❖ Not indicated for hospitalized patients with COVID-19 or patients on oxygen because of COVID-19

<https://www.fda.gov/news-events/press-announcements/coronavirus-covid-19-update-fda-authorizes-monoclonal-antibodies-treatment-covid-19>



Treatment

Baricitinib/Remdesivir EUA

- ❖ Baricitinib is a Janus kinase inhibitor, which modulated inflammation already approved for severely active Rheumatoid Arthritis
- ❖ Indicated for sicker patients aged 2 and up, hospitalized with COVID 19 requiring supplemental oxygen, mechanical ventilation or ECMO
- ❖ Approval based on ACTT-2 trial: odds of progressing to death or being ventilated at day 29 was lower in remdesivir/baricitinib group vs remdesivir/placebo group
- ❖ **ACTT-4 in progress:** dexamethasone vs baricitinib



Infection Prevention

- ❖ CDC Scientific Brief: Community Use of Cloth Masks to Control the Spread of SARS-CoV-2 (Nov 20, 2020)
 - ❖ “Experimental and epidemiological data support community masking to reduce the spread of SARS-CoV-2.”
 - ❖ “The relationship between **Source Control** and **Personal Protection** is likely complementary and possibly synergistic.”
 - ❖ “Adopting universal masking policies can **help avert future lockdowns**”



CDC Quarantine guidance

- ❖ Quarantine after an exposure can be shortened to **10 days** if no testing is done.
- ❖ Quarantine can be shortened to **7 days** if a PCR done <48hrs before is **negative**
 - ❖ Quarantined persons should still be checked for symptoms for the full 14 days and isolate if symptoms develop

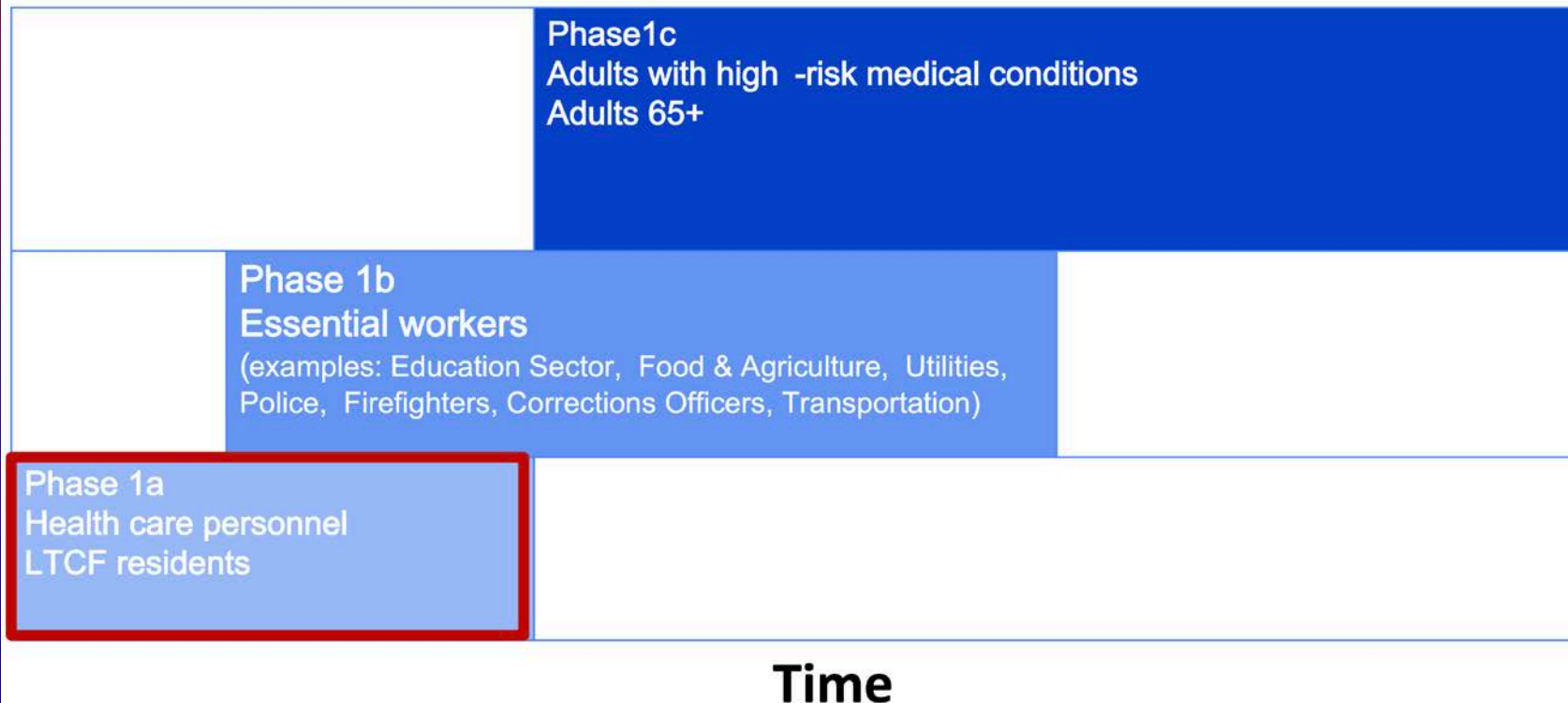
<https://www.cdc.gov/coronavirus/2019-ncov/more/scientific-brief-options-to-reduce-quarantine.html>



Vaccines

CDC ACIP priorities meeting 12/1/2020

Work Group Proposed Interim Phase 1 Sequence





More COVID-19 Training

- ❖ **CDC:** <https://www.cdc.gov/coronavirus/2019-ncov/hcp/index.html>
- ❖ **ACP Physician Handbook:** <https://www.acponline.org/clinical-information/clinical-resources-products/coronavirus-disease-2019-covid-19-information-for-internists>
- ❖ **UW Protocols:** <https://covid-19.uwmedicine.org/Pages/default.aspx>
- **UW IDEA Program:** <https://covid.idea.medicine.uw.edu/>
- **NIH Guidelines:** <https://covid19treatmentguidelines.nih.gov/>
- ❖ **Brigham and Women's Hospital:** covidprotocols.org

