

# **Allocating COVID Vaccines**

# Principles for Allocation

**Which principles should govern our approach to distributing vaccines?**

- Prioritize by means of the market.
- Prioritize maximizing general utility.
- Prioritize the most vulnerable

# Candidate groups for priority access

Groups important for overall social utility:

- Health care workers
- School teachers
- Public transportation workers
- Social workers
- Government officials
- Others?

Groups most vulnerable to COVID:

- The elderly
- People with underlying chronic health conditions (see slide)
- People confined to small spaces
- Prisoners
- Nursing and group home residents
- Racial and Ethnic minorities (Black, American Indian, Latino)
- “Frontline” workers (grocery, meatpackers, bus drivers, etc)
- Others?

Groups with the most social worth:

- Healthy people who do not engage in unhealthy behaviors (smoking, excessive drinking, recreational drug use) and who exercise
- Persons taking responsibility for others
  - Parents
  - Professionals: physicians, lawyers, professors, teachers, etc
  - Essential workers: police, fire fighters, health care workers, etc.
  - Others?

# COVID-19 Hospitalization and Death by Race/Ethnicity

Rate ratios compared to White, Non-Hispanic Persons	American Indian or Alaska Native, Non-Hispanic persons	Asian, Non-Hispanic persons	Black or African American, Non-Hispanic persons	Hispanic or Latino persons
Cases <sup>1</sup>	2.8x higher	1.1x higher	2.6x higher	2.8x higher
Hospitalization <sup>2</sup>	5.3x higher	1.3x higher	4.7x higher	4.6x higher
Death <sup>3</sup>	1.4x higher	No Increase	2.1x higher	1.1x higher

Source: CDC. <https://www.cdc.gov/coronavirus/2019-ncov/covid-data/investigations-discovery/hospitalization-death-by-race-ethnicity.html>

# Underlying health conditions

**Adults of any age with the following conditions are at increased risk of severe illness from the virus that causes COVID-19:**

- Cancer
- Chronic kidney disease
- COPD (chronic obstructive pulmonary disease)
- Heart conditions, such as heart failure, coronary artery disease, or cardiomyopathies
- Immunocompromised state (weakened immune system) from solid organ transplant
- Obesity (body mass index [BMI] of 30 kg/m<sup>2</sup> or higher but < 40 kg/m<sup>2</sup>)
- Severe Obesity (BMI ≥ 40 kg/m<sup>2</sup>)
- Pregnancy
- Sickle cell disease
- Smoking
- Type 2 diabetes mellitus

# Candidate groups for reduced priority:

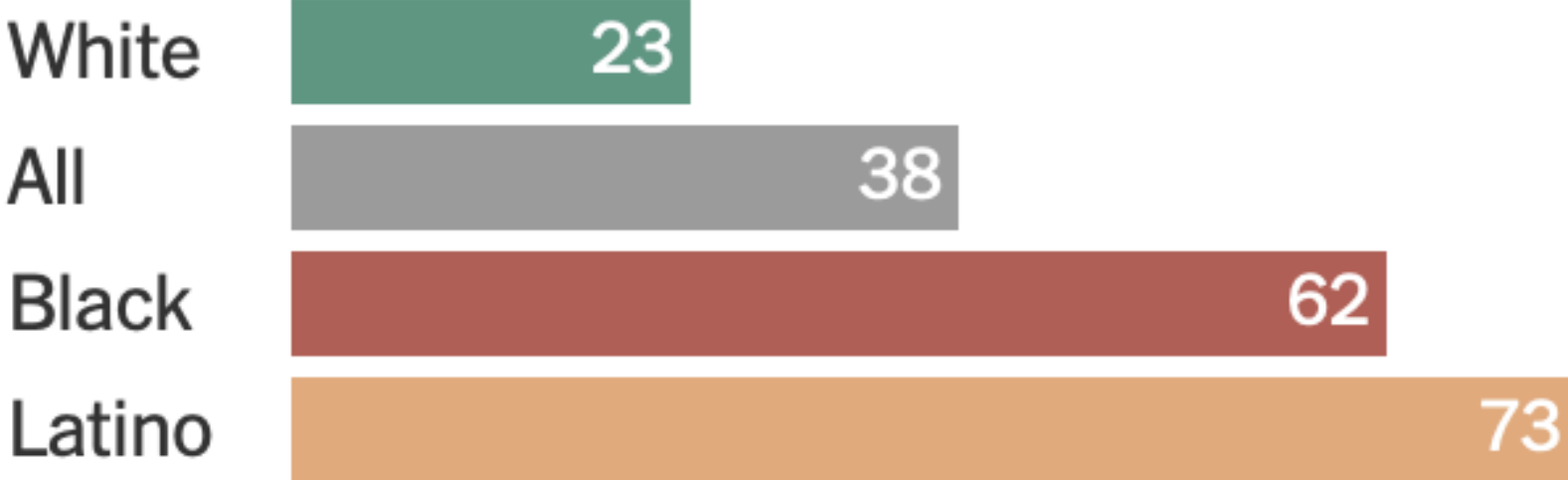
- Prisoners
- those with controllable chronic health conditions, such as obesity
- People who have chosen to make themselves more vulnerable:
  - Smokers
  - Drug addicts
  - heavy drinkers
- others?

# Exercise

Imagine that NYS receives enough vaccine doses to vaccinate 250,000 people from Pfizer (before anyone was vaccinated). More vaccines will come in the next 6 mos-1 yr. You are on the task force for allocating the state's stockpile of vaccines.

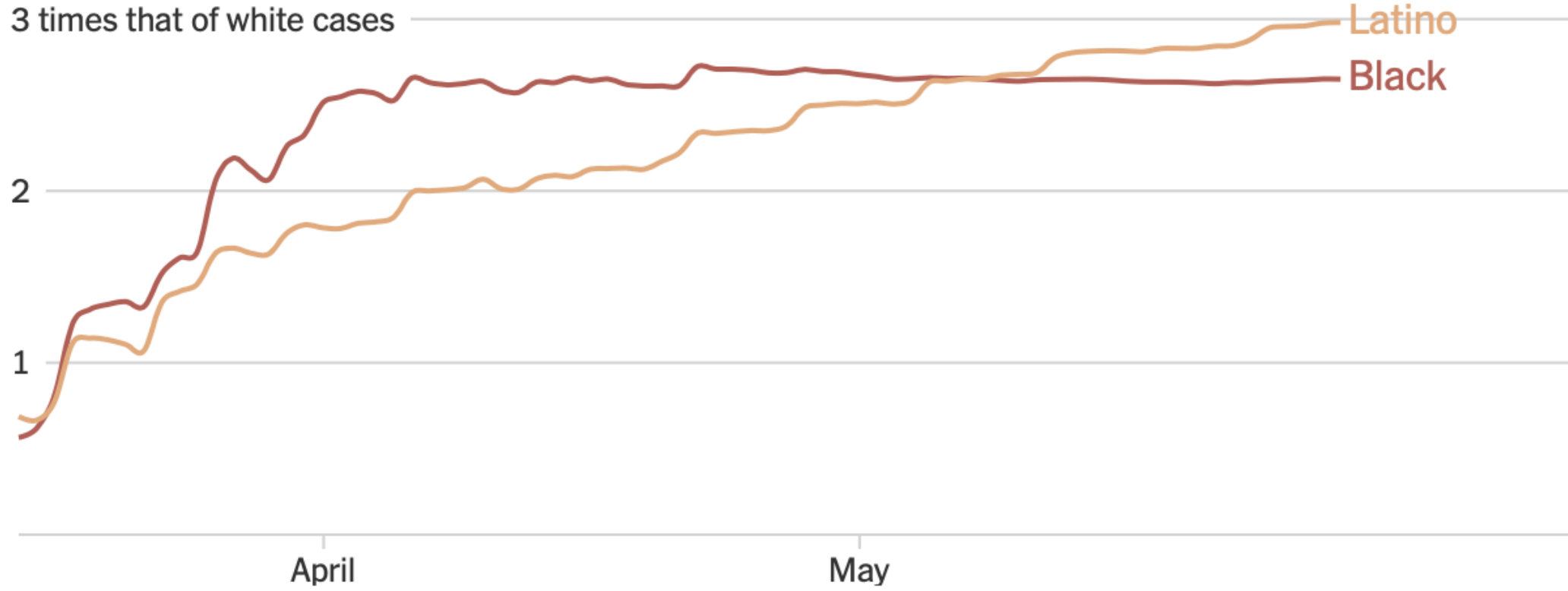
1. Which principles for allocation are most justifiable? Why?
2. Which groups should receive priority access? And why? Rank in order of most priority to least priority.
3. Should any groups be assigned reduced priority, at least until we have enough vaccine to treat everyone?

**Coronavirus cases per 10,000 people**



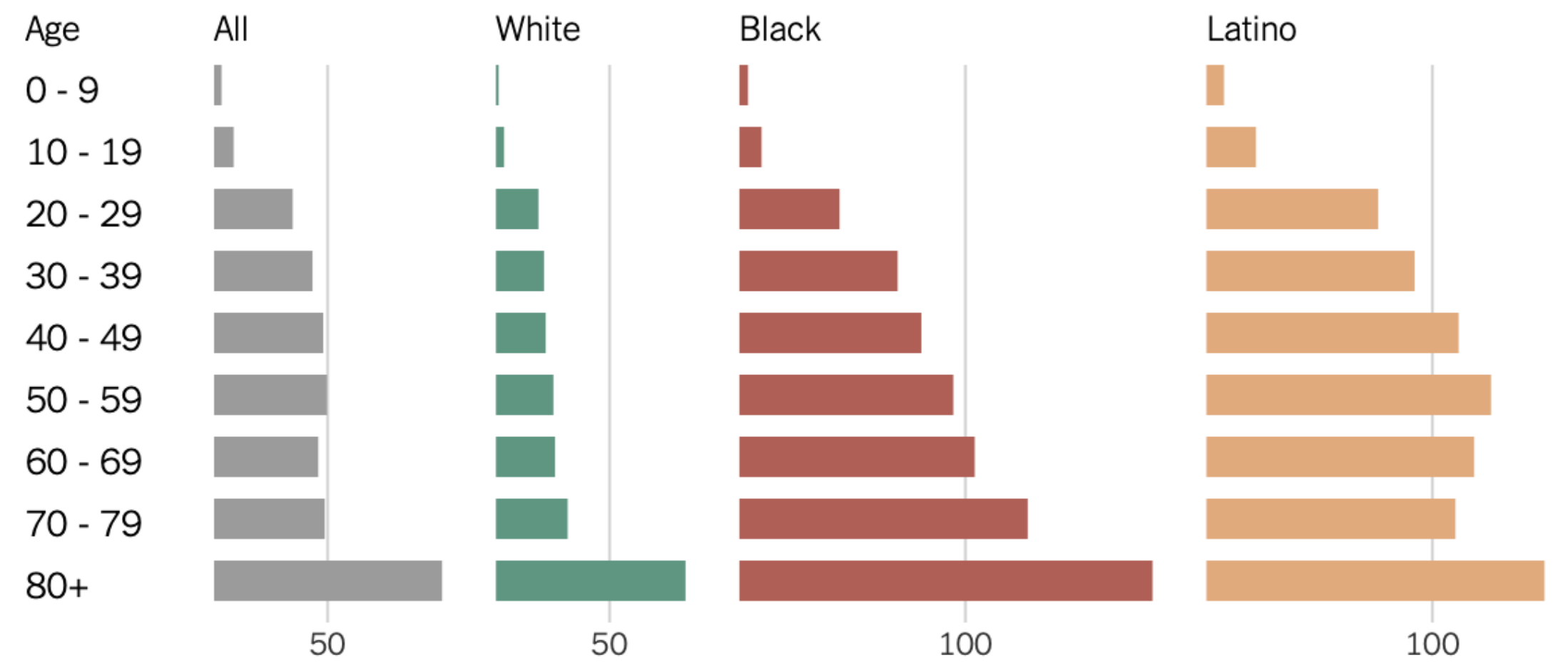


### Rate of Black and Latino coronavirus cases, compared with white cases



Source: Centers for Disease Control and Prevention | Note: Data is through May 28.

### Coronavirus cases per 10,000 people, by age and race



Source: Centers for Disease Control and Prevention | Note: Data is through May 28.

# NY State Plan

Source: <https://www.governor.ny.gov/news/governor-cuomo-announces-draft-new-york-state-covid-19-vaccination-administration-program>

Phase 1	<ul style="list-style-type: none"><li>• Healthcare workers (clinical and non-clinical) in patient care settings (ICU, ED, EMS top priority)</li><li>• Long-term care facility workers who regularly interact with residents</li><li>• Most at-risk long-term care facility patients</li></ul>
Phase 2	<ul style="list-style-type: none"><li>• First responders (fire, police, national guard)</li><li>• Teachers/school staff (in-person instructions), childcare providers</li><li>• Public Health workers</li><li>• Other essential frontline workers that regularly interact with public (pharmacists, grocery store workers, transit employees, etc.) or maintain critical infrastructure</li><li>• Other long-term care facility patients and those living in other congregate settings</li><li>• Individuals in general population deemed particularly high risk due to comorbidities and health conditions</li></ul>
Phase 3	<ul style="list-style-type: none"><li>• Individuals over 65</li><li>• Individuals under 65 with high-risk</li></ul>
Phase 4	<ul style="list-style-type: none"><li>• All other essential workers</li></ul>
Phase 5	<ul style="list-style-type: none"><li>• Healthy adults and children</li></ul>