

University Senate Plenary

January 29, 2021



University Senate

Proposed: January 29, 2021

Adopted: January 29, 2021

PROPOSED AGENDA

University Senate

Friday, January 29, 2021 at 1:15 p.m.

[Registration required](#)

After registering you will receive a confirmation email with meeting details.

1. Adoption of the agenda
2. Adoption of the minutes of December 11, 2020
3. President's report
4. Executive Committee Chair's report:
 - a. Covid-19 and vaccines update: Dr. Wafaa El-Sadr, University Professor
 - b. Return to campus: Dr. Melanie Bernitz, Senior Vice President for Columbia Health
5. New business:
 - a. Annual reports
 - i. Advisory Committee on Socially Responsible Investing Annual Report 2019-20 and 2020-21 agenda: Professor Bruce Usher, ACSRI Chair

MEETING OF DECEMBER 11, 2020

In the absence of President Bollinger, Executive Committee chair Jeanine D'Armiento (Ten., VP&S) called the Senate shortly after 1:15 pm on Zoom. Ninety-one of 107 senators were present during the meeting.

Adoption of the Agenda. The [agenda](#) (*December 11 Plenary Binder, p. 2*) was adopted as proposed.

Adoption of the Minutes. The [minutes of November 20](#) (*Binder, 3-9*) were adopted as proposed.

Old Business.

Three resolutions from the Structure and Operations Committee. Sen. D'Armiento said that, with the permission of the Senate, she would alter the agenda around to enable the Senate to take up the three resolutions right away. The first two, proposing amendments to the University Statutes and the Senate By-laws, would both require three-fifths majorities, and the Senate staff had determined that three fifths of all incumbent senators were present. The third resolution would require only a simple majority. Sen. D'Armiento invited Sen. Daniel Savin (Research Officers), co-chair of Structure and Operations, to present the resolutions.

Sen. Savin said the committee devoted a year to this project, with much of the work done over the summer, with the collaboration of the Senate Elections Commission. The impetus to make changes in these Senate documents came from the controversy over the 2019 Executive Committee Chair election. But then reapportionment, which the Senate takes up every five years, fell due in the spring of 2020, raising new issues. Then COVID-19 profoundly affected Senate operations. These challenges also made it clear that other sections of the governing documents urgently needed revision.

Sen. Savin said the present proposals had now been before the Senate since September. S&O had incorporated most of the comments it had received; some issues would be taken up in the near future. He said the committee took seriously the mission of the Senate and the service it must provide to future Columbians. He appealed to senators to help the committee make sure that the documents support that purpose as fully as possible.

Sen. Brendan O'Flaherty (Ten., A&S/Social Sciences) added that the proposed new procedures call for the election of the Executive Committee chair to take place in the spring. He said it would be helpful to approve the revised documents at the present meeting so that the Senate staff and the Elections Commission could start preparing for the election as soon as possible.

Sen. Savin invited Senate parliamentarian Linda Mischel Eisner, his S&O Committee co-chair, who had also worked hard on the project, to comment. Ms. Eisner thanked senators for reading the documents carefully. She suggested turning to the first resolution.

[Resolution to Update the University Statutes to Clarify Constituency Membership and Eligibility, General Policies and Powers, and to Refer to Electronic rather than Virtual Meetings](#) (*Binder, 10-24*).

Sen. D'Armiento invited discussion, but there was none. The resolution was moved and seconded.

Using their Zoom icons, senators voted to approve the first resolution by a count of 70-0, with one abstention. Sen. D'Armiento asked senators to turn their cameras on as they voted.

Sen. D'Armiento determined that the vote 70-0 in favor of the resolution, with one abstention.

Sen. Shelley Saltzman (NT, SPS) asked how many votes were needed for a super-majority. Senate director Geraldine McAllister said there were 107 sitting senators, so a three-fifths majority would be 65 senators.

[Resolution to Update the University Senate Bylaws](#) (*Binder, 25-49*) Sen. D'Armiento opened discussion on the second resolution. Again, there was none. The resolution was moved and seconded.

Sen. Anne Taylor (Admin., CUIMC) asked to have the resolution read aloud. Sen. D'Armiento said that the resolution was too long to read aloud. So she offered to send it to the senator through the chat.

Using their Zoom icons, senators approved the resolution by a vote of 74-1, with no abstentions.

[Resolution to Update the University Senate Elections Code](#) (*Binder, 50-58*). Sen. D'Armiento invited discussion. Sen. Mignon Moore (Fac., Barnard) asked when the term of an Executive Committee chair elected in the spring would start.

Sen. Savin said the committee decided, after some back and forth, that the term should start 14 days before Commencement, so that there would be a fully empowered Executive Committee over the summer, including all the student and faculty members.

There was no further discussion. Sen. D'Armiento requested and received a motion to approve the resolution and a second.

Using their Zoom icons, senators voted to approve the resolution by a vote of 71-0, with three abstentions.

Sen. D'Armiento again thanked the committee and staff director Geraldine Mc Allister for their work in preparing the resolutions. She then returned to the agenda items she had skipped before.

Executive Committee Chair's report

a. COVID-19 and Vaccines: Prof. Wafaa El-Sadr, University Professor. Prof. El-Sadr presented her report, referring to a set of slides available [here](#) (Binder, 59-90).

Sen. D'Armiento thanked Prof. El-Sadr for the presentation. She reported a question from Sen. Elisa Konofagou (Ten., SEAS): Why was the AstraZeneca/Oxford vaccine so much more effective in its UK trial than in its Brazil trial?

Prof. El-Sadr said the UK cohort was smaller than the Brazil cohort. By mistake the UK group also got only half of the intended first dose. Another difference was that the UK cohort was younger, with every member below 55. So it's not clear whether the differences in results are real or an effect of differences between the cohorts and the doses. But researchers don't know the answers to these questions. Prof. El-Sadr said the AstraZeneca study continues to enroll patients, including volunteers responding to an ICAP website.

Sen. Henry Ginsberg (Ten., VP&S) expressed concern that with the current spike in Covid cases there might not be a significant decrease in the number of new cases per day—despite the rollout of the vaccine—until the end of February or even later. He worried that a mixed result of this kind might make many people who are already wary of the vaccine even less willing to take it, thereby further slowing progress against the virus.

Sen. D'Armiento reported two more questions from the chat. One was whether some University people (such as instructors in hybrid classes) should be considered essential workers? Another question, from Sen. Shelley Saltzman (NT, SPS), was about prisoners: at one point they were included in the essential category, but then were removed from it.

Prof. El-Sadr said identifying essential workers is a crucial task. She said many people are likely to deem their jobs essential. By some measures, a job in payroll could qualify. But the intent behind the term “essential workers” is to recognize people in people-facing jobs. That includes transit, EMS, and supermarket workers, firefighters, police, and teachers. Teachers are part of this. She said the question about prisoners raises a huge issue. She noted that correctional facilities workers are included as essential in some of the guidance. With a group of advocates that she works with in her off hours, Prof. El-Sadr was pushing to expand the priority list to include prisoners, as well as homeless people in shelters.

Sen. D'Armiento said there were many more questions but only a few minutes left. She said any unanswered questions would be addressed by email. She relayed a query from Sen. Benjamin Rudshyeyn (Research Officers, Postdocs): Why did several members of the FDA advisory committee vote the day before *against* approval of the two newest vaccines for widespread distribution?

Prof. El-Sadr said she had listened to as much of that nine-hour meeting as she could. The recommendation before the FDA committee was that the balance of the data collected so far support the efficacy and safety of the vaccine in individuals of at least 16 years of age. The problem was that several pediatricians on the committee were concerned that not enough 16- and 17-year-olds had been included in the study, because Pfizer lowered the eligibility threshold from 18 to 12 years of age late in the game.

Sen. D'Armiento read one more brief question from Sen. Michelle Kaiser (Alumni) about the situation of people who had already had COVID-19 and were now getting the vaccine.

Prof. El-Sadr reminded senators that there would be two Columbia webinars in the near future focused on vaccines. Any unanswered questions from the present meeting could be taken up there. She said people who had had COVID-19 were not included in the vaccine studies. People who had serologic evidence of some kind of prior COVID infection were included, but there were few of those. In one Pfizer study such people made up only 2-3 percent of the tested population. It is thought that the immune response from the vaccine is much better from a quantitative point of view than the immune response to natural infection. So unless there are major issues with that small population, there is no plan to test people for antibodies in this project.

Prof. El-Sadr thanked senators for their questions. She agreed to share her presentation with the Senate.

- b. Developments in Hybrid and Online Learning at Columbia*, a report from Sen. Soulaymane Kachani, Vice Provost for Teaching, Learning and Innovation.

Sen. Kachani gave his presentation, referring to a set of slides available [here](#) (*Binder, 91-116*).

In the discussion that followed, Sen. Nachum Sicherman (Ten., Bus.) asked whether Columbia, by investing in remote learning over the long run, might be shooting itself in the foot. He said some of Columbia's distinct advantages over most other institutions—including its location in New York City and the face-to-face interaction it offers with top faculty—would diminish with the growth of remote learning.

Sen. Kachani shared Sen. Sicherman's hope that Columbia would get back to normal soon, and he agreed that the University must capitalize on its campus teaching and on its presence in New York City. But he said it was also clear that there will be more learning happening online, though possibly not so much in Columbia's typical undergraduate programs. But even there, Columbia would be able to leverage technology, as well as the challenges the University had faced during the Covid crisis, to enhance teaching and learning for both undergraduates and graduate students. He said technology also enables Columbia to reach bigger audiences, including practitioners and lifelong learners. How does the University engage those audiences in a variety of modalities, whether it's face to face, hybrid, online, or low residency? How can Columbia build a lifelong learning relationship, in which alumni remain connected to the institution? It is necessary to think hard about what technology provides to the University, as a set of competencies that can complement Columbia's key strengths, both in New York City and in its network of global centers.

Sen. Greg Freyer (NT, Public Health) said he had done a lot of online teaching during the semester now coming to an end. He had two thoughts. One was a recognition of students' overwhelming wish to be back in the classroom, working with their professors face to face. That wish was not going away. But at the same time, Sen. Freyer said, he was seeing some of the advantages of hybrid learning, despite his own initial resistance. He would never teach his class entirely online, but he did provide asynchronous material to students, making it possible for him

to spend more classroom time on discussion. With this approach he had gotten better discussions with students than ever before. He was looking forward to seeing how the technology would play out.

Sen. Kachani said this was why he had emphasized the wide use of the *active learning* page. He said that after six years there were some 150 flipped classrooms, and an opportunity now to accomplish that for most Columbia courses, building the right amount of asynchronous content to make the classroom environment more engaging. And this was a great opportunity to move Columbia forward.

c. Fiscal update. Sen. D'Armiento said senators had received the December 3 fiscal update from Provost Ira Katznelson and EVP for Finance Anne Sullivan. She invited senators to comment or ask questions about this letter. She said the Senate was looking closely at the steps the University has taken to address the COVID pandemic and its budgetary consequences for Columbia.

There were no questions or comments. Sen. D'Armiento welcomed email questions from senators, which she promised to convey to the administration. She said some questions had already arisen in Senate committees, and the Executive Committee would also pass those on.

Sen. D'Armiento wished everyone a safe, socially distanced, mask-adorned holiday season. She urged anyone who takes risks to react appropriately, isolating themselves. She noted Prof. El-Sadr's reminder that a vaccine was close at hand, and the end of the pandemic was within reach.

She adjourned the meeting shortly after 2:30 pm.

Respectfully submitted,

Tom Mathewson, Senate staff

COVID-19 Update

Wafaa El-Sadr, MD, MPH, MPA
ICAP at Columbia University

January 29, 2021



The Race between the Virus and Vaccines

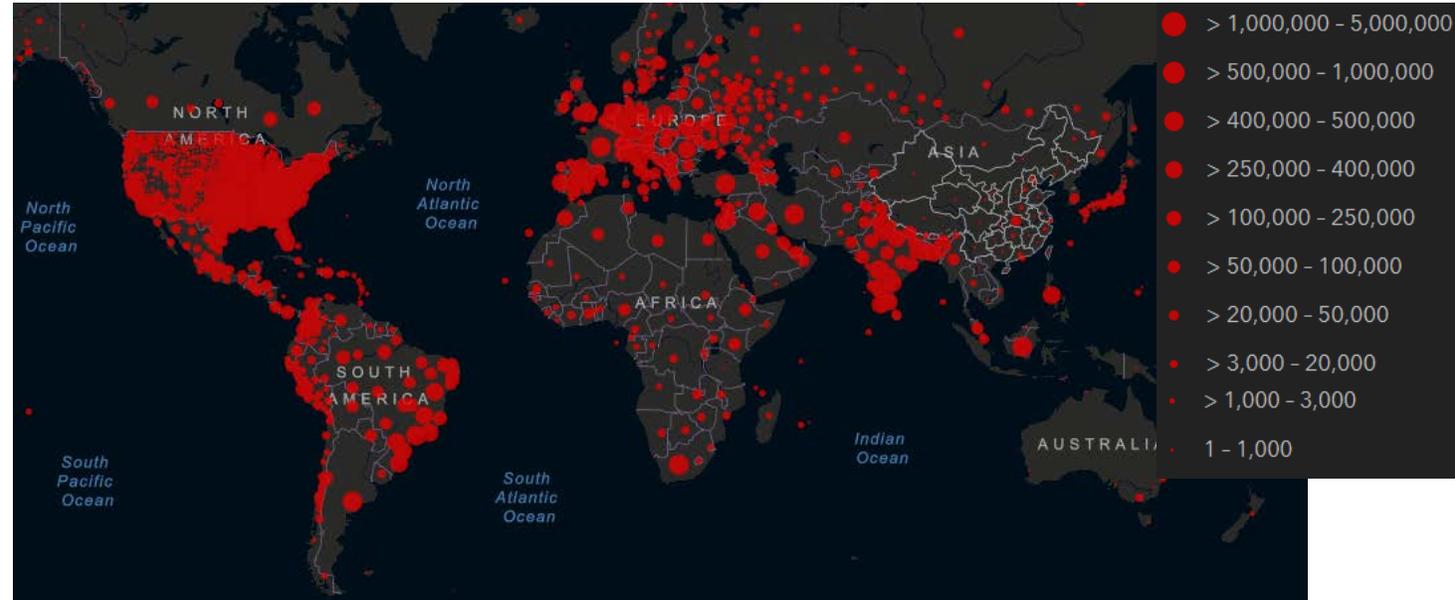
COVID-19 Global Snapshot

As of January 29th:

- 101,582,467 confirmed cases
- 2,193,844 reported deaths*
- 56,181,277 reported recoveries

By Region:

- 44% in the Americas
- 33% in Europe
- 13% in South-East Asia
- 6% in the Eastern Mediterranean
- 3% in Africa
- 1% in the Western Pacific



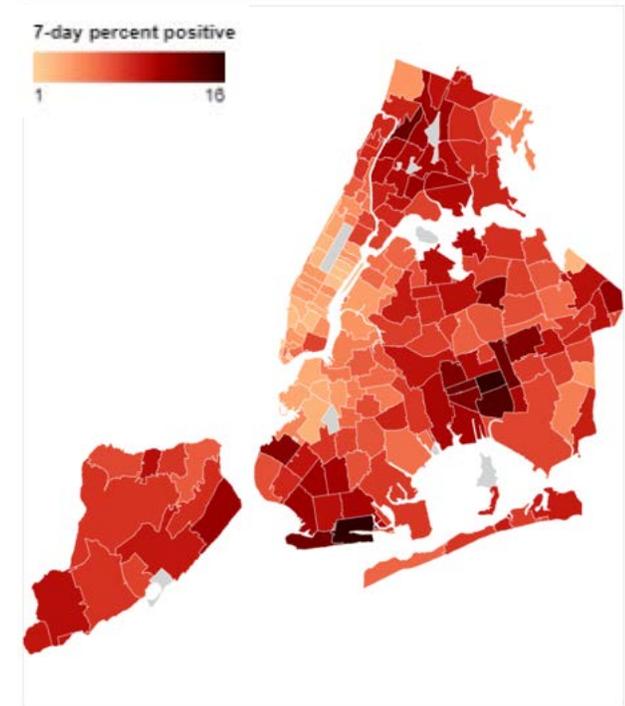
Top five: US, India, Brazil, Russia, UK

COVID-19 in NYC

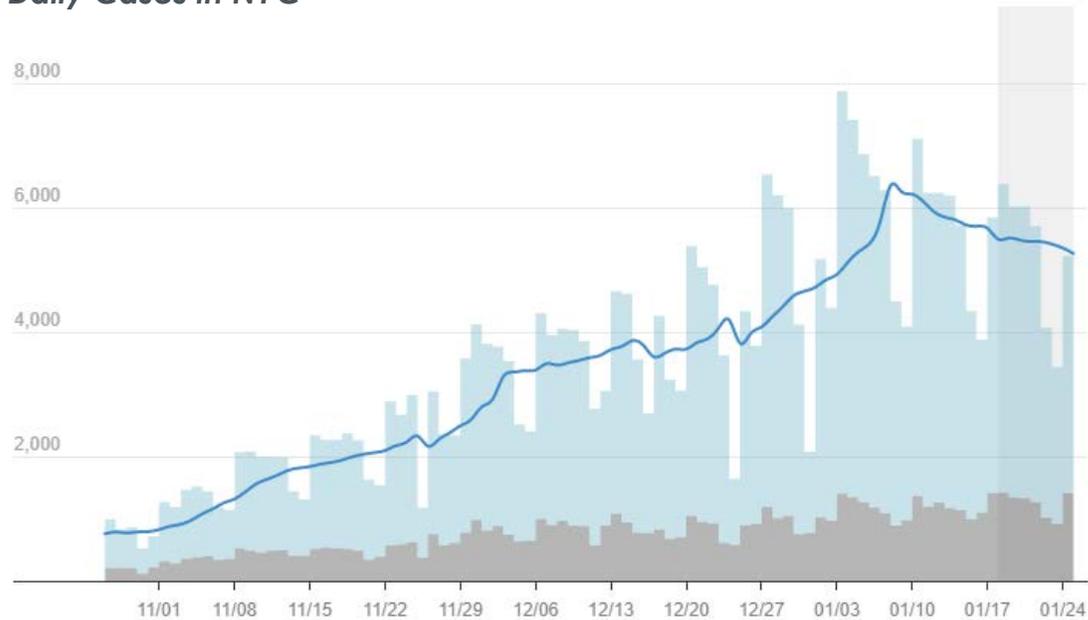
Current Snapshot:

- **590,926 reported cases***
 - 5,280 cases/ day
- **26,856 reported deaths***
 - 72 deaths/ day

*Confirmed + probable

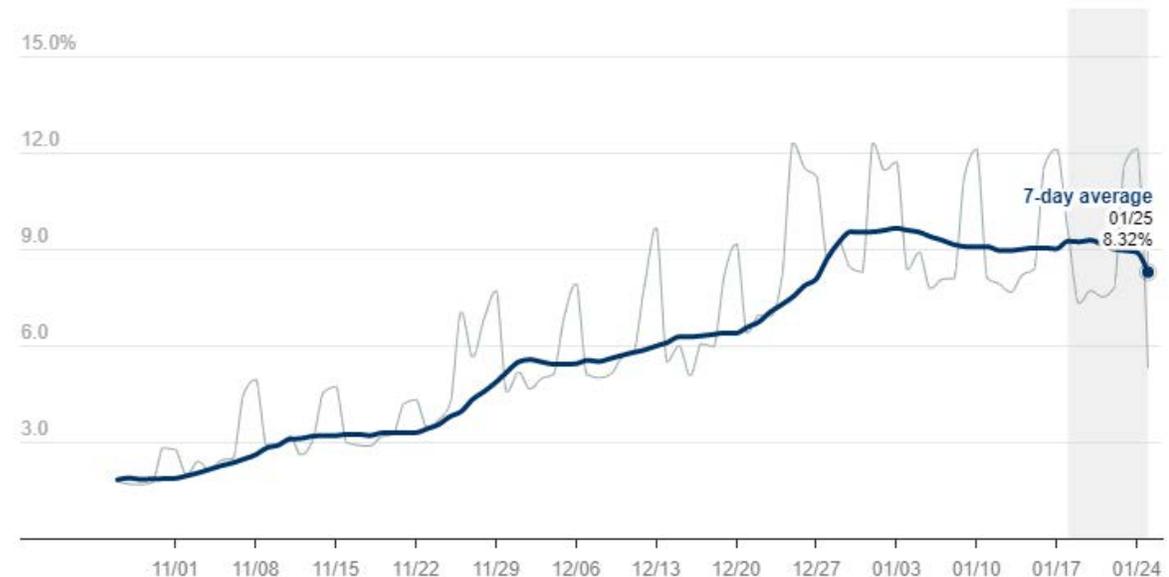


Daily Cases in NYC



Percent of people tested who test positive

Data from the most recent days are incomplete.



Notable SARS-CoV-2 Variants

Multiple variants are circulating globally:

UK B.1.1.7/ 501Y.V1 – circulating in over 60 countries, may be associated with increased transmissibility as reported by UK officials

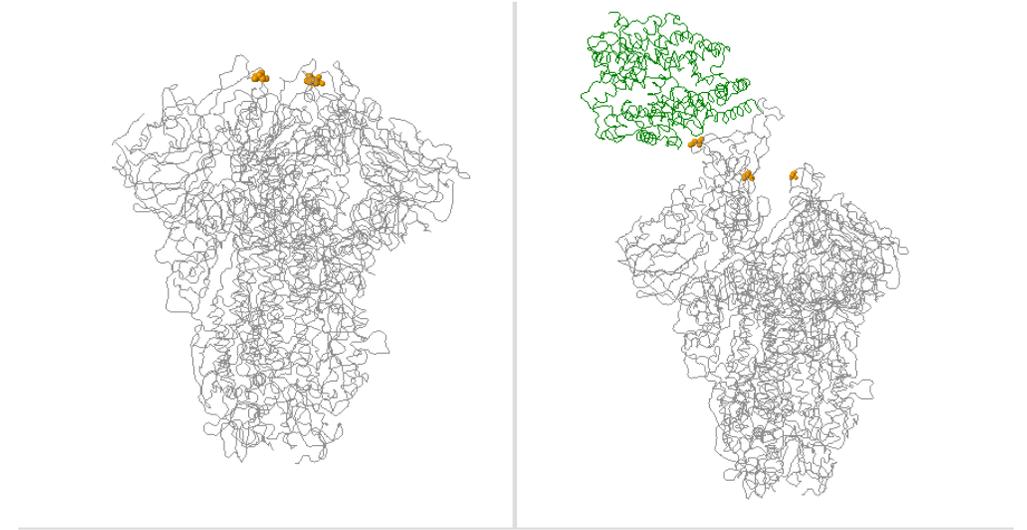
SA B.1.351/501Y.V2 - circulating in over 31 countries

Brazil P.1/ 501Y.V3 – accounted for over 50% of new infections in Manaus, Brazil in Dec, first case detected in US this week

US 20C-US (IL) CAL.20C (CA), COH.20G (OH) – recently emerging strains in the US

Many other variants are being tracked:

<https://www.gisaid.org/hcov19-variants/>



N501Y mutation (orange) is common to UK, SA, Brazilian and US Ohio variants and is located in the spike protein where binding to ACE2 occurs (green).

Impact on Diagnostics, Vaccines/Treatment, and Reinfection

Diagnostics

- Most **RT-PCR** tests will not be impacted by the mutations but a few that target the S-gene (spike protein) may give a false negative result
- **Antigen tests** target the nucleocapsid protein and will not likely be impacted

Vaccines & Treatments

- Moderna vaccine works against the UK B.1.1.7 variant but has a 6-fold reduction in neutralizing antibody titers against the SA B.1.351 variant
- Pfizer vaccine appears effective against these variants but the lab studies have been focused only on a subset of the mutations and not the variants themselves
- Novavax vaccine not as effective against SA variant in SA trial
- Regeneron has reported their multi-antibody cocktail works against UK and SA variants while Eli Lilly's monoclonal antibody is not effective against the SA variant.
- Convalescent plasma is not effective against the SA variant

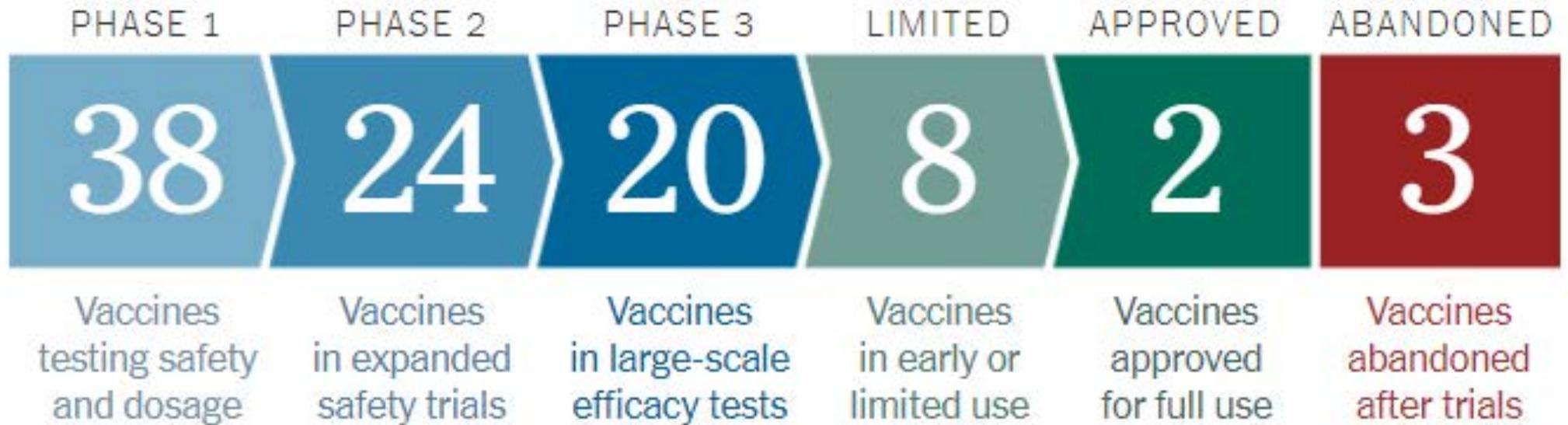
Reinfection

- Novavax SA trial found that 1/3 of trial participants had previously developed COVID-19 after being infected by the original form of the virus and that previous infection did not protect against the new variant



COVID-19 Vaccine Development

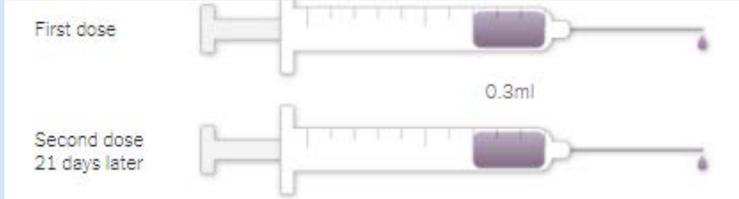
Vaccine Development

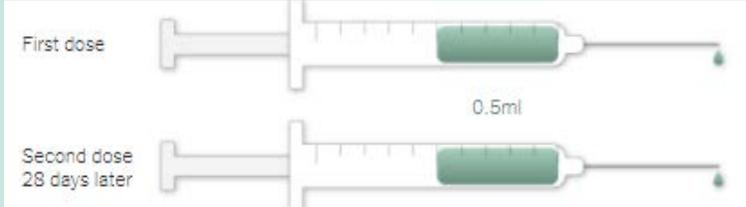


Status of Leading Vaccines

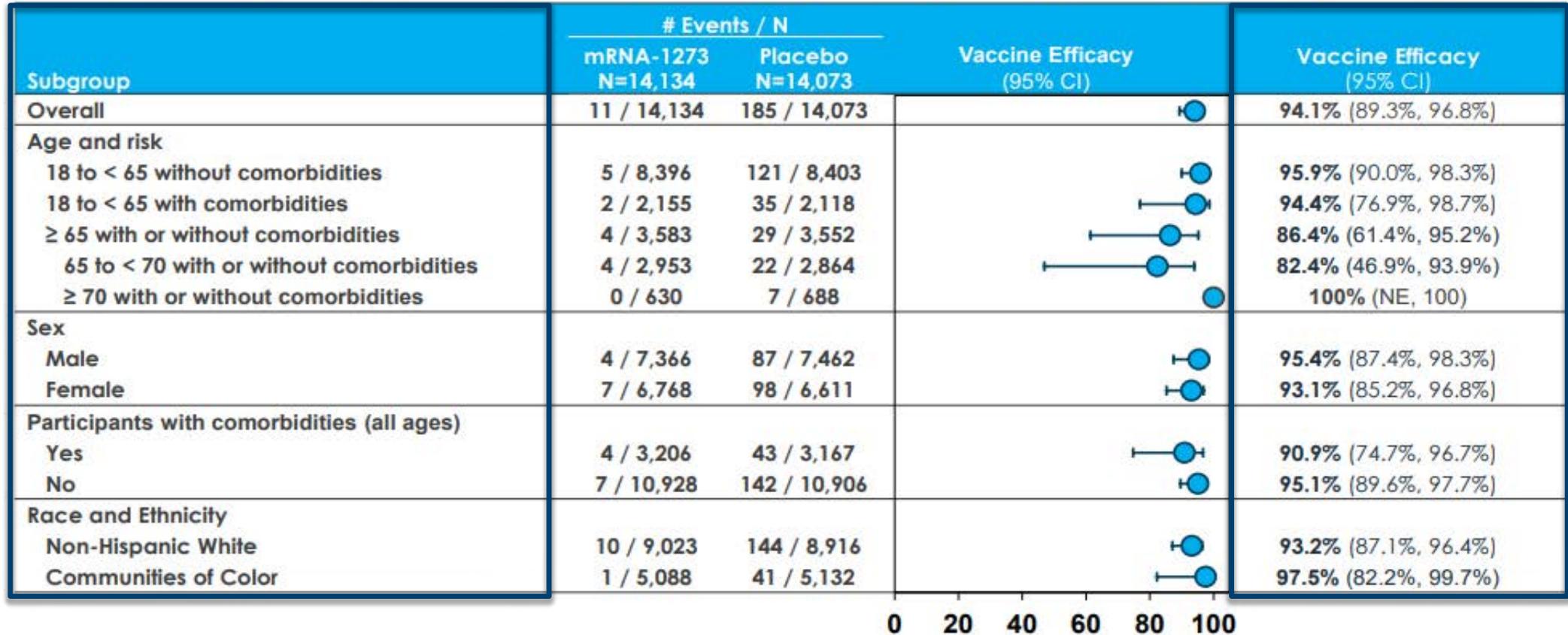
Developer	How It Works	Phase	Status
 Pfizer-BioNTech	mRNA	2 3	Approved in Saudi Arabia, Bahrain, Switzerland. Emergency use in U.S., E.U., other countries.
 Moderna	mRNA	3	Emergency use in U.S., U.K., E.U., other countries.
 Gamaleya	Ad26, Ad5	3	Early use in Russia. Emergency use in other countries.
 Oxford-AstraZeneca	ChAdOx1	2 3	Emergency use in Britain, India, other countries.
 CanSino	Ad5	3	Limited use in China.
 Johnson & Johnson	Ad26	3	
 Vector Institute	Protein	3	Early use in Russia.
 Novavax	Protein	3	
 Sinopharm	Inactivated	3	Approved in China, U.A.E., Bahrain. Emergency use in Egypt, Jordan.
 Sinovac	Inactivated	3	Emergency use in China, Brazil, other countries.
 Sinopharm-Wuhan	Inactivated	3	Limited use in China, U.A.E.
 Bharat Biotech	Inactivated	3	Emergency use in India.

How well do the vaccines work?

Pfizer-BioNTech Vaccine	
Efficacy	95% effective at preventing symptomatic COVID-19
Safety	No serious safety concerns reported Most common side effects: Mild-to-moderate pain at the injection site, fatigue, headache
Dose Regimen	

Moderna Vaccine	
Efficacy	94.1% effective at preventing symptomatic COVID-19
Safety	No serious safety concerns reported Most common side effects: Mild-to-moderate pain at the injection site, fatigue, headache
Dose Regimen	

Do vaccines work for all groups?

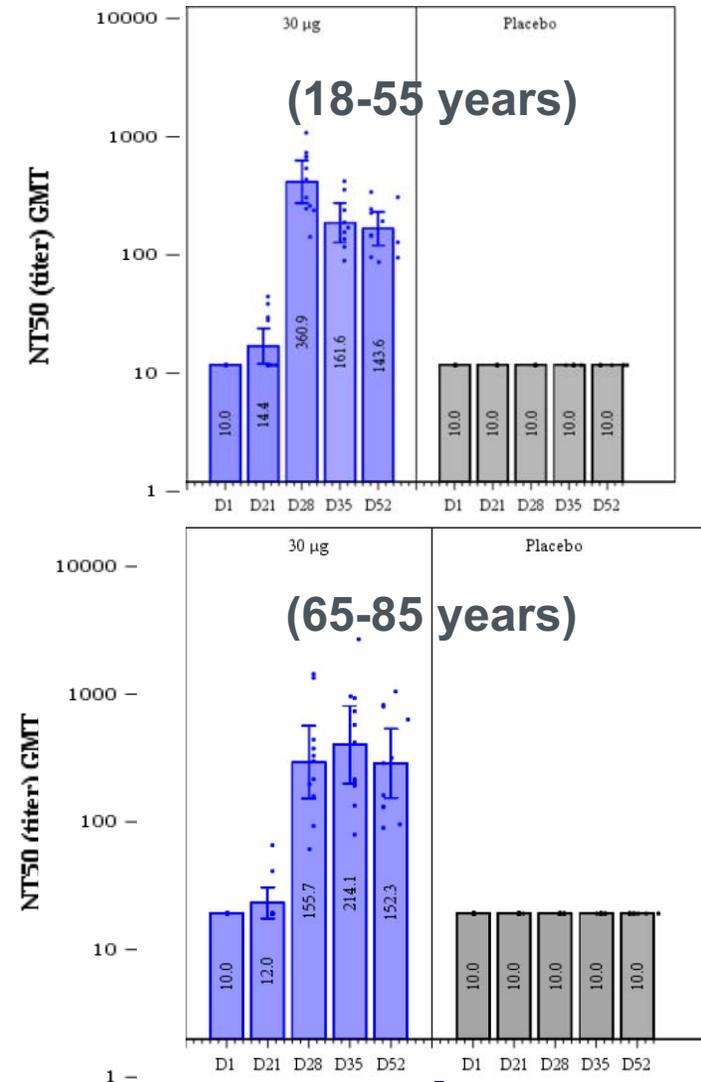


Is it necessary to get two doses of vaccines?

- Neutralizing antibody levels after one dose vaccination is no different from placebo
- Antibody response boosted after second dose of vaccine
- Vast majority of study participants got two doses
 - Very few only got one dose to be able to answer the question as to benefits from one dose

GMT = geometric mean titer; NT50 = 50% neutralizing titer

Neutralizing Antibodies



Pfizer presentation at FDA meeting

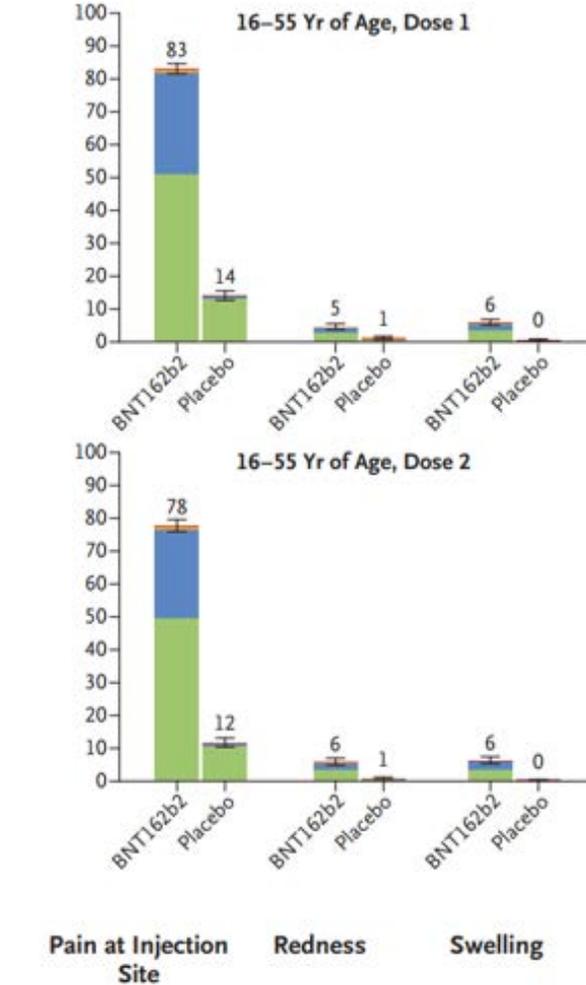
What are most common side effects?– Pfizer/BioNTech

- Most of side effects are **mild to moderate**
- Most side effects are local (injection site)
 - Pain
 - Redness
 - Swelling
- Younger people are more likely to have such reactions
- Systemic side effects less common
 - Headache
 - Fatigue
- Some people with some vaccines have more reactions after second dose than first dose

16-55 years

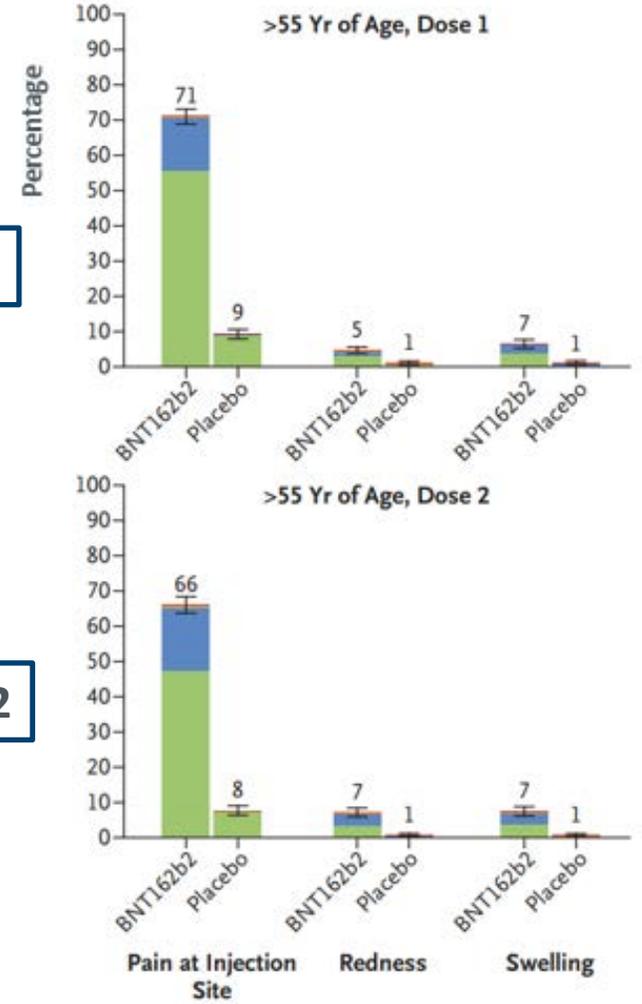
>55 years

A Local Events



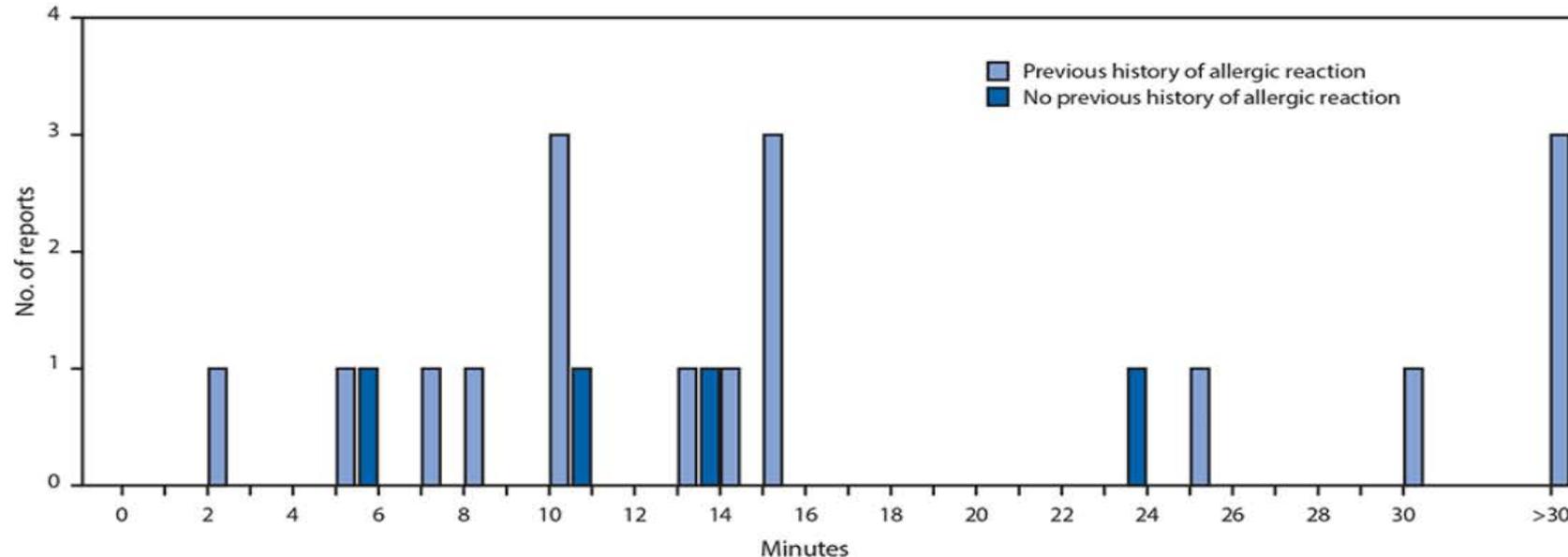
Dose 1

Dose 2



What about severe allergic reactions?

- During December 14–23, 2020, monitoring by VAERS detected 21 cases of anaphylaxis after administration of a reported 1,893,360 first doses of the Pfizer-BioNTech COVID-19 vaccine (**11.1 cases per million doses**)
 - 71% of these occurred within 15 minutes of vaccination
 - 81% had a documented history of allergies or allergic reactions, e.g. drugs or medical products, foods, and insect stings;
 - 33% had experienced an episode of anaphylaxis in the past, including one after receipt of a rabies vaccine and another after receipt of an influenza A(H1N1) vaccine.



Source: CDC MMWR (6 Jan 2021)

Contraindications and Precautions

- Persons who have had a **severe allergic reaction to any ingredient of the vaccine** should not be vaccinated
- Persons who have had a **severe allergic reaction to any other vaccine or therapy (intramuscular, intravenous, or subcutaneous)** can still be vaccinated though should discuss the risks with their healthcare provider first.
- Vaccine is considered safe for those with any other allergy, including food, pet, pollen, etc.
- Individuals should be observed for 15 minutes (30 minutes for people with history of severe allergy) after vaccination to monitor for the occurrence of immediate adverse reactions



Pregnant and Breastfeeding Women



- Pregnant women not included in the vaccine studies
 - No data on the safety of COVID-19 vaccines in pregnant women, though studies are ongoing
- mRNA vaccines and pregnancy
 - Not live vaccines
 - Are degraded quickly by normal cellular processes and don't enter the nucleus of the cell
- COVID-19 and pregnancy
 - Increased risk of severe illness (ICU admission, mechanical ventilation and death) and potentially adverse pregnancy outcomes

CDC's recommendation (Pfizer/Moderna):

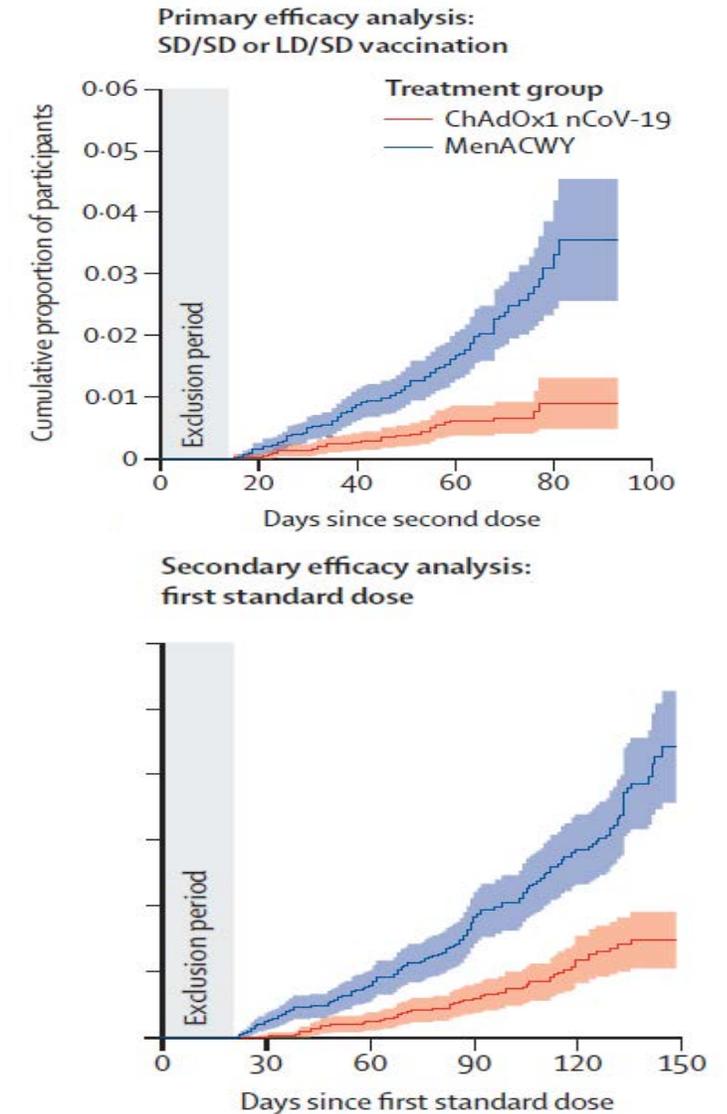
- Pregnant or breastfeeding person who are part of a group recommended to receive a COVID-19 vaccine (e.g., healthcare personnel), **may choose to be vaccinated/should be offered vaccine**
 - A discussion with healthcare provider can help inform decision
- Routine testing for pregnancy prior to receipt of a COVID-19 vaccine is not recommended

WHO's recommendation (Pfizer/Moderna):

- **Use is currently not recommended**, unless they are at risk of high exposure (e.g. health workers)

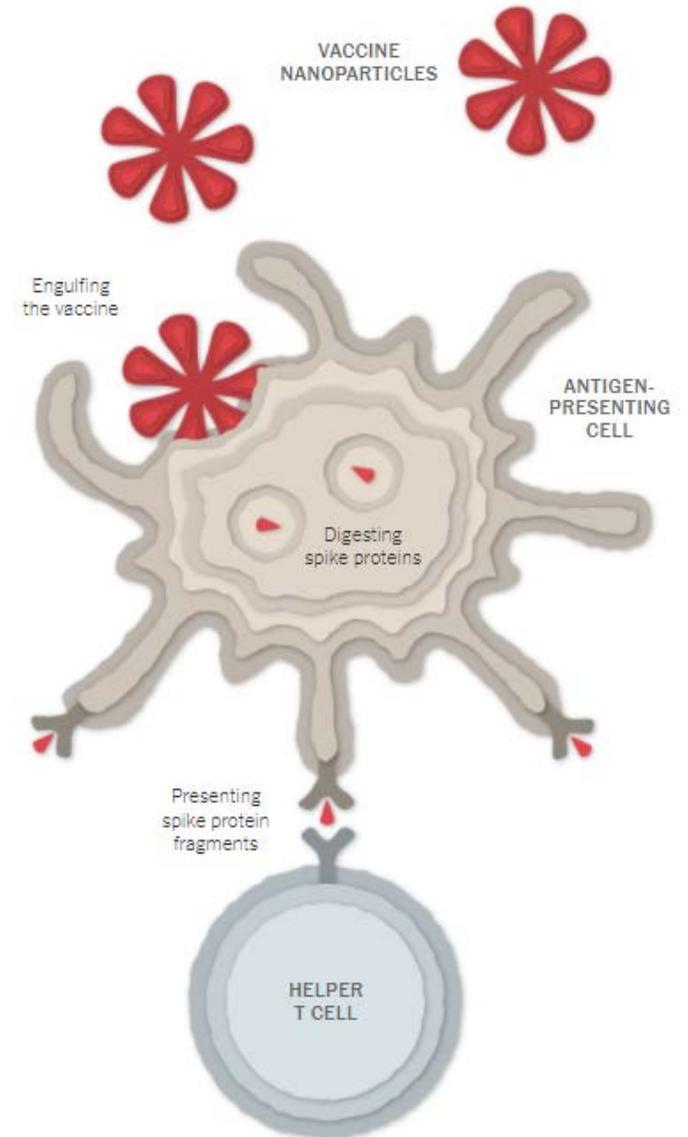
AstraZeneca/Oxford COVID-19 Vaccine

- **Adenovirus vaccine:** a chimpanzee cold virus that has been genetically altered to carry a gene for a coronavirus protein
- Interim analysis including data from studies in UK and Brazil
- A total of **131 COVID-19 cases, 30 (0.5%) in vaccine group and 101 (1.7%) in control group**
- Efficacy: (Average 70%)
 - UK (N=2,741 participants)*: 90% vaccine efficacy
 - * Half-dose was a result of a dosing error and was not tested in volunteers >55*
 - Brazil (N=8,622 participants): 62% vaccine efficacy
- No serious safety issues
- Study in US fully enrolled



Novavax COVID-19 Vaccine

- **Protein vaccine:** uses spike protein nanoparticles that mimic SARS-CoV-2; similar mechanism of action as the influenza and HPV vaccines
- Preliminary analysis of a Phase 3 **15,000-person** trial in Britain found that the 2-dose vaccine had an **efficacy rate of 89.3%**
 - Of the 62 participants who developed COVID-19, 56 had received a placebo and 6 received the vaccine
- Preliminary analysis of a smaller Phase 2b trial in South Africa (n=4,400) has found that the **efficacy rate dropped to 49.4%**
 - 44 trial participants developed Covid-19; genetic lineage was sequenced of 27 cases.
 - Of the 27, 25 cases were caused by the more contagious version of the virus





Vaccine Prioritization and Acceptability

Who should be prioritized for vaccination?

Higher Risk for infection and COVID-19

- Health care workers
- Essential workers: grocery, transit workers, meat processing plants, others
- Certain race/ethnic groups
- Congregate settings: long term facilities, homeless persons, prisons/jails

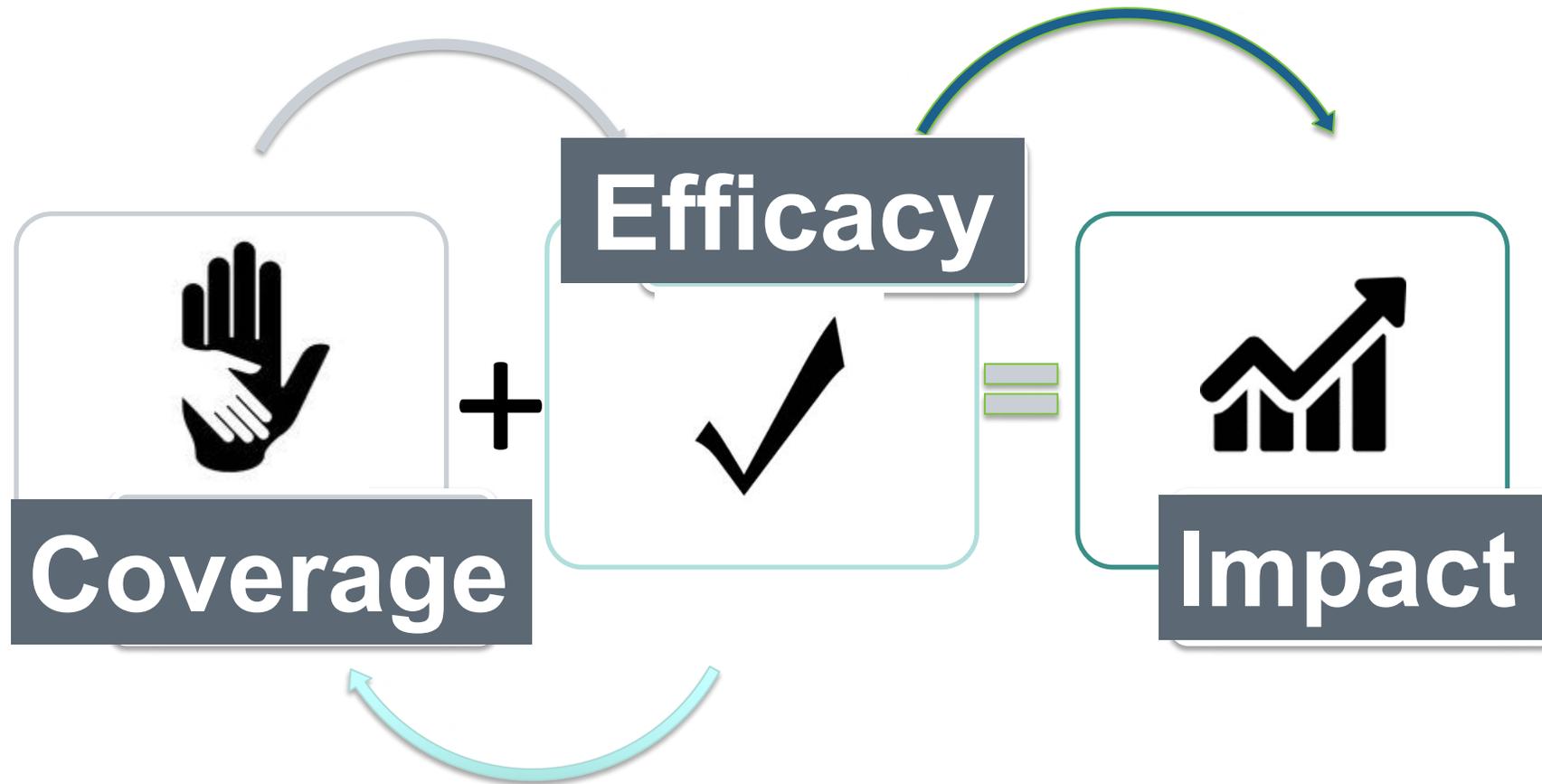


Higher Risk for complications of COVID-19

- Older age
- Co-morbid conditions: diabetes, heart disease, obesity, lung disease, hypertension
- Pregnancy



Achieving Vaccine Impact: Need for High Coverage + and High Efficacy



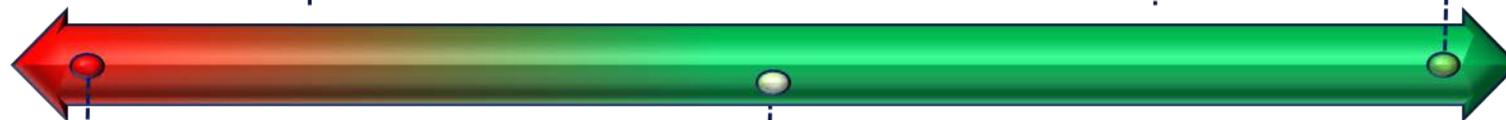
Continuum of Vaccine Acceptance



INCREASING CONFIDENCE IN VACCINE, VACCINATOR, AND HEALTH SYSTEM

May have questions, take "wait and see" approach, want more information

Demand



Refusal

Passive Acceptance

■ Already vaccinated
 ■ Get it as soon as you can
 ■ Wait and see how it's working
 ■ Get it only if required
 ■ Definitely not get it

NET: 47%

January 2021



December 2020



COVID-19 Vaccine Willingness Survey

Columbia University

Wafaa El-Sadr, MD, MPH, MPA

Melanie Bernitz, MD, MPH

Linda Fried, MD, MPH

Scott Hammer, MD

Steve Shea, MD, MPH

With appreciation:

Virginia Kaplan

Donna Lynne

Richard Mitchell

Joey Platt

Methods

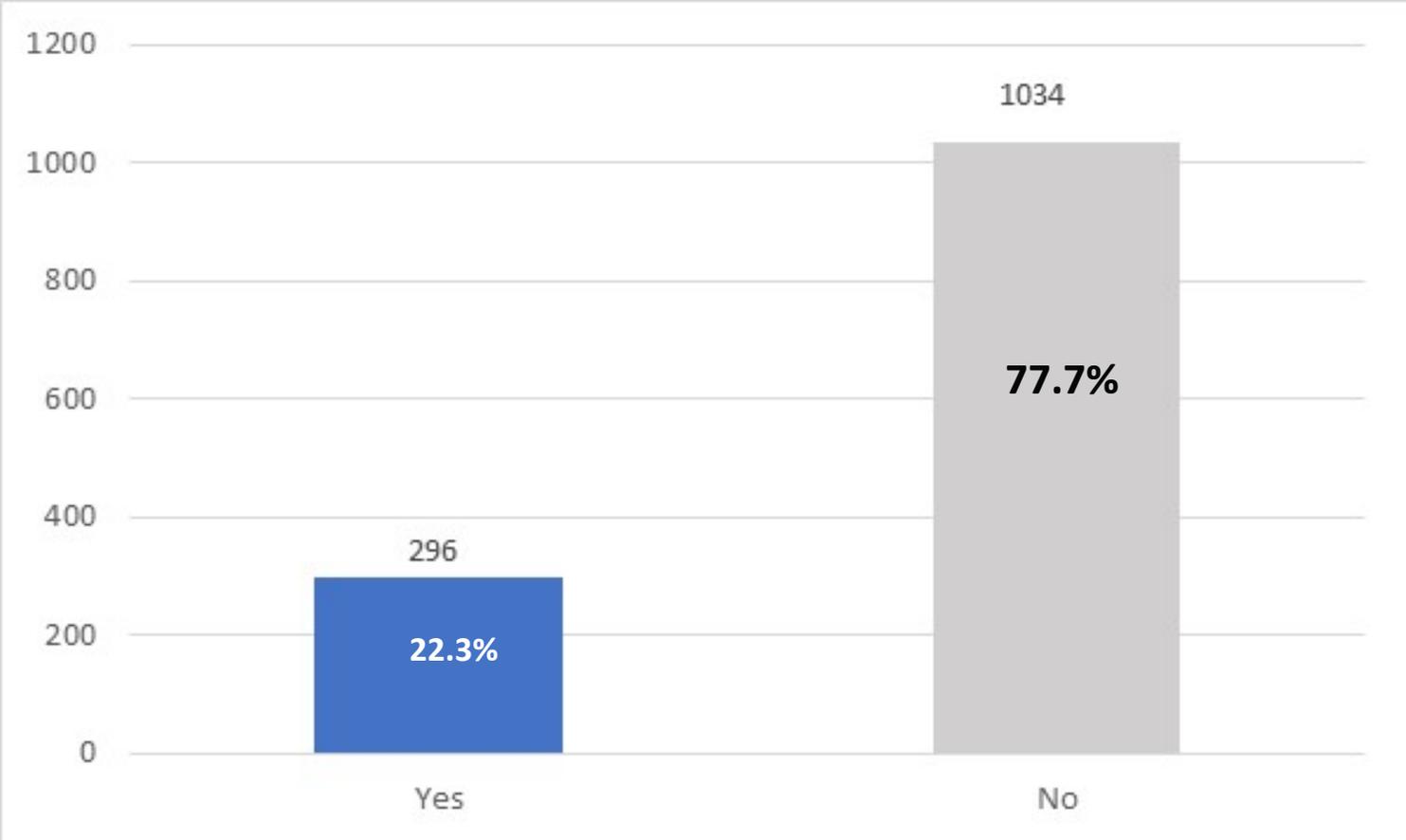
- **Online survey conducted January 12 – 15, 2021**
- **Invitation to participate was via email, with two reminder emails**
- **Survey included:**
 - Six questions on demographics, including University affiliation, campus, age, gender/sex, and race/ethnicity
 - Six questions related to vaccination readiness

Population Surveyed

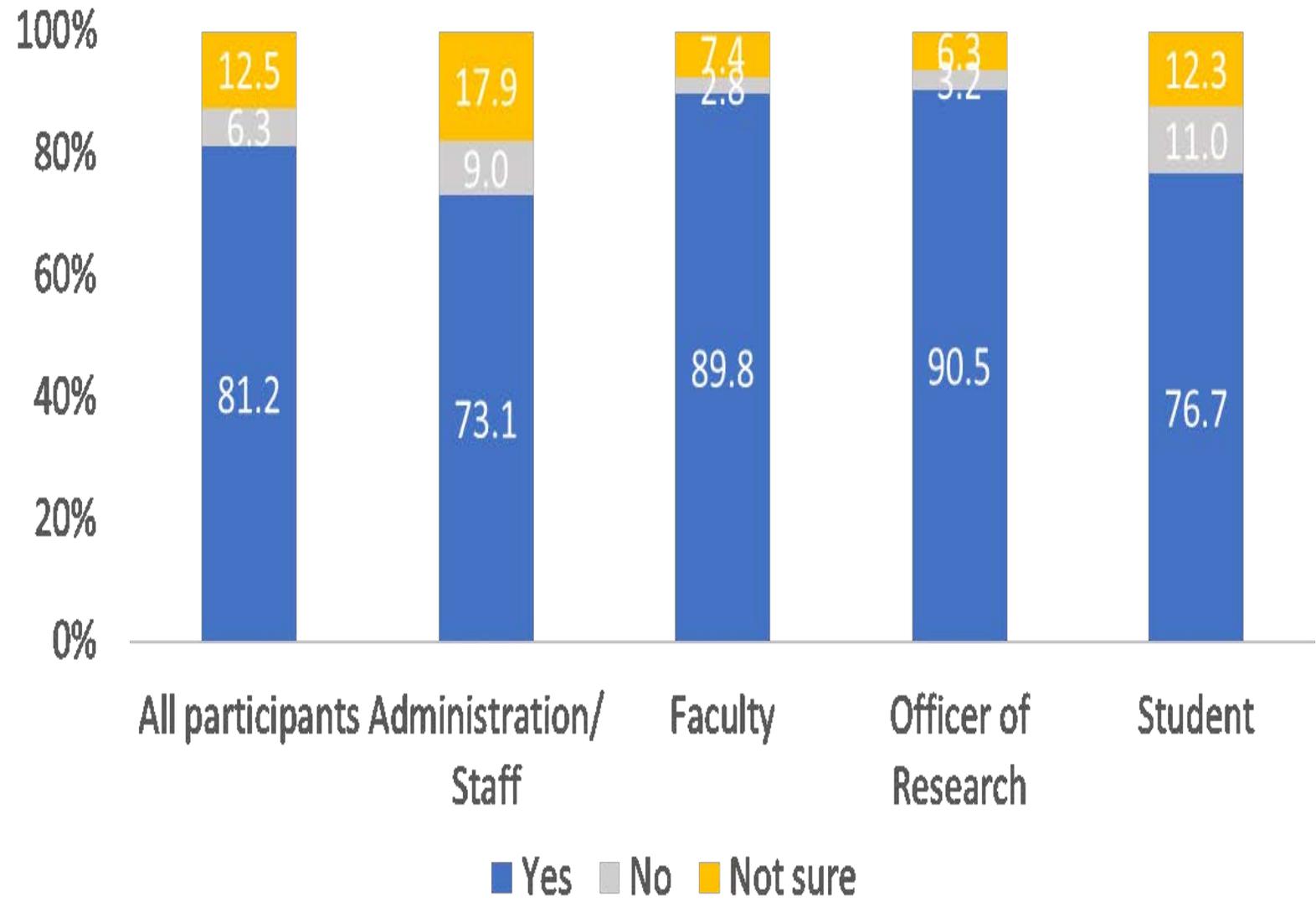
- 10% random sample, stratified by affiliation
- Distribution list (see table)
- Responses received from 1373 (26%)

Affiliation	Count of Individuals
Graduate Students	1549
Undergraduate Students	877
Admin	724
CUIMC Faculty and Librarians	527
CUIMC Admin	514
Faculty and Librarians	360
CUMC Students	355
CUIMC Research Officers	279
Research Officers	168
Total	5353

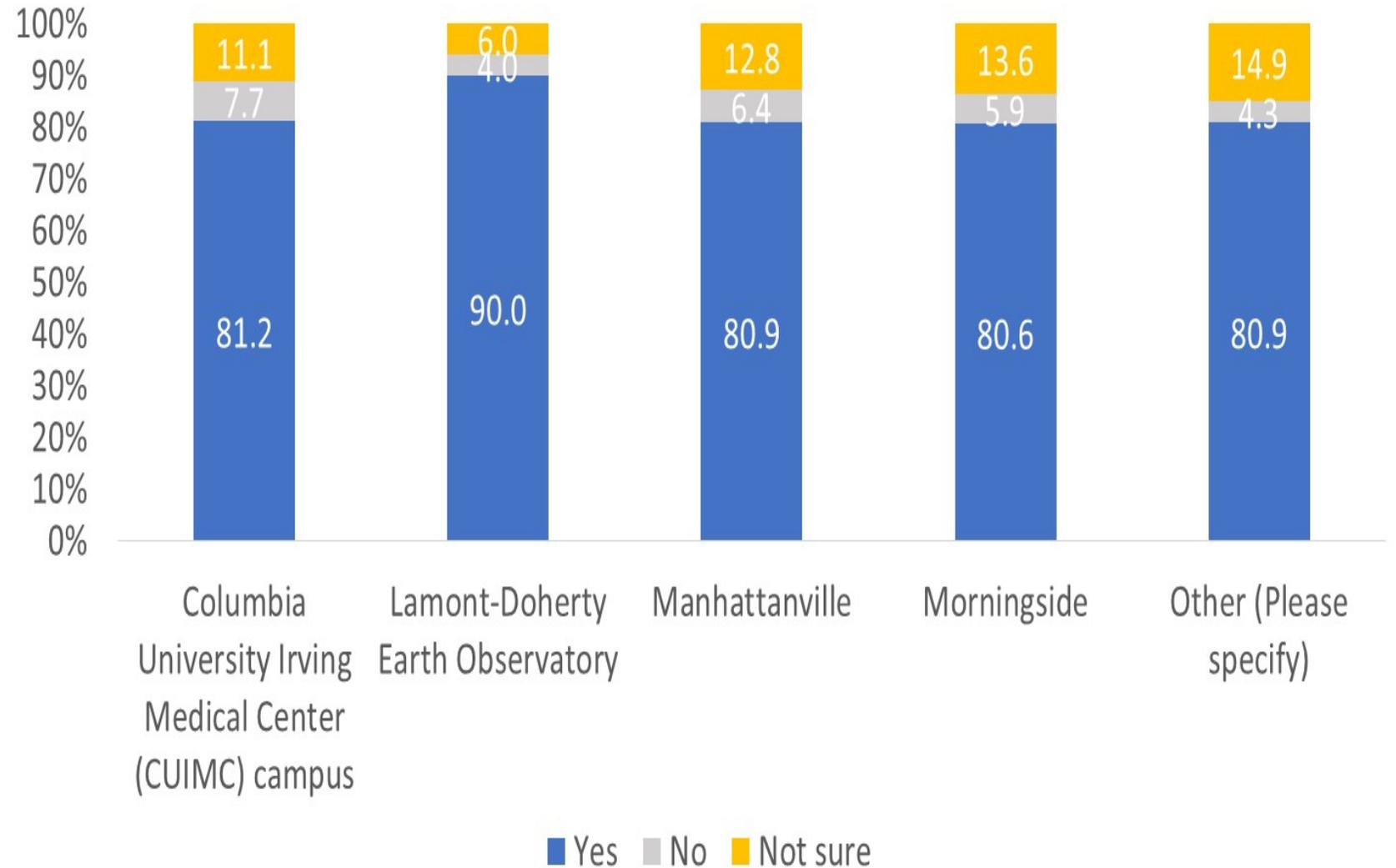
Received Vaccine



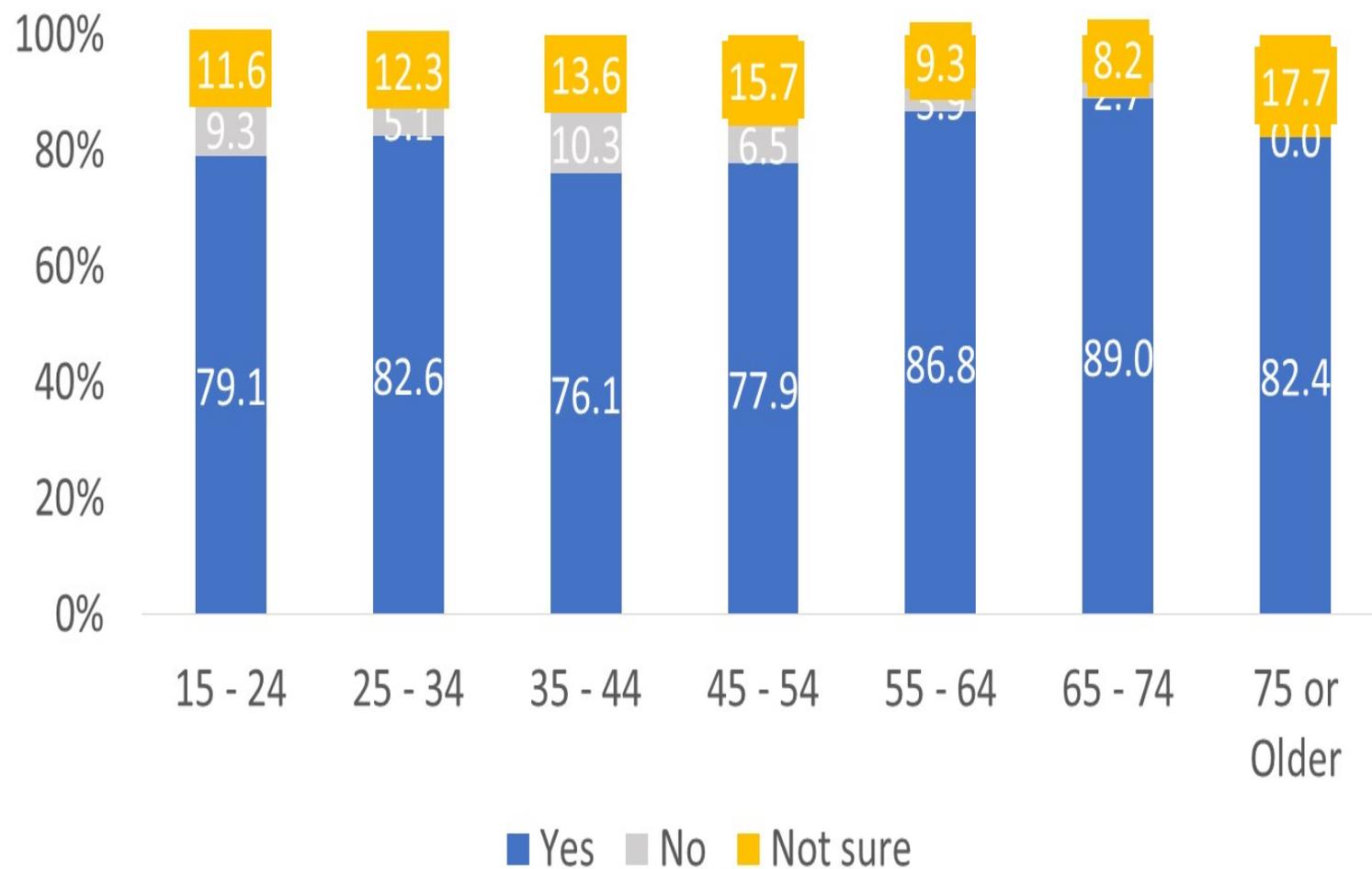
Willingness of COVID-19 vaccine among those not been vaccinated, %, n=1034



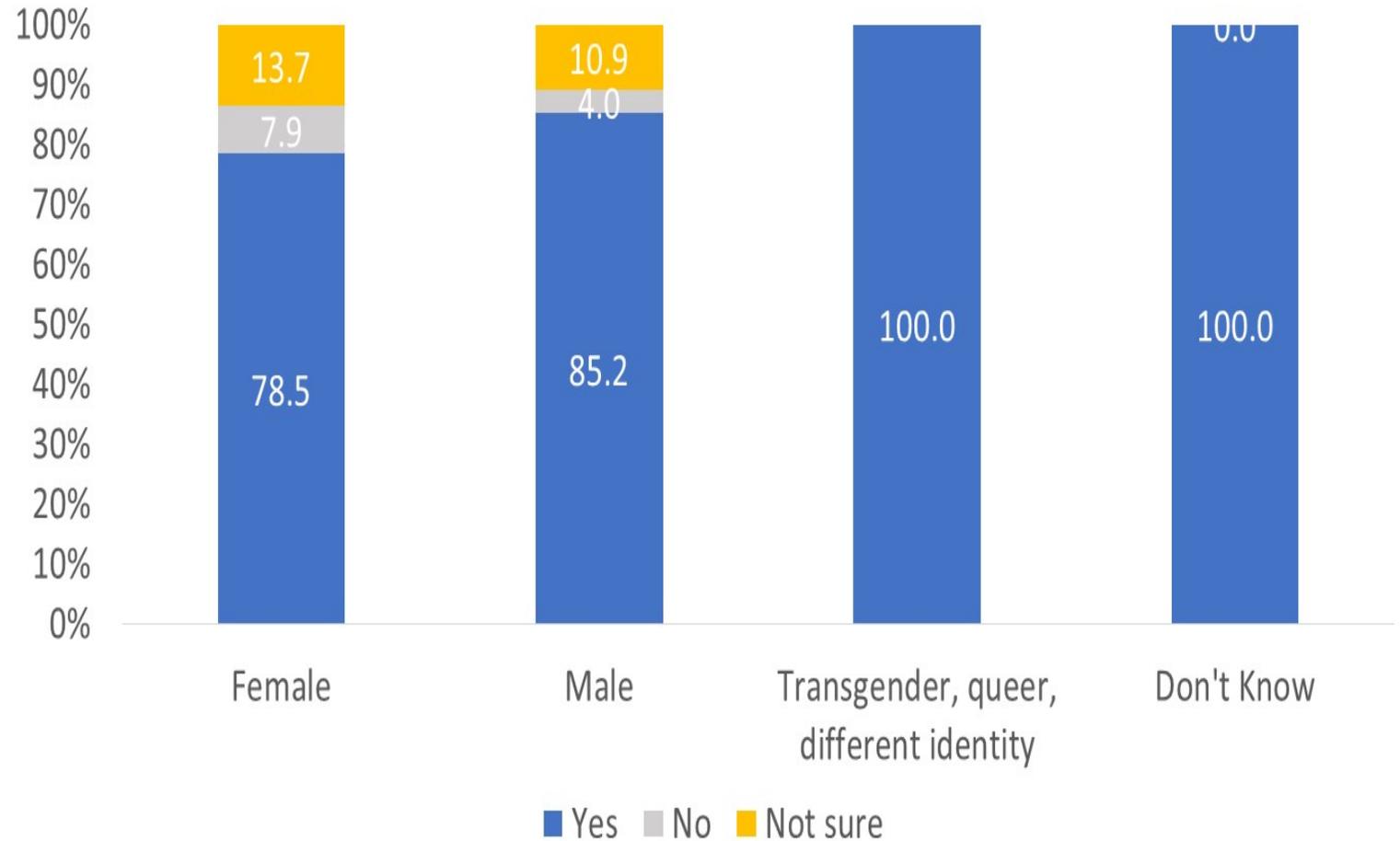
COVID-19 vaccine willingness by location among those not vaccinated, n=1034



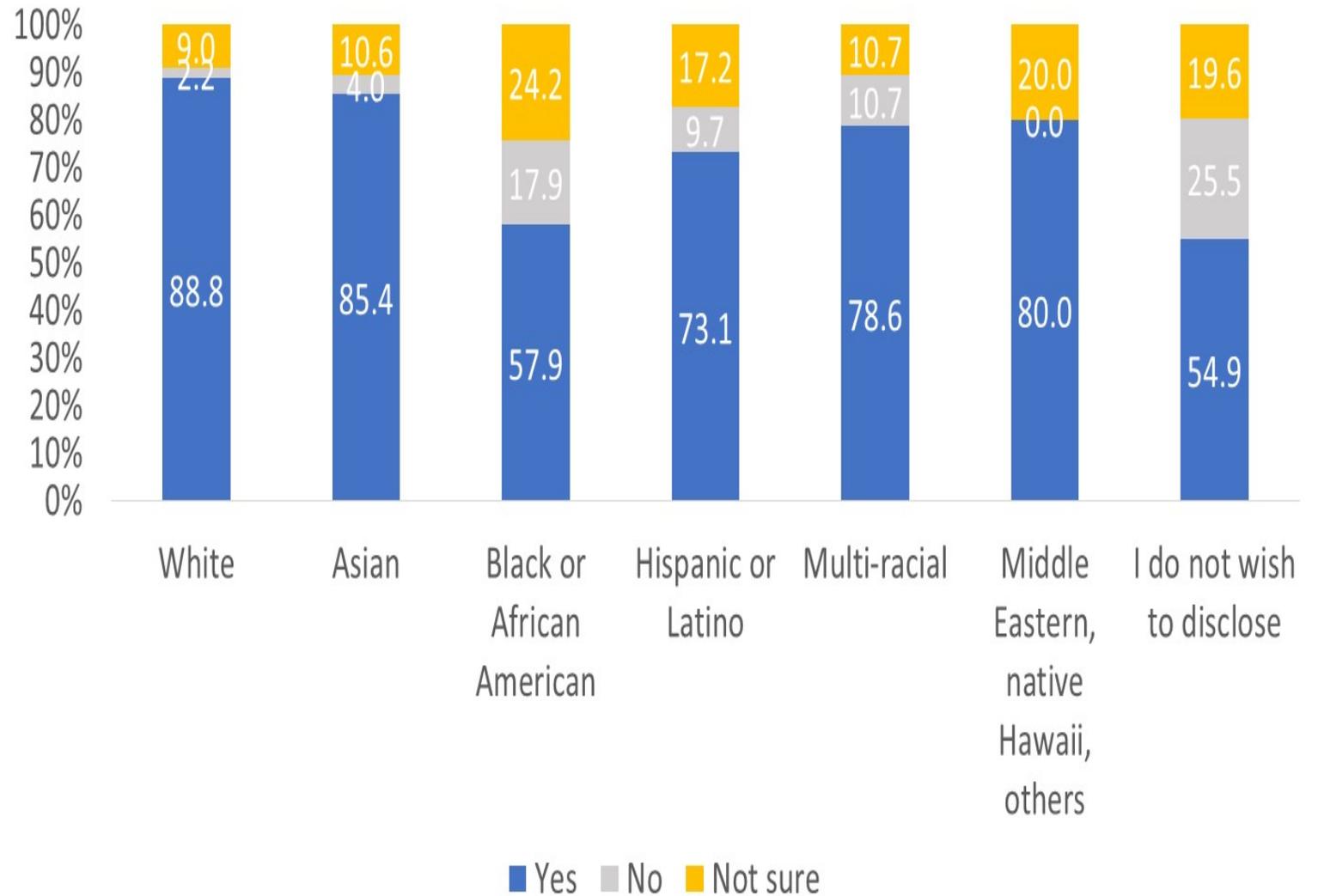
Willingness to get vaccinated by age among those not vaccinated, n=1034



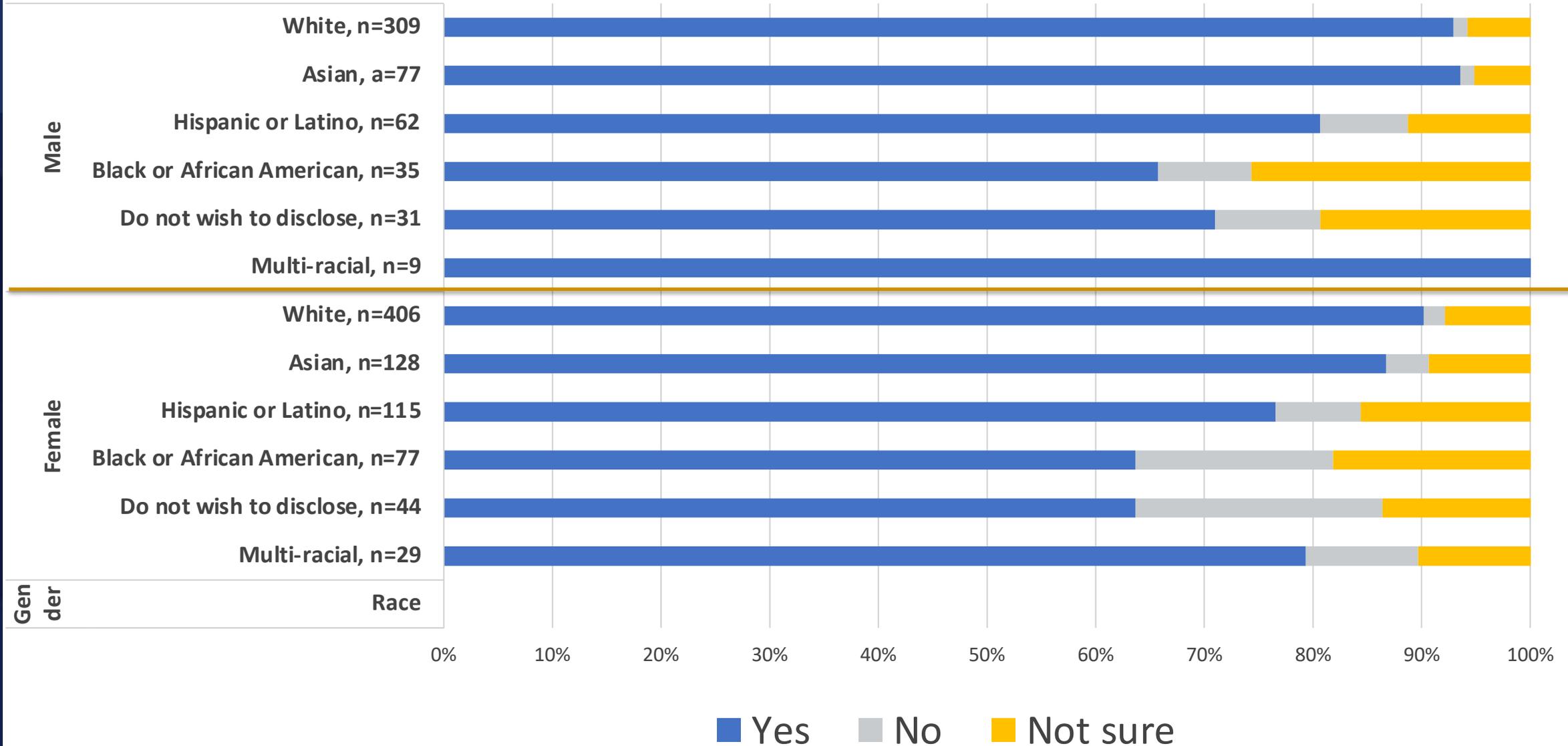
Willingness to get vaccinated by gender among those not vaccinated, n=1034



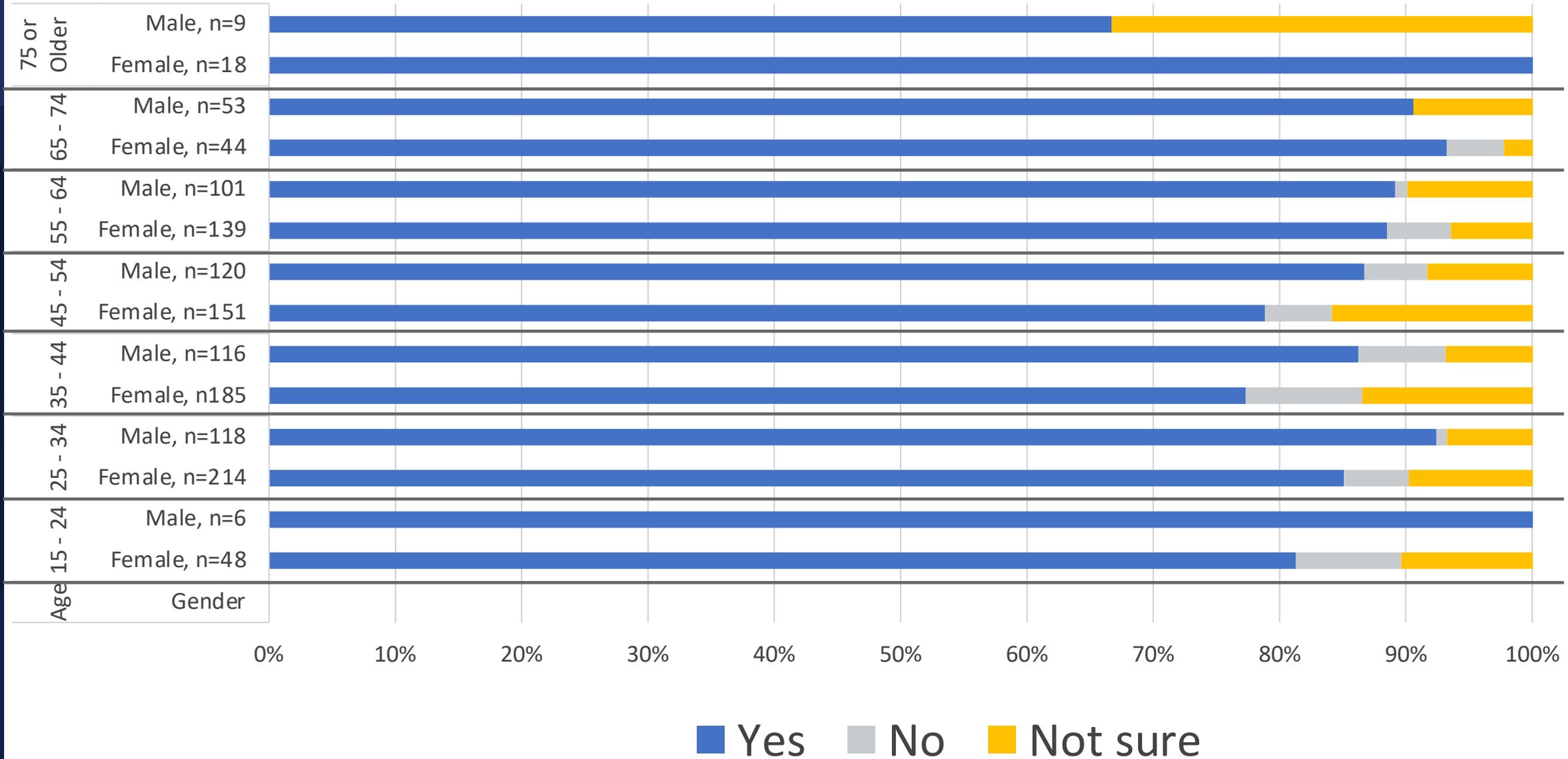
Willingness to get vaccinated among those not vaccinated by race/ethnicity, n=1034



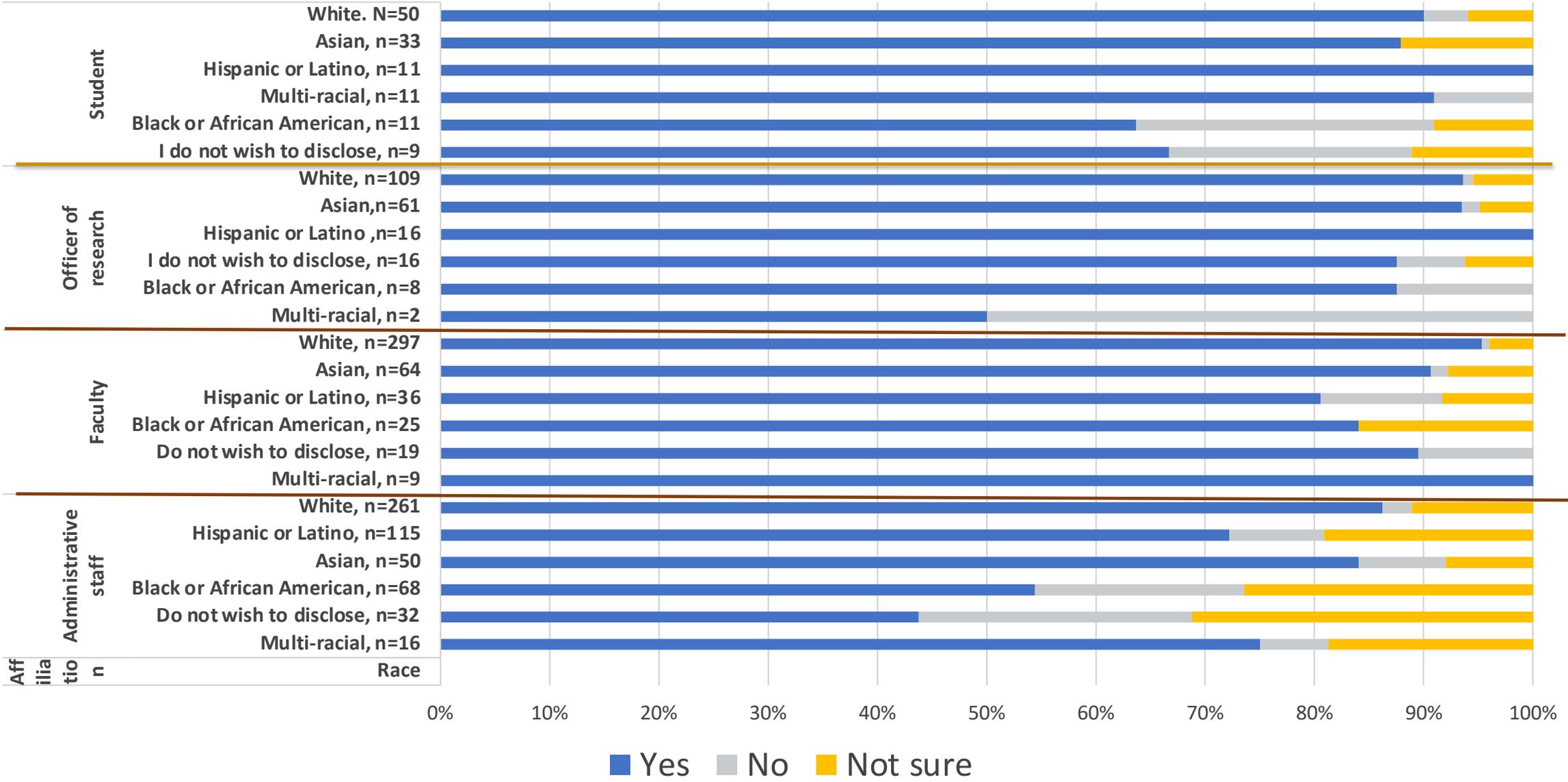
Vaccine willingness by gender and race/ethnicity



Vaccine willingness by age and gender



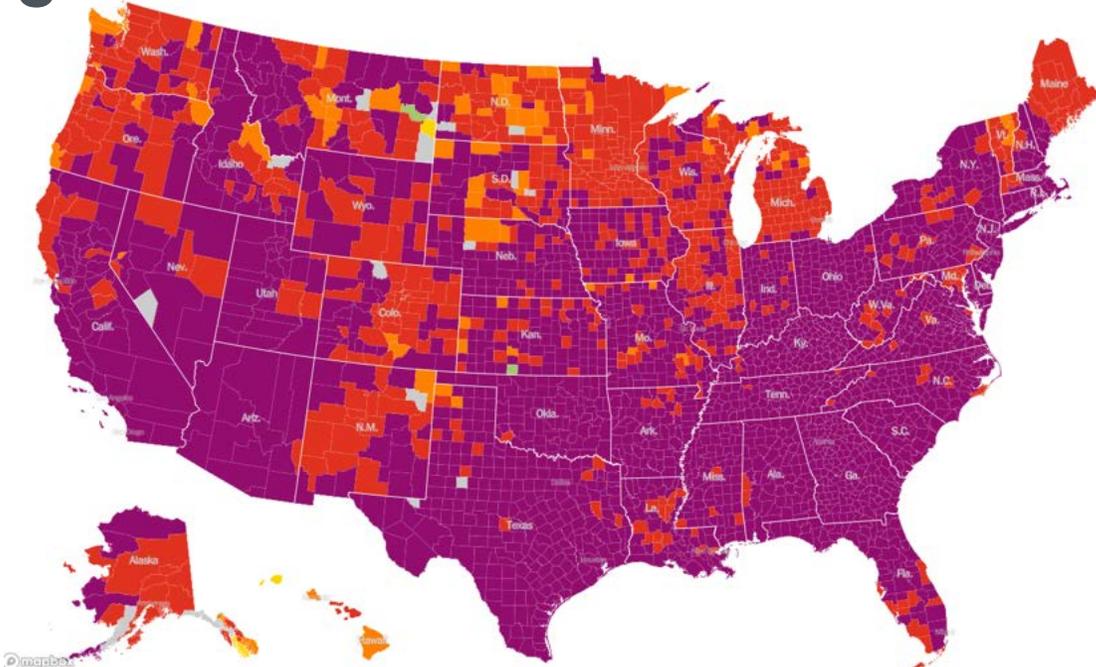
Vaccine willingness by affiliation and race/ethnicity





Way Forward

Risk of Getting COVID-19



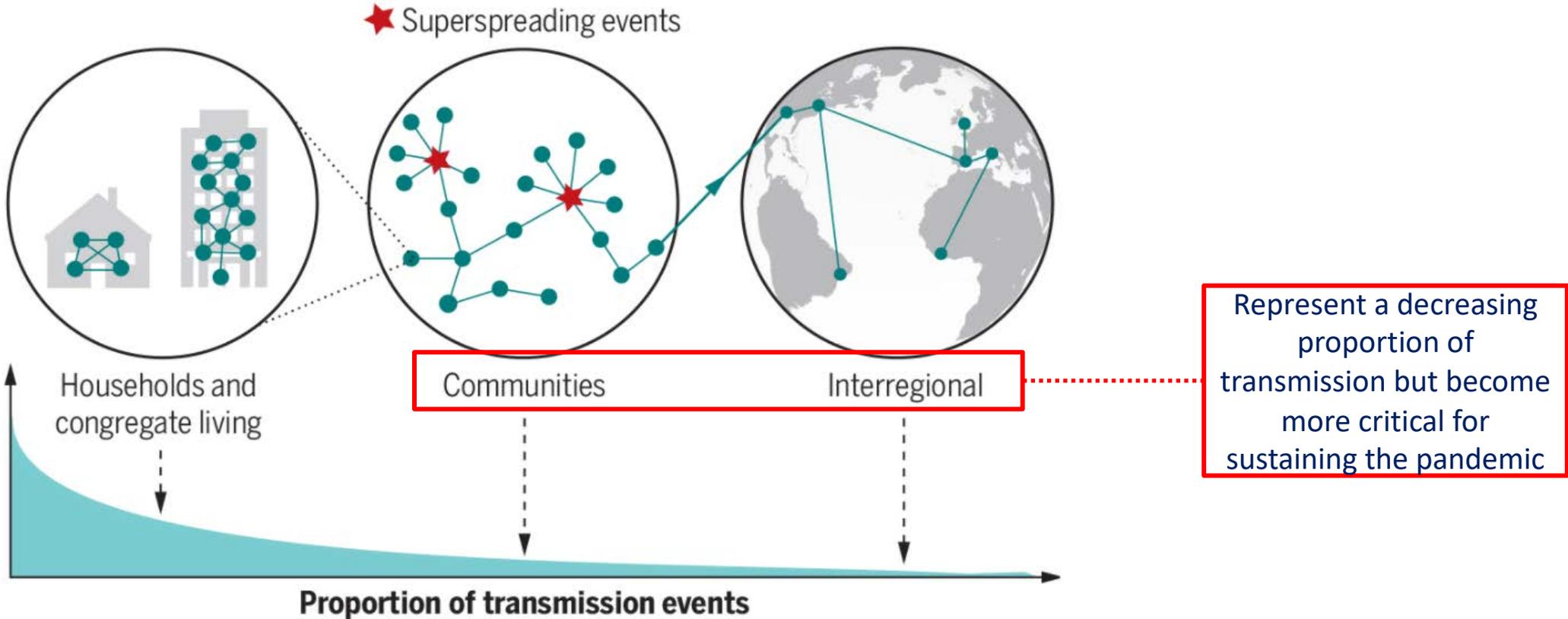
■ LOW ■ MEDIUM ■ HIGH ■ VERY HIGH ■ EXTREMELY HIGH

Indoor activities are extremely dangerous right now. +

Avoid nonessential travel. +

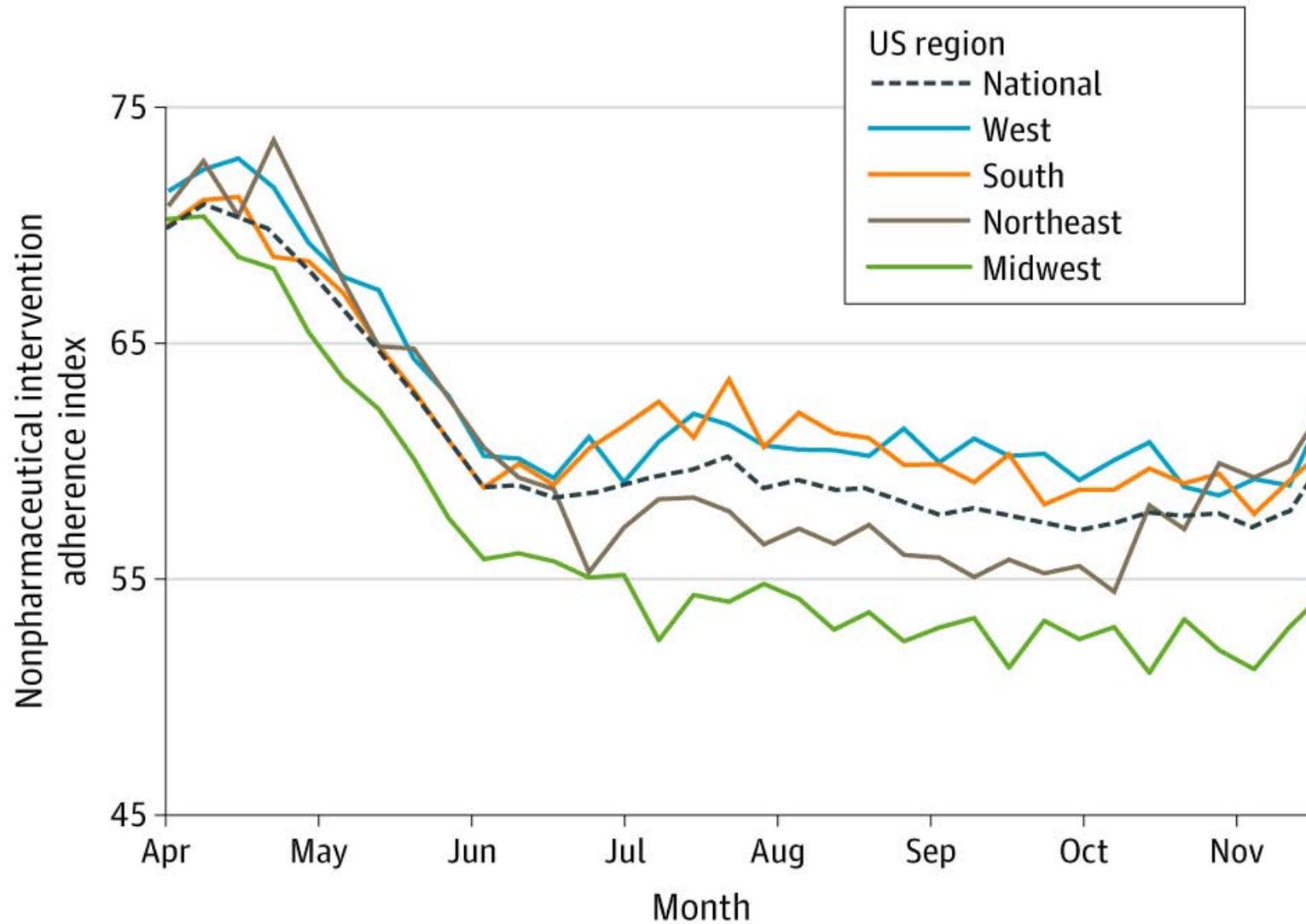
Avoid events with more than a handful of people. +

Drivers of SARS-CoV-2 Transmission



Lee, E. et al., Science (2020), Figure: N. Cary, Science (2020)

Decrease in Reported Adherence to NPIs



Source: Crane et al., JAMA (2021)

Preventive Measure Post-Vaccination

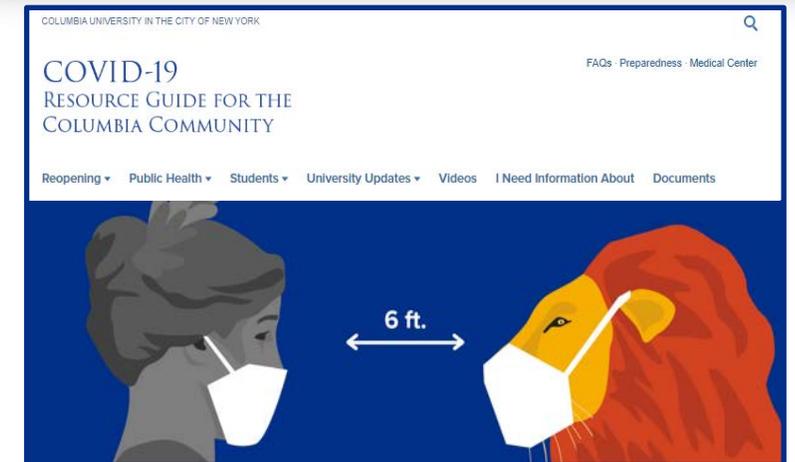
- Protection from vaccine is not immediate
- No vaccine is 100% effective
- Duration of protection unknown
- No (limited) information with regards to effect of the vaccine on prevention of infection
- Asymptomatic infection may lead to transmission to others

All individuals, including vaccinated persons should continue to:

- ***Wear face covering/mask***
- ***Stay at least 6 feet away from others***
- ***Avoid crowds***
- ***Wash hands often***
- ***Stay home if sick***
- ***Adhere to testing requirements***
- ***Follow any local guidance***

Fauci: Even after a COVID-19 vaccine, masks and social distance still vital

Health Sep 23, 2020 1:58 PM EDT



Thank you

Stay safe, stay well, stay connected



Columbia University COVID-19 Spring Updates

Melanie Bernitz, MD, MPH

Senior Vice President

January 29, 2021

Campus Data

WEEK OF JANUARY 18

Tests Conducted	Tests Positive	Positivity Rate	In Isolation	In Quarantine	In Hospital
10,238	106	1.0%	86	198	1

CUMULATIVE RESULTS*

Tests Conducted	Tests Positive	Positivity Rate
126,031	518	0.41%

COVID-19 New Daily Routines

New Year, Same Compact

Wear a mask.
Help curb
the spread
of COVID-19.



**Stay Home
if not
feeling
well**



**Complete the
Daily
Attestation**



**Wear a
Face
Covering**



**Keep at
least 6'
distance**



**Practice
workplace
and shared-
space hygiene**

- As set forth in the Enhanced Health and Safety Policy and the Compact, Columbia recognizes our shared responsibility for community health, informed by science and founded on mutual respect.
- Each of us knows that we, and Columbia, need to operate differently now than we did pre-pandemic, and that these changes require new habits and difficult adjustments.
- We also know these daily life changes—both on and off campus—are essential to our ability to be together on campus.

Updated Daily Attestation



Complete
the Daily
Attestation

To the best of your knowledge, select any of the following: *

- You have experienced any symptoms of COVID-19 in the past 14 days (fever, cough, shortness of breath or difficulty breathing, chills, repeated shaking with chills, muscle pain, sore throat, abdominal pain/diarrhea, or new loss of taste or smell)
 - I have been cleared by a medical provider or Human Resources to come to campus
 - I have not yet been cleared by a medical provider or Human Resources
- You have returned to New York from a non-contiguous state per Governor Cuomo's Executive Order 205.2 or any international destinations requiring quarantine as identified by New York State.
 - I have completed the quarantine and testing requirements (including those for essential employees defined by the department or those providing clinical care, clinical research, or in clinical training)
 - I have not completed the quarantine and testing requirements
- You knowingly have been in close or proximate contact in the past 14 days with anyone who has tested positive for COVID-19 or who has had symptoms of COVID-19
 - I have been notified by a contact tracer that I am a close contact and must quarantine for 14 days
 - I have NOT been identified as a close contact (within 6 feet for more than 10 mins) requiring quarantine.
- You tested positive for COVID-19 in the past 14 days
(Please check all that apply if you have tested positive for COVID-19 in the past 14 days)
 - More than 10 days have passed since onset of symptoms or the date of the positive test
 - I have had no fever within the past 24 hours without the use of fever-reducing medications
 - My other symptoms have improved
- None of the above

My Checklist

- I have signed the Compact (Show/Hide Compact).
- My training (student, faculty/staff) is completed.
- I have met the University's COVID-19 testing requirements.

Throughout the Day

Through Columbia's contact tracing program and other observations on campus, the University has identified common situations with a high risk for virus transmission.

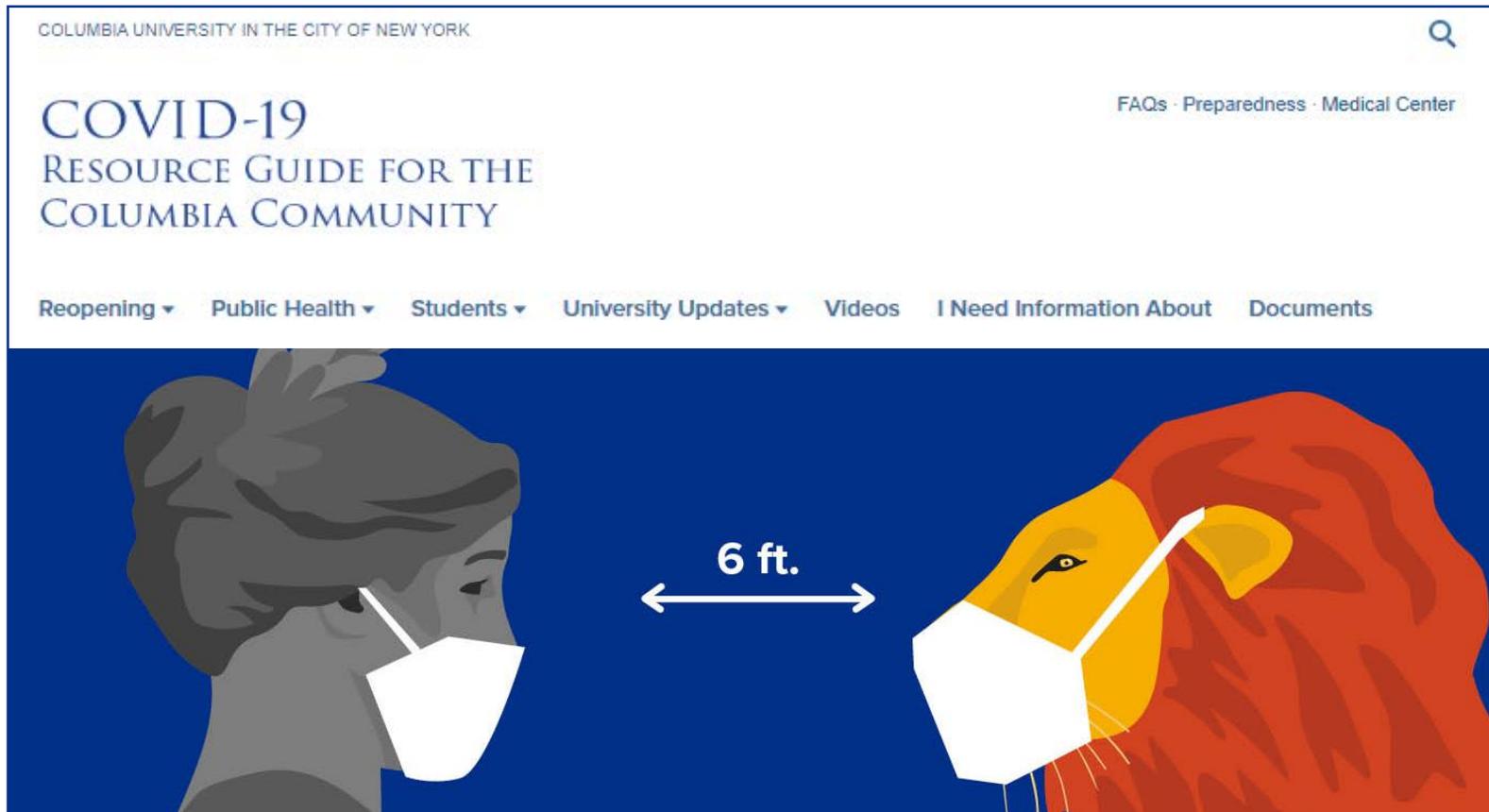
Some include:

- Not staying home if you have symptoms or a known exposure
- Failure to observe appropriate physical distancing (at least 6 feet) while eating together (with removal of face coverings/masks for eating/drinking)
- Situating desks, chairs or workstations without observing required physical distancing (at least 6 feet) and lack of consistent and appropriate wearing of face covering/masking
- Failure to maintain physical distance and use of face coverings outdoors



COVID-19 Resources Guide for the Columbia Community

The University's response to the pandemic adjusts to changing conditions. Critical real-time updates are posted on the [COVID-19 Resource Guide for the Columbia Community](https://covid19.columbia.edu). Please check it regularly for the most current information and additional details.



Spring 2021 Testing Plan

NEW COVID-19 Retesting Program Spring 2021



GATEWAY TESTING

If you are entering a Columbia building or campus regularly or for the first time and have not yet gotten a COVID-19 test, schedule one ASAP.



HELP US TEST

Random population testing helps us understand the prevalence of COVID-19. If you're selected, it is important that you come for a test.



WEEKLY VOLUNTARY TESTING

If you're regularly accessing campus, you can get a COVID-19 test once a week at Lerner or the William Black Building.



ASYMPTOMATIC ONLY

Don't come to University testing sites if you're symptomatic.

Students, if you're sick, contact your campus medical service. Faculty and staff, contact your primary care doctor or an urgent care center.



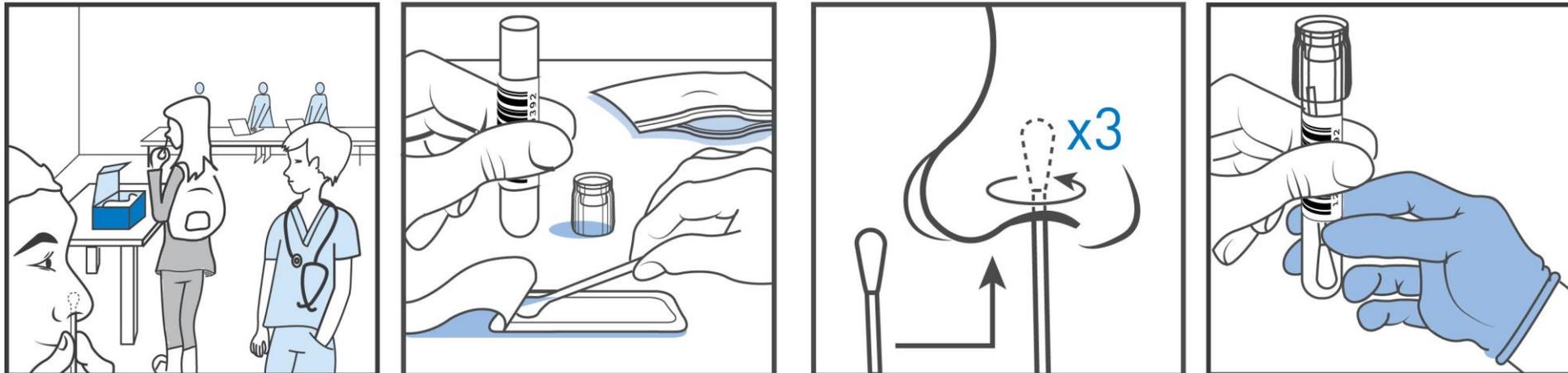
Testing Logistics

Important Reminders:

- Please do not come to one of the Columbia Testing Locations if you are having symptoms.
- Arrive on time
- Fill out your ReOpenCU app
- There is no cost to you for this testing.

To Arrange a Test Appointment:

- Visit: <https://secure.health.columbia.edu>
- Testing is available by appointment only
- Walk-ins will not be accepted
- Multiple testing locations and campuses



Contact Tracing

Columbia University has established its own highly trained Contact Tracing team. It is notified and engaged when there is a positive COVID-19 case on campus.

What Does the Contact Tracing Team Do?

- Quickly identify, contain, and suppress transmission of SARS-CoV-2
- Individuals who are diagnosed with COVID-19 will be asked about people with whom they have had close contact (as defined by the CDC) while they may have been infectious.
- Without revealing the identity of the person diagnosed with COVID-19, the team will notify these contacts of their potential exposure and ask them to self-quarantine for 10 days.
- Collected information is treated as confidential

Important Reminders:

- If you have tested positive for COVID-19 using an outside provider, call the COVID-19 hotline at [212-854-9355](tel:212-854-9355) or email covidtesttrace@columbia.edu
- Please cooperate with the Contact Tracing team if you are contacted
- Your school or department will be notified in the event of a positive COVID-19 case

NOTE: If the Contact Tracing Team does not notify you, **you have not been deemed a closed contact and you do not need to quarantine.**

Quarantine and Isolate

The Contact Tracing Team provides guidance and support to those who need to quarantine and isolate, with frequent check-ins and resources.

TRAVEL

Avoid unnecessary travel.

Student travel suspended except for emergencies.



Quarantine is required for:

- 1. Close Contacts:** Individuals identified as being a close contact of an individual with COVID-19 are required to quarantine for 10 days after their last contact with the infected individual.
- 2. Travel:** Individuals arriving from areas beyond the border states (NJ, CT, PA, MA, VT) or internationally must adhere to the most recent [NYS guidance](#). Travelers that are asymptomatic must quarantine for 10 days from the last day in a non-border state or another country, unless the traveler meets certain criteria. Refer to the [Spring 2021 Travel Restrictions](#) for additional details.

Isolation is required for:

1. Individuals with symptoms of COVID-19 who have been tested and are awaiting test results.
2. Individuals who are diagnosed with COVID-19.

Updated NYS Quarantine Guidance for Persons Exposed to COVID-19

Consistent with recent CDC guidance, quarantine for individuals exposed to COVID-19 can end after ten days without a testing requirement if no symptoms have been reported during the quarantine period.



This guidance aligns the requirements for release from quarantine with the December 2, 2020 Centers for Disease Control and Prevention (CDC) guidance.

- Individuals must continue daily symptom monitoring through Day 14;
- Individuals must be counseled to continue strict adherence to all recommended non-pharmaceutical interventions, including hand hygiene and the use of face coverings, through Day 14.
- Individuals must be advised that if any symptoms develop, they should immediately self-isolate and contact the local public health authority or their healthcare provider to report this change in clinical status and determine if they should seek testing.

Vaccine Plan

After you are vaccinated, you must continue to follow required health and safety protocols.

Note: COVID-19 vaccine availability and/or receipt of a vaccine will not mean an early end to the Enhanced Health and Safety Policy requirements.

These measures must remain in place well into 2021, even when many or even most members of the Columbia community will have been vaccinated.



Please refer to the websites below for regular updates and information:

[COVID-19 Vaccination Information](#)

Frequently Asked Questions

- Columbia University Irving Medical Center Information and Updates
- Vaccine-Related Town Halls and Announcements
- Local and State Guidance

Monitoring Plan

Priority Metrics

Select metrics reflecting the epidemic status in New York City, including in neighborhoods where Columbia campuses are situated, as well as campus metrics, are monitored on an ongoing basis.

Infection Rates

- Infection rate in New York City
- Infection rate on campus
- PCR positivity in New York City
- PCR positivity on campus

COVID-19 Cases

- COVID-19 cases in New York City
- COVID-19 cases in neighborhoods surrounding campuses
- COVID-19 hospitalizations in New York City
- Number of COVID-19 cases on campus

Capacity for Care

- Number, location, and size of COVID-19 clusters on campus
- Capacity for isolation and quarantine of students
- Capacity of [Columbia Contract Tracing program](#)
- Hospital bed capacity



Keep Columbia Healthy



COLUMBIA UNIVERSITY
IN THE CITY OF NEW YORK

Advisory Committee on Socially Responsible Investing (ACSRI)

Senate Plenary, 29 January 2021

Bruce Usher, ACSRI Chair

Professor of Practice, Columbia Business School

Role of the ACSRI

To advise the University Trustees on ethical and social issues that arise in the management of the investments in the University's endowment.

Key Points about the ACSRI

- Broad representation from the Columbia community: twelve voting members are drawn in equal proportion from volunteer students, faculty and alumni. Two non-voting administrative members.
- The Committee's recommendations are advisory in nature as the final fiduciary responsibility for the management of the investments that support the University's mission lies with the Trustees.

Core Activities of the ACSRI

Review shareholder proposals for U.S. companies in which Columbia is directly invested and where the resolution intersects with social responsibility issues *(as specified in the Columbia University ACSRI Proxy Voting Guidelines posted on the ACSRI's website)*.

The ACSRI reviews proposals and then makes recommendations to the Trustees on how the University, as an investor, should vote. Categories reviewed include, for example: political spending, gender pay equity, and reducing greenhouse gas emissions.

Continued...

The ACSRI is also responsible for **reviewing divestment proposals** submitted by members of the Columbia community and makes recommendations to the Trustees on whether a divestment screen should be implemented. *Detailed guidance and instructions for submitting proposals are posted on the ACSRI's website.*

Once a divestment recommendation is submitted to and **approved by the Trustees**, the ACSRI monitors the divestment screen to update divestment/non-investment lists.

The annually updated divestment/non-investment lists are provided to the Columbia Investment Management Company, to refrain from investing in those companies.

Divestment

Divestment is the strongest action that a University can take as socially responsible investor. Therefore, the ACSRI sets a very high bar for this decision.

Criteria that must be met before divestment can be recommended by the ACSRI:

1. Broad consensus within university community
2. Merits of the dispute must lie clearly on one side
3. Divestment must be more viable and appropriate than ongoing communication and engagement with company management

Current Divestment Screens

- **Sudan (2006):** Divestment from companies whose activities substantially enhance the revenues available to the Khartoum government, which was responsible for the genocide in Darfur.
- **Tobacco (2008):** Divestment from companies engaged in the manufacture of tobacco or tobacco products; but not from companies which supply peripheral materials.
- **Private Prison Operators (2015):** Divestment from companies engaged in the operation of private prisons.
- **Thermal Coal (2017):** Divestment from companies deriving more than 35% of their revenue from thermal coal production.

Divestment Screen Updates

- **Sudan Update:** At the conclusion of a three-year review to assess whether Columbia's divestment policy is still in the best interest of Sudan's citizens, the ACSRI voted on December 9, 2020 to recommend ending divestment in Sudan. Particular consideration was given to whether the divestment policy hurts or helps human rights in Sudan. A formal recommendation will shortly be submitted to the Trustees.
- **Fossil Fuel Update:** In the Spring Term 2020, the ACSRI began consideration of a fossil fuel divestment proposal submitted by the student group Extinction Rebellion. The ACSRI continued work on this proposal over the summer of 2020 and completed its consideration this November with a recommendation submitted to President Bollinger and the University Trustees.

Fossil Fuel Divestment Recommendation

Columbia University Advisory Committee on Socially Responsible Investing (ACSRI)

Submitted to President Bollinger and the University Trustees, November 12, 2020

1. Oil & Gas Divestment: Although Columbia's endowment currently has no direct public holdings in fossil fuel companies, it will be prevented from future investment in all oil & gas companies involved in exploration & production activities, including integrated oil & gas companies, (henceforth "oil & gas companies") lacking a credible plan for transitioning to net zero emissions by 2050.

2. Collaboration with Investment Managers: When Columbia invests in a fund or strategy with a new investment manager, or renews investment in a fund or strategy with an existing investment manager, the following criteria will apply:

- a. Columbia will not make any new investments or renew investments in any fund or strategy that primarily invests in oil & gas companies, whether such companies are publicly or privately held.

3. Criteria Expansion: Columbia recognizes that many sectors beyond oil & gas are significant contributors to greenhouse gas emissions and climate change and drive the demand for fossil fuels. Multiple sectors are critical for achieving net zero emissions by 2050. Therefore, every five years, beginning no later than 2025, the ACSRI will work with experts at Columbia to proactively expand the sectoral focus for potential divestment beyond oil & gas exploration & production to other oil & gas activities and other significant emitters of greenhouse gases, including but not limited to utility, cement, agriculture and transportation sector companies.

The following Policy Statement on Fossil Fuels was approved by the Board of Trustees of Columbia University in the City of New York on January 20, 2021.

- Currently, Columbia University holds no direct equity investments in publicly-traded oil and gas companies.
 - The Board recognizes that certain oil and gas companies aim to develop credible plans for transitioning their businesses to net zero emissions by 2050, including establishing clear interim targets.
 - The President and the Board of Trustees have asked the University's Advisory Committee on Socially Responsible Investing to provide a report annually that draws on the expertise of the Columbia Climate School, other university research and expertise, and relevant outside resources to identify publicly-traded oil and gas companies that are making significant strides toward net zero emissions.
 - Based on this report, the Board may make exceptions to its non-investment policy.
- Columbia will not make any new investments in private funds that primarily invest in oil and gas companies.
- Periodically the University's non-investment policies may be evaluated, and possibly expanded to sectors that merit further scrutiny due to their heavy greenhouse gas emissions.
- The IMC will expand its evaluation of its investment managers to assess whether managers have established plans to create portfolios with net zero emissions by 2050.

Questions?

For more information, visit the ACSRI website:



The screenshot shows the top portion of a website. At the top right, there are links for "Home", "Contact Service Center", and "Organizational Charts". Below this is the "COLUMBIA FINANCE" logo. A navigation menu includes "Finance Topics", "Systems", "Training", "Forms & Documents", "Policies", and "About". The main content area has a breadcrumb trail: "Home" > "Finance Topics" > "Advisory Committee on Socially Responsible Investi...". Below the breadcrumb is a large image of a green plant growing in a glass jar filled with coins. Overlaid on the image is the text "Advisory Committee on Socially Responsible Investing". Below the image is a text box containing the following text:

The Advisory Committee on Socially Responsible Investing (ACSRI) was established as a permanent addition to the University in March 2000. The Committee's purpose is to advise the University Trustees on ethical and social issues that arise in the management of the investments in the University's endowment.

<https://www.finance.columbia.edu/content/advisory-committee-socially-responsible-investing>



**ADVISORY COMMITTEE
ON SOCIALLY RESPONSIBLE INVESTING**

ANNUAL REPORT 2019-2020

Advisory Committee Members:

Merritt Fox, Chair
Geoffrey Heal (Fall 2019)
Daniel Howard
Ruby Khan
Bridget Realmuto LaPerla
Benjamin Lebwohl
Sharon Liebowitz
Meredith Milstein (Fall 2019)
William Shamma
Courtney Thompson
Bruce Usher
Regen Wallis (Spring 2020)
Michael Wang

Executive Vice President and CFO:
Anne Sullivan, ex officio, non-voting

Associate Director, Socially Responsible Investing:
April Croft, ex officio, non-voting

Table of Contents

I.	Introduction and Background	p. 3
II.	2019-2020 Committee Membership	p. 4
III.	2019-2020 Agenda	p. 4
IV.	Activities of the ACSRI 2019-2020	p. 5
	<ul style="list-style-type: none">• Private Prison Operators Divestment Monitoring• Sudan Divestment Monitoring• Thermal Coal Divestment Monitoring• Tobacco Divestment Monitoring• 2020 Proxy Voting Season• Extinction Rebellion Fossil Fuel Divestment Proposal	
V.	Attachments	
A.	Private Prison Operators Screening and Divestment/ Non-Investment List	p. 10
B.	Sudan Screening and Divestment/Non-Investment List	p. 16
C.	Thermal Coal Screening and Divestment/Non-Investment List	p. 24
D.	Tobacco Screening and Divestment/Non-Investment List	p. 28
E.	Extinction Rebellion Fossil Fuel Divestment Proposal	p. 31

Introduction and Background

During the 2000 spring semester, Columbia established two committees to assist the University in addressing its responsibilities as an institutional investor: the Advisory Committee on Socially Responsible Investing (“ACSRI” or the “Committee”) and The Subcommittee on Shareholder Responsibility of the Committee on Finance (“The Subcommittee,” formerly Trustees Subcommittee on Shareholder Responsibility “TSSR”). The ACSRI is a permanent addition to the University, with the mandate to set its own agenda within the broad arena of socially responsible investing (“SRI”). Its mission is to advise the University Trustees on ethical and social issues that arise in the management of the investments in the University’s [endowment](#).

The ACSRI has established a membership process to ensure that it is broadly representative of the Columbia community. The President of the University appoints twelve voting members (four faculty, four students and four alumni), who are nominated, respectively, by the deans of the schools, the Student Affairs Committee of the University Senate, and the Office of University Development and Alumni Relations. The President designates the Committee chair who presides at meetings of the Committee. The Chair certifies the minutes, all other official publications and any recommendations forwarded to the University Trustees or the University on behalf of the Committee. In addition, two administrators (the Executive Vice President for Finance and IT and the Associate Director for Socially Responsible Investing) sit as non-voting members of the Committee.

As the legal and fiduciary responsibility for the management of the University’s investments lies with the University Trustees, the ACSRI’s recommendations are advisory in nature. The Subcommittee on Shareholder Responsibility deliberates and takes final action upon the recommendations of the ACSRI. In some circumstances, The Subcommittee may bring ACSRI recommendations to the full Board of Trustees for action.

The following report provides an overview of the Committee’s activities during the 2019-2020 academic year. It provides information about ACSRI recommendations and votes on shareholder proposals during the 2020 proxy voting season (the period between March and June when most publicly-traded corporations hold annual meetings). It also summarizes the ACSRI’s Private Prison Operators, Sudan, Thermal Coal and Tobacco divestment/non-investment monitoring processes.

2019-2020 Committee Membership

The ACSRI voting membership during the 2019-2020 academic year is listed below*:

Name	Membership Category	School Affiliation	Membership Start Year
Bridget Realmuto LaPerla	Alumni	Earth Institute / MBA Candidate 2019	2018-2019
Sharon Liebowitz	Alumni	Graduate School of Business	2019-2020
Meredith Milstein	Alumni	Columbia College	Spring 2017
Courtney Thompson	Alumni	Graduate School of Business	2018-2019
Regen Wallis	Alumni	Columbia Business School	Spring 2020
Daniel Howard	Student	Columbia College / Graduate School of Arts and Sciences	Spring 2018
Ruby Khan	Student	SIPA	2019-2020
William Shamma	Student	SEAS	2019-2020
Michael Wang	Student	Columbia College	2018-2019
Merritt Fox (Chair)	Faculty	School of Law	2017-2018
Geoffrey Heal	Faculty	Columbia Business School	2017-2018
Benjamin Lebowohl	Faculty	CUIMC	2019-2020
Bruce Usher	Faculty	Columbia Business School	Spring 2019

*Membership totals more than twelve due to members serving only one term during the academic year.

2019-2020 Agenda

One of the core annual activities of the ACSRI is to make recommendations to the Trustees on how the University, as an investor, should vote on selected shareholder proposals addressed to U.S. registered, publicly-traded corporations whose securities are directly held in Columbia's endowment portfolio. As a general matter, the ACSRI expects that making recommendations to The Subcommittee with respect to shareholder proposals will continue to be one of its primary activities.

Another core activity is the Committee's monitoring of the divest/non-invest lists (screens) for Private Prison Operators, Sudan, Thermal Coal and Tobacco. The divest/non-invest lists (screens) are updated each academic year and are shared with Columbia Investment Management Company, which will refrain from investing in those companies.

- In June 2015, the Trustees voted to support a policy of divestment in companies engaged in the operation of private prisons and to refrain from making new investments in such companies. The Committee instituted the private prison operators screen in accordance with the June 2015 Trustee Statement on Prison Divestment Resolution. (See Attachment A: Private Prison Operators Divestment Screening and Divestment/Non-Investment List)
- The monitoring of companies operating in Sudan is managed in accordance with the April 2006 Statement of Position and Recommendation on Divestment from Sudan. (See Attachment B: Sudan Divestment Screening and Divestment/Non-Investment List)
- In March 2017, the Trustees voted to support a policy of divestment from companies deriving more than 35% of their revenue from thermal coal production and to participate in the Carbon Disclosure Project's Climate Change Program. (See Attachment C: Thermal Coal Divestment Screening and Divestment/Non-Investment List)
- In accordance with the Committee's January 2008 Statement of Position and Recommendation on Tobacco Screening, the Committee screens for domestic and foreign companies engaged in the manufacture of tobacco and tobacco. (See Attachment D: Tobacco Divestment Screening and Divestment/Non-Investment List)

Periodically, the ACSRI considers divestment proposals from the Columbia community and makes recommendations to The Subcommittee on Shareholder Responsibility of the Committee on Finance. During the 2019-2020 academic year, the ACSRI received a fossil fuel divestment proposal for consideration (See Attachment E: Extinction Rebellion Fossil Fuel Divestment Proposal).

Activities of the ACSRI 2019-2020

Private Prison Operators Divestment Monitoring

The ACSRI engages ISS to create a list of domestic and foreign publicly traded companies engaged in the operation of private prisons. The ACSRI reviewed and approved the private prison operators divestment/non-investment list. It was provided to the Columbia Investment Management Company, and the University does not currently hold any of the identified companies in its directly held public equity portfolio. (See Attachment A: Private Prison Operators Divestment Screening and Divestment/Non-Investment List).

Sudan Divestment Monitoring

In April 2006 the Trustees adopted the ACSRI's recommendation for divestment from Sudan. Specifically, the ACSRI's Statement of Position and Recommendation on Divestment from Sudan (April 4, 2006) recommended the University's divestment from, and prohibition of future investment in, all direct holdings of publicly-traded non-U.S. companies whose current activities, directly or indirectly, substantially enhance the revenues available to the Khartoum government,

including companies involved in the oil and gas industry and providers of infrastructure. At the time, the ACSRI's work focused on non-U.S. companies. This is because beginning in 1997, the U.S. government imposed comprehensive economic, trade and financial sanctions against Sudan, effectively barring U.S. companies from conducting business with the Government of Sudan, except those explicitly permitted by the U.S. Treasury Department's Office of Foreign Assets Control (OFAC). These sanctions were tightened in 2007. Thus the recommended divestment/no investment principle as applied to Sudan extended the principles behind the sanctions that the U.S. government had decided were desirable and efficacious to non-U.S. companies.

In its statement, the ACSRI identified eighteen such companies from which it recommended immediate divestment, and stated that recommendations for removals from and/or additions to the divestment list may be made in the future. The divestment list was revised with Trustee approval in March and June of 2007, and in March of each subsequent year. In addition, in March of 2008 a watch list was created of companies to be carefully reviewed for changes during the monitoring process.

In February 2009, the ACSRI recommended that the language regarding the University's position include specific reference to providers of military and defense services.

The independence of the Republic of South Sudan in 2011 did not substantively affect the University's screening process, which focuses on companies activities of which enhance the revenues of the Khartoum government in northern Sudan.

On January 13, 2017, citing "positive actions" by Sudan, President Obama signed an executive order to permanently revoke most sanctions against Sudan following a six-month waiting period. During that six-month period, the Treasury Department authorized Americans to do business in Sudan including the exportation of U.S. products. Sanctions tied to Sudan as a state sponsor of terrorism (i.e. weapons sales) remain in place.

On October 6, 2017, the U.S. government announced a decision to revoke economic sanctions with respect to Sudan effective October 12, 2017 in "recognition of the Government of Sudan's sustained positive actions." The ACSRI has attempted to determine, to the best of its ability, whether the positive actions cited in the report relied upon by the U.S. government address fully the concerns that formed the basis for the University's divestment position in 2006. Although the Committee acknowledges that the situation is complex and multi-faceted, its assessment is that the "positive actions" cited by the U.S. government were related to greater cooperation with the United States by the government of Sudan with regard to fighting terrorism and that concerns regarding humanitarian treatment of citizens in Sudan remain, particularly in the Darfur region. These concerns were the original motivating force behind ACSRI's recommendations to the Trustees in 2006. Consequently, the Committee was not prepared at that time to reverse its position but agreed to re-examine its position at least once every two years.

With the decision of the U.S. government in 2017, it became legally practical again for many U.S. companies to do business in Sudan. Given this change, in the spirit of the original divestment proposal, last year the ACSRI updated its "Monitoring Process" to include

examination of all companies doing business in Sudan, both foreign and U.S.-based entities, and has continued that process this year. Therefore in 2018, the language in the “Monitoring Process” has been updated to remove reference to “foreign” companies doing business in Sudan and simply refer to “companies” doing business in Sudan.

In the spring of 2019, President Omar al-Bashir was ousted and replaced by a transitional, joint civilian-military government. Last fall, the ACSRI discussed the potential effect that recent political changes in the country may have on Columbia’s Sudan divestment policy. As part of its decision making process, the Committee consulted with two experts:

- Mahmood Mamdani, Columbia University Herbert Lehman Professor of Government, MESAAS, International Affairs, and Anthropology; and
- Payton Knopf, a former diplomat and currently an advisor to the Africa program at the United States Institute of Peace and to the European Institute of Peace.

After further deliberation, the ACSRI decided that it was too early in the transition to end divestment. The ACSRI will revisit the policy this fall unless other pertinent changes occur in the interim.

Prior to putting forth their recommendations for 2020, the ACSRI reviewed 421 publicly traded, non-U.S. companies currently doing business in Sudan, an increase of 12 companies compared to last year. In addition, 34 U.S. based companies were reviewed – one more than last year. In 2017, upon the recommendation of the ACSRI and the Subcommittee, most of the telecommunications companies were removed from the watch and divestment lists. In 2019, the ACSRI and the Subcommittee recommended that power companies be moved from the divestment to the watch list unless there is an exception like ties to the military. The language in the “Monitoring Process” has been updated to reflect these exceptions.

For 2020, the Subcommittee recommended that 15 companies be included on the divestment list, a net decrease of 13 compared to last year. The Subcommittee further recommended that 35 companies be included on the watch list, a net decrease of 16 compared to last year.

The trustee-approved 2020 Sudan Divestment/Non-Investment list was provided to the Columbia Investment Management Company, and the University does not currently hold any of the identified companies in its directly held public equity portfolio. (See Attachment B: Sudan Divestment Screening and Divestment/Non-Investment List).

Thermal Coal Divestment Monitoring

The ACSRI engages two service providers (Vigeo Eiris and ISS) to provide a list of companies deriving more than 35% of their revenue from thermal coal production. The ACSRI reviewed and approved the thermal coal divestment/non-investment list. It was provided to the Columbia Investment Management Company, and the University does not currently hold any of the identified companies in its directly held public equity portfolio. (See Attachment C: Thermal Coal Divestment Screening and Divestment/Non-Investment List).

Tobacco Divestment Monitoring

The ACSRI engages ISS to create a list of domestic and foreign tobacco companies that directly manufacture tobacco products. The universe of companies and their revenues from specific activities are updated annually. The ACSRI reviewed and approved the tobacco divestment/non-investment list. It was provided to the Columbia Investment Management Company, and the University does not currently hold any of the identified companies in its directly held public equity portfolio. (See Attachment D: Tobacco Divestment Screening and Divestment/Non-Investment List).

2020 Proxy Voting Season

There were 29 proxies (shareholder proposals) that were reviewed and voted on during the 2020 season. The majority of the proposals related to initiating or improving disclosure, primarily in the areas of political spending/lobbying, gender pay disparity, board diversity and linking executive pay to ESG metrics.

The ACSRI's and The Subcommittee's support for shareholder proposals followed precedents and/or rationale. For example:

Precedent and/or Rationale for Support	Shareholder Proposal
Increased disclosure and transparency	<ul style="list-style-type: none">• Report on Child Sexual Exploitation and Products/Services• Report on Efforts to Reduce Deforestation• Report on Lobbying/Political Spending

The ACSRI's and The Subcommittee's rejection of shareholder proposals also followed precedents and/or rationale. For example:

Precedent and/or Rationale for Rejection	Shareholder Proposal
Proposal was poorly written, too broad or unimplementable	<ul style="list-style-type: none">• Ensure Due Diligence on Human and Indigenous People's Rights• Report on Oil Sands Financing

Proposals may also be rejected if they duplicate existing company efforts, impose significant burdens on company resources without definable gains or appear unrelated to a company's business, etc.

Proxy Voting Summary

A summary of the proxies voted by the ACSRI and The Subcommittee on Shareholder Responsibility of the Committee on Finance in the 2020 season is shown in the table below:

2020 Proxy Season								
Number of Proposals	Issue	Companies	ACSRI			Trustees		
			Support	Reject	Abstain	Support	Reject	Abstain
1	Adopt a policy for improving board and top management diversity	Berkshire Hathaway	1				1	
1	Ensure due diligence on human and indigenous people's rights	PayPal		1			1	
1	Establish board oversight committee on human rights	Alphabet	1			1		
2	Nominate civil/human rights expert to the Board	Alphabet, Facebook		2			2	
1	Report on board oversight of civil and human rights risks	Facebook		1			1	
1	Report on charitable contributions	JPMorgan Chase		1			1	
1	Report on child sexual exploitation and products/services	Facebook	1			1		
1	Report on climate change/fossil fuel financing	JPMorgan Chase	1			1		
1	Report on efforts to reduce deforestation	Yum! Brands	1			1		
1	Report on environmental expenditures	ExxonMobil		1			1	
1	Report on executive pay links to ESG metrics	Alphabet	1			1		
1	Report on executive pay links to ESG metrics - user privacy	Verizon Communications		1			1	
6	Report on gender and racial pay equity/gap	Adobe, Alphabet, Facebook, Intel, JPMorgan Chase, Wells Fargo	3	3			6	
1	Report on government censorship/takedown requests	Alphabet		1			1	
3	Report on lobbying	Comcast, ExxonMobil, Verizon Communications	3			3		
1	Report on oil sands financing	JPMorgan Chase		1			1	
1	Report on political advertising and posts	Facebook		1			1	
1	Report on political contributions	ExxonMobil	1			1		
1	Report on risks of petrochemical investments	ExxonMobil		1			1	
1	Report on sugar and public health	PepsiCo		1			1	
1	Report on whistleblower protection and human rights	Alphabet	1				1	
29	Total							

Fossil Fuel Divestment Proposal

In the Spring Term 2020, the ACSRI began consideration of a fossil fuel divestment proposal submitted by the student group, Extinction Rebellion. It continued work on this proposal over the summer of 2020 and expects to complete its consideration of the matter in the fall of 2020.

Attachment A: Private Prison Operators Divestment Screening and Divestment/Non-Investment List

COMMITTEE ON FINANCE
BACKGROUND FOR RESOLUTIONS

June 12, 2015

Divestment from companies engaged in the operation of private prisons. The Columbia University Advisory Committee on Socially Responsible Investing (ACSRI) was formed by the University in March 2000 to advise the Trustees on ethical and social issues confronting the University as an investor, and includes students, faculty, alumni and non-voting University administrators as members. The ACSRI makes its own agenda, and may make recommendations to the Trustees. The Subcommittee on Shareholder Responsibility of the Committee on Finance has the role of receiving recommendations from the ACSRI. The current members of the Subcommittee are Ann Kaplan, Paul Maddon and Jonathan Lavine.

Columbia Prison Divest, a student-organized group, made presentations to the ACSRI, in the spring and fall of 2014, and in February 2015 presented the ACSRI with an updated proposal for divestment. The ACSRI reviewed background and considered the proposal, and on March 31, 2015 resolved to make a recommendation to the Trustees that the University should divest any direct stock ownership interests in companies engaged in the operation of private prisons and refrain from making subsequent investments in such companies. A copy of the resolution, as well as additional views of some ACSRI members, is attached as Exhibit A.

The Subcommittee on Shareholder Responsibility is proposing that the Committee on Finance resolve that the University divest from and refrain from future investment in any direct holdings of publicly-traded stock of companies engaged in the operation of private prisons, and refrain from making investments in such companies in the future.

Exhibit A

Resolution of the ACSRI

The Advisory Committee on Socially Responsible Investing of Columbia University hereby resolves to recommend to the Trustees that the University should divest any direct stock ownership interests in companies engaged in the operation of private prisons and refrain from making subsequent investments in such companies.

The resolution is based on the Committee’s application of the three criteria that guide its divestment recommendations: community sentiment, the merits, and the possibilities for shareholder engagement.

The Committee is persuaded that the Columbia community would generally favor a private prison divestment measure, based on: a resolution adopted by an overwhelming majority of the University Senate’s Student Affairs Committee, a 23-0-1 vote, representing students in the University’s 20 schools and affiliates; an assessment of sentiments expressed at a public meeting called to discuss the matter; an informal consultation with knowledgeable faculty, especially at the Law School; and the absence of voiced opposition to such a measure, despite the public discussion of the proposal and opportunities provided by the Committee for the public expression of views.

Private prisons have been the subject of litigation alleging violations of constitutionally required minimal levels of maintenance, welfare, and medical conditions. The Committee has taken note of such litigation and the fact-finding reports by public interest groups substantiating such concerns, but has not attempted to compare private prisons with public prisons on this dimension. The Committee was particularly concerned that the business model of private prison companies creates incentives for increasing the level of incarceration in the United States, which is remarkably high both in historical terms in the U.S. and in international comparisons. The profits of private prison companies increase in the utilization of prison services, both in the occupancy rate for existing facilities and in the construction of new facilities. This gives private prison companies incentives to lobby for legislation, police and prosecutorial practices, and sentencing decisions that increase (or at least maintain) current incarceration levels. In the Committee’s opinion, an investment whose positive performance is linked to an increase in already high levels of incarceration does not fit with the University’s mission and values.

Engagement does not offer an avenue for addressing the Committee’s concerns. The conditions in private prisons, including the opportunities for rehabilitative education and terms of confinement, are largely a matter of contract between private prison companies and the governmental authorities that use them. The University has little means of influencing governments in the fashioning and monitoring of those contracts, certainly not the usual course of its activities as a concerned shareholder. Given that the business model of a private prison company benefits from an increase in incarceration levels, it is not a promising course for shareholder activism to ask a company – or fellow shareholders – to retreat from a model that produces performance. On this basis, the Committee finds that shareholder engagement is not an effective alternative to divestment.¹

March 31, 2015

¹ An independent manager disposed of the University’s holdings in CCA, one of the private prison companies identified in the petition presented by Columbia Prison Divest, for investment-related reasons in February 2015. This matter is not moot, however, because Columbia may own shares in other such firms and the recommendation applies prospectively as well.

Additional Views of Some Committee Members

In the course of discussions within the ACSRI, a number of important issues raised by the divestment petition were the subject of dialogue and debate. The grounds set forth in the resolution attracted the broadest consensus but the Committee felt that it would be valuable to share some additional views expressed within the Committee to reflect the breadth of the issues considered and that many Committee Members believe there is opportunity for further work on the issues raised in connection with the petition, beyond the narrow act of divestment.

Specifically, some Committee Members expressed concern that the University's divestment from share ownership in private prison companies would be taken by the proponents as a sufficient response to their concerns about the level of incarceration or the educational and rehabilitative options available to the prison population. Some Committee Members also noted that conditions in private prisons were in significant measure the result of contractual terms with governmental agencies and reflected monitoring shortfalls by such agencies. Thus some Committee Members expressed the hope that proponents of the divestment resolution would undertake additional efforts towards improving conditions and outcomes in private prisons and public prisons.

Some Committee Members expressed particular concern about the disparate racial make-up of the inmate population of private prisons, even if this may have arisen as a by-product of other policies, such as contractual provisions that resulted in assigning younger inmates to private prisons because of the lower health care costs of this population. These Members wanted to point out that to the extent private prisons provide fewer resources for education and rehabilitation, confinement in a private prison would have racially disparate consequences.

“The Trustees have voted to support a policy of divestment in companies engaged in the operation of private prisons and to refrain from making new investments in such companies. The decision follows a recommendation by the University’s Advisory Committee on Socially Responsible Investing (ACSRI) and thoughtful analysis and deliberation by our faculty, students and alumni. This action occurs within the larger, ongoing discussion of the issue of mass incarceration that concerns citizens from across the ideological spectrum. We are proud that many Columbia faculty and students will continue their scholarly examination and civic engagement of the underlying social issues that have led to and result from mass incarceration. One of many examples of the University's efforts in this arena is the work of Columbia’s Center for Justice, <http://centerforjustice.columbia.edu/about/>. In partnership with the Heyman Center for the Humanities, the Center for Justice recently received generous support from the Mellon and Tow foundations to help educate incarcerated and formerly incarcerated persons, and to integrate the study of justice more fully into Columbia’s curriculum.”

2020 Private Prison Operators Divestment/Non-Investment List

2020 Private Prisons - Domestic Companies

NAME	NOTE
CoreCivic, Inc.	<p>CoreCivic Inc. is a U.S.-based real estate investment trust (REIT) company which operates correctional, detention and prison facilities. The company currently lists 129 for-profit facilities across the U.S., which include illegal immigrant detention facilities.</p> <p>Total revenue amounted to USD1.84b in FY2018 (year ended 31 December 2018). All of the company's revenue is derived from building, owning and operating for-profit detention and correctional facilities.</p>
The GEO Group, Inc.	<p>Geo Group Inc. is a fully-integrated real estate investment trust specializing in the ownership, leasing and management of correctional, detention and reentry facilities and the provision of community-based services and youth services. The company owns, leases and operates correctional and detention facilities including maximum, medium and minimum security prisons, immigration detention centers (including Dungavel House in South Lanarkshire, Scotland), minimum security detention centers, as well as community based reentry facilities.</p> <p>Total revenue amounted to USD2.33b in FY2018 (year ended 31 December 2018). Geo Group Inc. derives all of its revenue from the construction, ownership and operation of for-profit correctional facilities.</p>

2020 Private Prisons - Foreign Companies

NAME	NOTE
G4S plc	<p>Formerly Group 4 Securicor plc, G4S Plc is a United Kingdom-based company engaged in the provision of security services. The company operates globally in three areas: security services and technology, care and justice services, and justice cash solutions. G4S acquired a controlling interest in the London-based security company ArmorGroup in 2008. The company is engaged in the management of several correctional facilities and the Brook House immigrant detention center. The company is also engaged in the provision of prisoner escorting, asylum services, electronic monitoring services, and police services. Total revenue amounted to GBP7.51b in FY2018 (year ended 31 December 2018). The company reports that its Care and Justice services segment, which represents its operations in for-profit correctional and detention facilities, accounts for approximately 7% of its overall revenue.</p>
MITIE Group Plc	<p>Mitie Group plc is a U.K.-based company that is engaged in management services for its clients. The company has six primary business segments: Engineering Services, Security, Professional Services, Cleaning & Environmental Services, Care & Custody and Catering. The company manages prisons for the U.K. government, including HMP Brixton and HMP Youth Offender Institute ISIS. The company also manages illegal immigrant detention centers for the U.K. government, including the Campsfield House and Heathrow immigration removal centers. Total revenue amounted to GBP2.32b in FY2018 (year ended 31 March 2019). The company reports that its Care and Custody</p>

	segment, which represents a range of prison services on behalf of the U.K. government, accounted for 4.6% of its revenue.
Serco Group plc	Serco Group plc is a U.K.-based company offering business process outsourcing (BPO), consulting and technology services to public and private sector customers worldwide. The company manages immigrant detention centers, including Yarl's Wood in Bedfordshire, England, and prisons in the U.K., Australia and New Zealand. Total revenue amounted to GBP2.84b in FY2018 (year ended 31 December 2018). The company reports that its Justice and Immigration segment, which represents its for profit prison and detention facilities business, accounted for 19.39% of its overall revenue.
Sodexo SA	Sodexo SA is a France-based company engaged in providing a diversified range of business sectors with construction management, food service, and correctional facility maintenance services. The company operates prisons in Belgium, Chile, France, Netherlands and the U.K. In addition to private prisons, the company operates 4 refugee detention centers for the Belgium Ministry of Justice and 40 refugee detention centers for the Netherlands Ministry of Justice. Total revenue amounted to EUR20.41b in FY2018 (year ended 31 August 2018). The company reports that its Business and Administrations segment accounts for 56% of group revenue, with the Government and Agencies sub-segment accounting for 11% of of this segment, or 6.16% of total revenue. Included within this sub-segment are various government, defense and justice clients. The firm also discloses that 3.3% of its revenue in 2016 was derived from its Justice segment, which is engaged in the operation and provision of services to prisons. It is therefore reasonable to estimate that between one and five percent of company revenue is derived from the operation of for-profit correctional facilities.

Attachment B: Sudan Divestment Screening and Divestment/Non-Investment List

THE COMMITTEE ON FINANCE

Socially Responsible Investing Sudan Recommendations

February 20, 2020

BACKGROUND: Modification of List of Companies Identified for Sudan Divestment

The Columbia University Advisory Committee on Socially Responsible Investing (ACSRI) was formed by the University in March 2000 to advise the Trustees on ethical and social issues confronting the University as an investor, and includes students, faculty, alumni and non-voting University administrators as members. The ACSRI makes its own agenda, and may make recommendations to the Trustees. The Trustee's Subcommittee on Shareholder Responsibility of the Committee on Finance has the role of receiving recommendations from the ACSRI. The current members of the Subcommittee are Mark Gallogly, Li Lu, Victor Mendelson and Kathy Surace-Smith.

In April 2006 the Trustees adopted the ACSRI's recommendation for divestment from Sudan. Specifically, the ACSRI's Statement of Position and Recommendation on Divestment from Sudan (April 4, 2006) recommended the University's divestment from, and prohibition of future investment in, all direct holdings of publicly-traded non-U.S. companies whose current activities, directly or indirectly, substantially enhance the revenues available to the Khartoum government, including companies involved in the oil and gas industry and providers of infrastructure. At the time, the ACSRI's work focused on non-U.S. companies. This is because beginning in 1997, the U.S. government imposed comprehensive economic, trade and financial sanctions against Sudan, effectively barring U.S. companies from conducting business with the Government of Sudan, except those explicitly permitted by the U.S. Treasury Department's Office of Foreign Assets Control (OFAC). These sanctions were tightened in 2007. Thus the recommended divestment/no investment principle as applied to Sudan extended the principles behind the sanctions that the U.S. government had decided were desirable and efficacious to non-U.S. companies.

In its statement, the ACSRI identified eighteen such companies from which it recommended immediate divestment, and stated that recommendations for removals from and/or additions to the divestment list may be made in the future. The divestment list was revised with Trustee approval in March and June of 2007, and in March of each subsequent year. In addition, in March of 2008 a watch list was created of companies to be carefully reviewed for changes during the monitoring process.

In February 2009, the ACSRI recommended that the language regarding the University's position include specific reference to providers of military and defense services.

The independence of the Republic of South Sudan in 2011 did not substantively affect the University's screening process, which focuses on companies activities of which enhance the

revenues of the Khartoum government in northern Sudan.

On January 13, 2017, citing “positive actions” by Sudan, President Obama signed an executive order to permanently revoke most sanctions against Sudan following a six-month waiting period. During that six-month period, the Treasury Department authorized Americans to do business in Sudan including the exportation of U.S. products. Sanctions tied to Sudan as a state sponsor of terrorism (i.e. weapons sales) remain in place.

On October 6, 2017, the U.S. government announced a decision to revoke economic sanctions with respect to Sudan effective October 12, 2017 in “recognition of the Government of Sudan’s sustained positive actions.” The ACSRI has attempted to determine, to the best of its ability, whether the positive actions cited in the report relied upon by the U.S. government address fully the concerns that formed the basis for the University’s divestment position in 2006. Although the Committee acknowledges that the situation is complex and multi-faceted, its assessment is that the “positive actions” cited by the U.S. government were related to greater cooperation with the United States by the government of Sudan with regard to fighting terrorism and that concerns regarding humanitarian treatment of citizens in Sudan remain, particularly in the Darfur region. These concerns were the original motivating force behind ACSRI’s recommendations to the Trustees in 2006. Consequently, the Committee was not prepared at that time to reverse its position but agreed to re-examine its position at least once every two years.

With the decision of the U.S. government in 2017, it became legally practical again for many U.S. companies to do business in Sudan. Given this change, in the spirit of the original divestment proposal, last year the ACSRI updated its “Monitoring Process” to include examination of all companies doing business in Sudan, both foreign and U.S.-based entities, and has continued that process this year. Therefore in 2018, the language in the “Monitoring Process” has been updated to remove reference to “foreign” companies doing business in Sudan and simply refer to “companies” doing business in Sudan.

In the spring of 2019, President Omar al-Bashir was ousted and replaced by a transitional, joint civilian-military government. Last fall, the ACSRI discussed the potential effect that recent political changes in the country may have on Columbia’s Sudan divestment policy. As part of its decision making process, the Committee consulted with two experts:

- Mahmood Mamdani, Columbia University Herbert Lehman Professor of Government, MESAAS, International Affairs, and Anthropology; and
- Payton Knopf, a former diplomat and currently an advisor to the Africa program at the United States Institute of Peace and to the European Institute of Peace.

After further deliberation, the ACSRI decided that it was too early in the transition to end divestment. The ACSRI will revisit the policy this fall unless other pertinent changes occur in the interim.

Prior to putting forth their recommendations for 2020, the ACSRI reviewed 421 publicly traded, non-U.S. companies currently doing business in Sudan, an increase of 12 companies compared to last year. In addition, 34 U.S. based companies were reviewed – one more than last year. In 2017, upon the recommendation of the ACSRI and the Subcommittee, most of the

telecommunications companies were removed from the watch and divestment lists. In 2019, the ACSRI and the Subcommittee recommended that power companies be moved from the divestment to the watch list unless there is an exception like ties to the military. The language in the “Monitoring Process” has been updated to reflect these exceptions.

For 2020, the Subcommittee recommends that 15 companies be included on the divestment list, a net decrease of 13 compared to last year. The Subcommittee further recommends that 35 companies be included on the watch list, a net decrease of 16 compared to last year. The process followed and criteria adhered to by the ACSRI in reaching its recommendation are set forth in the attached Exhibit A. A summary of the recommended changes is attached as Exhibit B.

As of January 23, 2020, the University does not currently hold any of the identified companies in its directly held public equity portfolio.

Exhibit A

Monitoring Process and Criteria

In developing its recommendations, the Sudan Divestment Subcommittee reviewed the activity of all companies already on the Columbia divestment list and watch list, as well as companies warranting scrutiny as determined by ISS-ESG (formerly IW Financial) and EIRIS.¹ For companies included on the current divestment list and watch lists, the Sudan Subcommittee developed a recommendation to retain a company on the list, remove it, or shift a company between the lists. For newly reviewed companies, the Subcommittee developed a recommendation to add a company onto the divestment or watch list, or to perform no action.

Companies that fit Columbia's divestment criteria include companies with publicly-traded equity whose current activities, directly or indirectly, substantially enhance the revenues available to the Khartoum government, in particular (1) through their involvement in the oil, gas and mining industries in Sudan – including goods and services providers, as well as explorers and extractors, or (2) as providers of military and defense products and services.

Since 2017, telecommunications companies are no longer listed on the divestment or watch lists unless there are ties to Khartoum government. Since 2019, power companies are placed on the watch list rather than the divestment list unless there is an exception like ties to the military.

The ASCRI does NOT recommend divestment from the following classifications of companies:

- 1) Companies active in Sudan in the past and/or companies having expressed intent to operate in Sudan in the future, but for which there is no (conclusive) evidence of current activity in Sudan.
- 2) Companies which may currently be active in Sudan, but have demonstrated a willingness (or even undertaken some action) to change their corporate behavior in Sudan. The Committee may judge that these companies are strong candidates for continued shareholder engagement and ongoing communication.

¹ The Sudan Subcommittee relied upon data from ISS-ESG (formerly IW Financial) and a research service provider, EIRIS Conflict Risk Network: Empowering Responsible Investing (EIRIS). ISS-ESG provided the Committee with a list of all companies with publicly-traded equity currently operating in Sudan. The list included information on the companies such as, level of involvement (active or plan to cease) and industry (government, power, energy, telecom, defense, and financial). Each company on the list was accompanied by a page of research outlining the company's involvement in Sudan. Though ISS-ESG is a provider of objective research and technology solutions that help financial professionals evaluate the environmental, social, and governance performance of companies, we wanted to make sure that we had *comprehensive* data for this effort. As a result, we continue to use EIRIS to provide us with a list of companies in the targeted sectors of oil, mineral extraction, power production or weapons and (a) that met the other threshold criteria laid out in the targeted Sudan divestment legislative model or (b) when the company has failed to respond to requests to provide evidence to the contrary. These companies are subject to divestment measures in states with legislation based on the targeted model. EIRIS research sheets are not provided as they confirmed the information from ISS-ESG for targeted divestment companies.

3) “Second order” and logistical support/service providers: companies which provide services to other suppliers/service providers in the industries matching the divestment criteria. The Committee did not recommend divestment of these companies for the following reasons:

- a) The Committee wished to establish a precedent of not targeting companies on the supply chain beyond the first order;
 - b) The Committee believed that these companies do not directly/substantially contribute revenue to the Khartoum government.
- 4) Subsidiaries of parent companies with known involvement in Sudan, unless the subsidiary itself fits the criteria and is actively involved in Sudan.
- 5) Companies providing goods or services that sustain life, including, without exception, pharmaceutical companies, medical service providers and agricultural fertilizer producers.

The Committee may recommend placement of companies meeting this exception criteria on the watch list in order to highlight them for careful monitoring during the ensuing monitoring process.

EXHIBIT B

2020 Changes to Non-Investment and Watch Lists

2020 Additions to Current Sudan Divestment / Non-Investment List

Hanwha
Hanwha Aerospace Co. Ltd.

Keep Current Status on Divestment / Non-Investment List

Dongfeng Motor Group Co.
Dubai Investments
Dubai Islamic Bank
Gtl Otkrytoe Aktsionernoe Obschest
Kamaz
Kuwait Finance House
Managem
Oil & Natural Gas Corporation Ltd.
Oil India Ltd.
Orca Gold Inc.
PetraChina Co. Ltd.
Qalaa Holdings
Sudan Telecom Co (Sudatel)

Switch from Previous Sudan Divestment / Non-Investment List to 2020 Watch List

Anton Oilfield Services Group
Arabian Pipes Co.
Asec Company for Mining
China Camc Engineering Co. Ltd.
China Petroleum & Chemical Corp.
Doosan Heavy Industries and Construction
Energy House Holding Company K.S.C.C.
Engineers India Ltd.
Indian Oil Corporation Ltd.
Regency Mines
Scomi Group Bhd

2020 New Additions to Sudan Watch List (not shifted from Divest)

Groupe Bruxelles Lambert
Hangzhou Hik-Vision Digital Technology Co. Ltd.
Inner Mongolia First Machinery Group Co. Ltd.

Keep Current Status on Sudan Watch List

A.P. Moller – Maersk AS
China Communications Construction
China Gezhouba Group Company Limited
Doosan Corp.
Drake & Scull International Pjsc
Egypt Kuwait Holding Co.
El Sewedy Electric Company
Ericsson
Harbin Electric Company Limited
Independent Petroleum Group Co.
Kuwait & Gulf Link Transport Co.
LafargeHolcim Ltd.
Larsen & Toubro Ltd.
Man SE
Mashreqbank
National Shipping Co. of Saudi Arabia
Nirou Trans Co.
OFFTEC Holding
Panalpina Weltransport (Holding) AG
Sinopec Oilfield Equipment Corp
Wartsila Oyj Abp

Removal from Current Sudan Divestment/Non-Investment and Watch Lists

Abu Dhabi Islamic Bank
Al Salam Bank Sudan
Andritz AG
Astra Industrial Group Company
Bank Audi
Barwa Real Estate
Bharat Heavy Electricals
Bharat Petroleum Corporation Ltd.
Boustead Singapore Ltd.
Croda International plc
IHS Nigeria plc
International Container Terminal Services Inc.
JXTG Holdings Inc.
LS Industrial Systems
Mangalore Refinery & Petrochemicals Ltd.
Muhibbah Engineering (Malaysia) Bhd
NewLead Holdings
Nexans SA
Power Construction Corporation of China Ltd.
Qatar Islamic Bank
QNB
Ramco Cements Ltd.

Ramco Industries Ltd.
Ramco Systems Ltd.
Sany Heavy Industry Co.
Sapura Energy Berhad
Saudi Arabian Amiantit Co.
Saudi Public Transport Co.
Saudi Telecom
Schlumberger Ltd.
Schneider Electric SE
Shanghai Electric Group Co.
Spectrum ASA
UltraTech Cement Ltd.

Columbia Announces Divestment from Thermal Coal Producers

March 13, 2017

Building on Columbia's longstanding commitment to addressing climate change, the University's Trustees have voted to support a recommendation from the Advisory Committee on Socially Responsible Investing (ACSRI) to divest from companies deriving more than 35% of their revenue from thermal coal production and to participate in the Carbon Disclosure Project's Climate Change Program.

Thermal coal is used in coal-fired electricity generating plants (whereas metallurgic coal is used in steel production). The basis of the **ACSRI recommendation** adopted by the Trustees is that coal has the highest level of CO₂ emission per unit of energy; it is used ubiquitously across the globe as a source of electrical energy; and there exist today several cleaner alternative energy sources for electricity production (including but not limited to natural gas, solar, and wind). The University's divestment from thermal coal producers is intended to help mobilize a broader public constituency for addressing climate change and, in the words of ACSRI, to "encourage the use of the best available knowledge in public decision-making."

"Divestment of this type is an action the University takes only rarely and in service of our highest values," said University President Lee C. Bollinger. "That is why there is a very careful and deliberative process leading up to any decision such as this. Clearly, we must do all we can as an institution to set a responsible course in this urgent area. I want to recognize the efforts of the many students, faculty and staff whose substantive contributions have brought us to this point."

The Trustees also encouraged the University to continue to strengthen efforts to reduce its own carbon footprint, as well as to further support research, educational efforts, and policy analysis in the field of climate change and carbon emissions reduction.

Many elements of this effort are already in place or underway. A multi-year planning process will result in the announcement next month of Columbia's new plan to further enhance the environmental sustainability of our operations. Columbia's renowned Lamont-Doherty Earth Observatory, on the forefront of the science of "global warming" since the term was first coined by a faculty member, is once again leading by example, having announced that it will rely on solar power for 75% of its electrical energy needs. Lamont-Doherty is part of the Columbia University Earth Institute, which brings together one of the world's most significant collection of researchers across multiple fields to deepen human understanding of climate change and the solutions for a sustainable future.

2019 Thermal Coal Non-Investment List

Thermal Coal - Domestic Companies

Company Name
Alliance Holdings GP LP
Alliance Resource Operating Partners LP
Alliance Resource Partners LP
Arch Coal, Inc.
Cloud Peak Energy Resources LLC
Cloud Peak Energy, Inc.
CONSOL Coal Resources
CONSOL Energy, Inc.
Foresight Energy LLC
Foresight Energy LP
Hallador Energy Company
NACCO Industries, Inc.
Peabody Energy Corp.
Rhino Resource Partners LP
Westmoreland Coal
Westmoreland Resource Partners LP

Thermal Coal - Foreign Companies

Company	Country
Adani Enterprises	India
Adaro Energy	Indonesia
Agritrade Resources Limited	Bermuda
Altura Mining	Australia
Anhui Hengyuan Coal Industry and Electricity Power	China
Banpu Public Co. Ltd.	Thailand
Beijing Haohua Energy Resource Co., Ltd.	China
Bumi Investment Pte Ltd.	Singapore
China Coal Energy	China
China Coal Xinji Energy Co., Ltd.	China
China Qinfa Group	China
China Shenhua Energy Company Limited	China
China Shenhua Overseas Capital Co. Ltd.	Virgin Isl (UK)
Datong Coal Industry Co., Ltd.	China
Exxaro Resources Ltd.	South Africa
Feishang Anthracite Resources Ltd.	Virgin Isl (UK)
Gansu Jingyuan Coal Industry & Electricity Power Co., Ltd.	China

Gujarat Mineral Development Corp. Ltd.	India
Hidili Industry International Development	China
Huolinhe Opencut Coal Industry Corp. Ltd. of Inner Mongolia	China
Indika Energy Capital II Pte Ltd.	Singapore
Indika Energy Capital III Pte Ltd.	Singapore
Indo Energy Finance BV	Netherlands
Indo Energy Finance II BV	Netherlands
Indo Integrated Energy BV	Netherlands
Inner Mongolia Pingzhuang Energy Resources	China
Inner Mongolia Yitai Coal Co., Ltd.	China
Jizhong Energy Resources Co., Ltd.	China
Kinetic Mines & Energy	China
Kuzbasskaya Toplivnaya Kompaniya PJSC	Russia
Lubelski Wegiel BOGDANKA SA	Poland
MC Mining Ltd.	Australia
Mercator Limited	India
Mitsui Matsushima Holdings Co., Ltd.	Japan
New Hope Corp. Ltd.	Australia
Peabody Energy Australia PCI Pty Ltd.	Australia
PT ABM Investama TBK	Indonesia
PT Adaro Energy Tbk	Indonesia
PT Alfa Energi Investama	Indonesia
PT Bayan Resources Tbk	Indonesia
PT Bukit Asam Tbk	Indonesia
PT Bumi Resources Tbk	Indonesia
PT Dian Swastatika Sentosa Tbk	Indonesia
PT Golden Eagle Energy TBK	Indonesia
PT Golden Energy Mines TBK	Indonesia
PT Harum Energy TBK	Indonesia
PT Indika Energy Tbk	Indonesia
PT Indo Tambangraya Megah Tbk	Indonesia
PT Trada Alam Minera Tbk	Indonesia
RAG-Stiftung	Germany
Resources Prima Group Ltd.	Singapore
Sakari Resources Ltd.	Singapore
Semirara Mining & Power Corp.	Philippines
Shaanxi Coal Industry Co., Ltd.	China
Shanghai Datun Energy Resources Co., Ltd.	China
Shanxi Lu'An Environmental Energy Development Co., Ltd.	China
Southern Kuzbass Coal Co. PJSC	Russia
The Lanna Resources Public Co., Ltd.	Thailand
United Tractors	Indonesia
Universal Coal	Australia

Washington H. Soul Pattinson & Co. Ltd.	Australia
Wescoal Holdings Ltd.	South Africa
Whitehaven Coal Ltd.	Australia
Yancoal Australia Ltd.	Australia
Yang Quan Coal Industry (Group) Co., Ltd.	China
Yanzhou Coal Mining Co., Ltd.	China
Zhengzhou Coal Industry & Electric Power Co., Ltd.	China

Attachment D: Tobacco Divestment Screening and Divestment/Non-Investment List

COLUMBIA UNIVERSITY ADVISORY COMMITTEE ON SOCIALLY RESPONSIBLE INVESTING

Statement of Position and Recommendation on Tobacco Screening

January 31, 2008

The Advisory Committee on Socially Responsible Investing (“The Committee”), as chartered by the University Trustees in March 2000, is the University’s vehicle to advise the Trustees on ethical and social issues confronting the University as an investor. At the prompting of the Investment Management Company (“IMC”), the Committee was asked to review the University’s stance and informal practice of screening out investments in tobacco companies and to create a formal tobacco screening policy.

University Position on Tobacco Screening:

The Committee believes that for many years it has been the University’s intention to refrain from investing in companies engaged in the manufacture of tobacco and tobacco products, but not from investing in companies who supply peripheral materials and supplies to the tobacco industry or distribute these products.

Review of Prior Practice:

Though not formally written as a policy, Columbia has engaged in the practice of screening tobacco companies for some time. Columbia obtains its list of screened tobacco companies from a service known as TrustSimon, provided by Institutional Shareholder Services (ISS). ISS creates its lists of restricted companies through industry lists and company research. The universe of companies and their revenues from specific activities are updated annually by ISS.

ISS divides its screening service based on geographic location of the companies, producing separate lists for domestic and foreign tobacco companies. Careful examinations of both lists produced by ISS have revealed that while the list of domestic tobacco companies matches the University’s historic practice on tobacco screening, the list of foreign companies does not. The domestic universe includes filters to narrow the screening to tobacco manufacturers and includes only companies whose business is the direct manufacture of tobacco products, including chewing tobacco and/or snuff; cigarettes, including make-your-own custom cigarettes; cigars; pipe and/or loose tobacco; smokeless tobacco; and raw, processed or reconstituted leaf tobacco. The foreign list from ISS, however, includes manufacturers as well as distributors of tobacco products and suppliers to the tobacco industry. This past year, the Office of Socially Responsible Investing under the Executive Vice President of Finance carefully culled the foreign universe to more closely align with the University’s practice of screening only manufacturers.

Committee position and recommendations:

The Committee requests that the Trustees clarify and formalize the University’s stance on tobacco screening by recommending that IMC refrain from investing in companies whose business is the direct manufacture of tobacco products.

It is the belief of the Committee that appropriate lists of both domestic and foreign companies that conform to the above definition can still be obtained from ISS. The list of domestic companies obtained from ISS conforms to this definition as is. A comparable list of foreign companies can be obtained from the ISS list by simply applying a manual filter. The Committee would offer that IMC rely on the Office of Socially Responsible Investing to provide this service, either on scheduled dates throughout the year, or upon request from IMC.

2019 Tobacco Non-Investment List

Tobacco - Domestic Companies

Company Name

22nd Century Group, Inc.
Altria Group, Inc.
American Heritage International, Inc.
Arcis Resources Corp.
Icon Vapor, Inc.
mCig, Inc.
Philip Morris International Inc.
Pyxus International, Inc.
Rapid Fire Marketing, Inc.
Schweitzer-Mauduit International, Inc.
Smokefree Innotec, Inc.
Standard Diversified, Inc.
Swan Group of Cos., Inc.
Turning Point Brands, Inc.
Universal Corporation
Vapor Group, Inc.
Vapor Hub International, Inc.
Vector Group Ltd.
VPR Brands LP
Wee-Cig International Corp.

Tobacco Foreign Companies

Company

Al-Eqbal Co. for Investment Plc
British American Tobacco Bangladesh Co.
British American Tobacco Kenya Ltd.
British American Tobacco Malaysia Bhd.
British American Tobacco plc
British American Tobacco Uganda Ltd.
British American Tobacco Zambia PLC
British American Tobacco Zimbabwe Ltd.
Bulgartabac Holding AD
Ceylon Tobacco Co. Plc
Coka Duvanska Industrija AD
CTO Public Co. Ltd.
Dupnitsa-Tabak AD
Duvanska Industrija a.d. Bujanovac
Duvanski Kombinat ad Podgorica
Eastern Co. (Egypt)
Empresa Agroindustrial Cayalti SAA
Fabrika Duhana Sarajevo dd
Fabrika Duvana Banja Luka AD

Godfrey Phillips India Ltd.
Golden Tobacco Ltd.
Gotse Delchev Tabac AD
Haci Omer Sabanci Holding AS
Hoang Long Group
Hrvatski Duhani dd
Huabao International Holdings Ltd.
Imperial Brands Plc
ITC Limited
Japan Tobacco Inc.
Jerusalem Cigarette Co. Ltd.
Karelia Tobacco Co., Inc.
Khyber Tobacco Co. Ltd.
KT&G Corp.
LT Group, Inc.
Ngan Son JSC
Nikotiana BT Holding AD
NTC Industries Ltd.
Pakistan Tobacco Co. Ltd.
Pazardzhik BTM AD
Philip Morris (Pakistan) Ltd.
Philip Morris CR a.s.
Philip Morris Operations ad
Press Corporation PLC
PT Bentoel International Investama Tbk
PT Gudang Garam Tbk
PT Hanjaya Mandala Sampoerna Tbk
PT Wismilak Inti Makmur Tbk
Scandinavian Tobacco Group A/S
Shanghai Industrial Holdings Limited
Shumen Tabac AD
Sila Holding AD
Sinnar Bidi Udyog Ltd.
SITAB
Slantse Stara Zagora Tabac AD
Swedish Match AB
Tanzania Cigarette Co. Ltd.
TSL Ltd.
Tutunski Kombinat AD Prilep
Union Investment Corp.
Union Tobacco & Cigarette Industries Co.
Veles Tabak AD
VST Industries Limited
West Indian Tobacco Co. Ltd.

Attachment E: Extinction Rebellion Fossil Fuel Divestment Proposal

ACSRI Proposal Submission Overview

Date of Submission to the ACSRI: December 6, 2019

Subject of Review: Fossil fuel divestment

Contact Name: Abby Schroering

Contact Email: abby.schroering@columbia.edu Phone Number: (502)689-3043

University Affiliation: Graduate Student

Dept./Office: GSAS

Requesting on behalf of an organization? Yes

If yes, which organization? Extinction Rebellion

Provide a summary of the issue, the action requested, and the rationale:

There is a University-wide consensus that climate change poses a grave threat to humanity and to the natural systems on the planet, and that the use of fossil fuels is the principal cause. This proposal (formulated and signed by 25 members of the Earth Institute Faculty and others in 2016, resubmitted with updates by Extinction Rebellion in 2019) calls upon the University to engage in an orderly divestment of the shares of all fossil fuel companies.

Please attach in PDF format the following additional required information and supporting evidence (20 pages max):

- 1) State which criteria the proposal is using to make the case (1 paragraph)
- 2) Provide all the critical data with footnotes for any arguments in your proposal
- 3) Provide research on the possible opposite argument against your conclusions
- 4) Conclusion - provide bullet points for the final recommendations to the ACSRI citing the criteria for each one

Email the proposal to the ACSRI Staff Administrator as posted on the website

Proposal on Fossil Fuel Divestment and Engagement

Michael B. Gerrard

Andrew Sabin Professor of Professional Practice
Director, Sabin Center for Climate Change Law
Columbia Law School
Chair of the Faculty of The Earth Institute
Revised 2019: Extinction Rebellion Columbia University

During the 2015-2016 academic year, the faculty of The Earth Institute held intensive discussions about whether Columbia University's endowment should divest from fossil fuel stocks. On March 1, 2016, a statement was released that was signed by 25 members of this faculty and by several Earth Institute researchers. It was not issued as a formal statement of the faculty itself; the faculty had never previously issued a statement on a social/policy issue and some members were uncomfortable with doing so now.

The relevant portions of the faculty members' statement are pasted below. (The remainder called for efforts to advance the efforts to reduce the greenhouse gas footprint of campus operations, and to continue research, educational and public service activities concerning climate change; all of these are being pursued as well.)

I am submitting this proposal to ACSRI on behalf of myself and the other signatories to the statement.

Statement on University Investment and Sustainability Policy

The undersigned faculty and researchers of Columbia University's Earth Institute recommend that Columbia University implement a policy that recognizes the critical need for society to transition to non-fossil fuel energy sources, the role of the University in promoting public good through its investments, and the importance of upholding these principles through activities on its campuses. Columbia University should proactively lead these efforts both within and without the University and recognize that such investment choices need not adversely affect University finances, but they do

provide an opportunity to strengthen the University financially, civically and morally. We are aware of no evidence of a clear correlation between fossil fuel divestment and portfolio return.

1. Coal combustion is the largest and fastest-growing anthropogenic source of greenhouse gas emissions. Major reductions in global coal use are an essential part of any strategy to fight climate change. Coal companies are bad investments for the planet and for forward-looking investment portfolios. If these companies are losing money (as many of them are), Columbia University should not suffer the losses; if they are making money, Columbia should not share in the profits. Columbia should engage in orderly divestment from the stock of any companies that are primarily in the coal mining business, and should refrain from buying any such stock in the future.
2. Companies that are primarily involved with other fossil fuels need to transition to clean sources of energy in the decades to come. In order to stay in or join Columbia University's stock portfolio, oil and natural gas companies should provide satisfactory affirmative answers to these questions, and should provide documentation supporting the answers. According to a recent article in the [New York Times](#), the recent decline of coal has been "more than offset by strong growth in the use of oil and natural gas around the world." Therefore, the reduction in coal use must be accompanied by a major reduction in the use of other fossil fuels in any realistic strategy to avoid the worst consequences of anthropogenic climate change. Fossil fuel companies are bad investments for the planet and for forward-looking investment portfolios. If these companies are losing money (as many of them are), Columbia University should not suffer the losses; if they are making money, Columbia should not share in the profits. Columbia should engage in orderly divestment from the stock of any companies that are primarily in the fossil fuel and extraction business, and should refrain from buying any such stock in the future.:
3. Columbia University should hold no shares in any company, in whatever sector, that directly or through organizations that it supports rejects the scientific consensus on climate change.
4. The University should be an active investor in companies whose shares it continues to hold. The University should initiate or participate in shareholder resolutions and other activities that urge companies to behave in a responsible manner toward climate change, including, *inter alia*, the reduction in the emission of greenhouse gases and the transition to non-fossil fuel energy sources. In doing so, the University should cooperate with other organizations engaged in similar activities.

Applicable Criteria

ASCRI has identified three basic tests or criteria that must be met before divestment is recommended:

- 1) There must be broad consensus within the University community regarding the issue at hand;
- 2) The merits of the dispute must lie clearly on one side;
- 3) Divestment must be more viable and appropriate than ongoing communication and engagement with company management.

If "the issue at hand" is defined as whether climate change is a serious threat to humanity and to the planet, and the "dispute" is whether fossil fuels are a major contributor to climate change, the first two criteria are easily met. There is broad consensus among the scientific community (including, I believe it is fair to say, every member of the Earth Institute faculty) about the threat caused by climate change, and the central role of fossil fuels in causing it. Nor does there appear to be any serious disagreement within the University community about these points. I have participated in countless meetings and public fora at Columbia about climate change, and I do not recall ever hearing anyone express disagreement on these key points. There is certainly disagreement about the magnitude and pace of the climate threat, and about the best technical and policy tools for addressing it, but not about the underlying merits. The most authoritative current study of the causes and impacts of climate change is probably the Fifth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC), which is linked [here](#). If the ACSRI desires further scientific references on these points, I would be happy to provide them. **Since 2016, IPCC reports have only solidified the necessity for urgent action to**

reduce carbon emissions ([2019 Refinement Report](#)) and the dire consequences of failing to do so ([Global Warming of 1.5°C](#)).

Many members of the University community support divestment. In October 2013 [Spectator](#) conducted a ballot referendum of Columbia College students; 73.7% voted in favor (though it is unclear from what I have found whether that is a percentage of all students, or of all respondents to the poll). Last spring an open faculty letter to President Bollinger and the Trustees received more than 350 signatures (see [here](#)). According to the Columbia Divest for Climate Justice website, linked [here](#), over 2,000 students and faculty members have signed their petition to divest from fossil fuels, representing all undergraduate and graduate schools at Columbia. As the ACSRI is well aware, the issue has been the subject of a great deal of student activism on campus. [The week before Thanksgiving 2019, four Columbia students went so far as to go on hunger strike with divestment as a central demand, garnering an additional >100 faculty signatures](#) and widespread student body support. Divestment is also accumulating widespread support among other Ivy League universities, as represented by the [Harvard-Yale 2019 football game halftime demonstrations](#). Not everyone agrees with divestment but to my knowledge no groups have organized to oppose it, and there have been no counter-petitions. This is merely anecdotal, but I will report that in November 2014 I organized and chaired a public forum at the Law School about divestment; I had a great deal of difficulty finding anyone on or off campus willing to speak in opposition, and I had to fly an investment advisor in from Colorado to represent that point of view.

The third criterion is whether divestment is more viable and appropriate than ongoing communication and engagement with company management. There has been extensive

shareholder activism with respect to climate change since the early 1990s. As a result a number of manufacturing companies have agreed to reduce their carbon footprint and take other environmentally beneficial actions. However, while this activism has had some effect on the securities disclosures of fossil fuel producers, it has had little discernible effect on the substantive practices of fossil fuel producers (as opposed to fossil fuel users). A large shale oil producer, Continental Resources, did agree to reduce its flaring (burning) of natural gas at its North Dakota well. ExxonMobil agreed to make certain disclosures (the adequacy of which are now a subject of investigation by the New York Attorney General). There may be other examples, but I have not found any.

Many groups continue to be engaged in shareholder activism on climate change; the Interfaith Center for Corporate Responsibility plays a leading role in organizing such efforts. However, it is unlikely that this kind of activism will induce any fossil fuel companies to move away from their core business. The fossil fuel divestment campaigns are ultimately aiming to achieve a major reduction in the use of fossil fuels around the world. One key element is the movement to "leave it in the ground" -- to not utilize the proven reserves that are a large piece of the asset base of many fossil fuel companies. Regulatory requirements, reduced markets, and economic factors (such as the currently low prices for oil and gas) may help achieve that, but it is difficult to imagine that shareholder activism could induce a company to abandon its assets and effect a fundamental shift in its business model. The more likely that a resolution is to seriously impair a company's profits (as opposed to alter its practices around the edges), the less likely that it will be supported by major investors and come anywhere close to a majority vote.

Few proponents of fossil fuel divestment believe that it alone will move the coal, oil and gas companies or even affect their stock price; there will always be other buyers for the shares. Rather the act of divestment is symbolic, and in important ways. It would help signify that Columbia University is using every tool available to it to address the grave issue of climate change: we are conducting research and education, we are greening our campuses, and now we would be pulling our shares from **all fossil fuel companies**. Divestment would also convey the idea that fossil fuel use is in growing disfavor, and so are the fossil fuel producers (whose views still carry great weight in Congress and other political bodies). **In divesting from fossil fuels, Columbia will refuse to participate in these companies' "greenwashing" campaigns and definitively declare that climate- and ecologically-destructive practices are no longer acceptable.**

While a large number of entities around the world have announced partial or total fossil fuel divestment (see [this](#) compilation), few leading universities have. But among those that have announced partial divestment are Stanford, Georgetown, Oxford, and the London School of Economics. Columbia could mark itself as a leader in taking this action, while at the same time doing everything it can to reduce its own fossil fuel use and to participate in the scientific quest for alternatives. **An updated database of divestment commitments in 2019 can be found [here](#): notable new fossil fuel divestment commitments include Oregon State University, Syracuse University, University of Hawaii, University of Maryland, and the entire University of California system.**

Another counter-argument leveled against divestment is that there are relatively few available replacements for oil and natural gas in New York, and Columbia still utilizes these fuels in its own operations. There are many other, cleaner ways to make electricity. All nuclear,

hydropower, and wind turbine energy goes to make electricity, as does most solar. These cleaner energy sources are available in the rapidly developing countries. For example, both China and Brazil have already developed a great deal of hydropower, and many other populous and rapidly developing countries, including India and Indonesia, have the natural features necessary to develop a great deal themselves. See [here](#). According to the Renewables 2016 Global Status Report from REN21, available [here](#), China is the world leader in solar photovoltaic capacity and additions, while India is ninth (p. 63), and China is first in wind power capacity and additions, while India is fourth (p. 77). In the world's poorest countries, where large segments of the population have no electricity at all, distributed energy (primarily solar photovoltaic) is being rapidly installed and (unlike central station coal plants) does not require the installation of extremely expensive transmission lines. (id, at pp 87-97; see also [this](#)). In India, solar power is now cheaper to provide than coal. See [here](#).

In contrast, about 71% of the world's oil goes to transport, see [here](#), and 93% of the energy used for transport in the world comes from oil, see [here](#). Major efforts are underway around the world to use more electric cars, but there are only about 1.3 million electric automobiles now on the road around the world, see [here](#), out of about 1 billion total, see [here](#) – just 0.1%. There are currently no commercial substitutes for petroleum or gas for heavy duty vehicles (such as trucks and buses) or for aircraft.

In other words, today there are many large-scale substitutes for coal in making electricity; the substitution of oil for transport is nowhere near that scale.

With respect to unconventional oil and gas, there are numerous and varying estimates of their emissions intensity. However, these methods of extraction all share one thing in common:

they involve a quest for fossil fuel resources that should be left in the ground. We already know where massive coal reserves are located, and they can be extracted with very modest effort. However, most of the easily-recoverable oil and gas reserves (except for those in protected areas such as Antarctica) have already been extracted, and extraordinary efforts are needed to find and produce new ones. Given the solid scientific information available about the need to limit the amount of fossil fuel extracted (despite continuing questions about the exact amounts -- see [this](#)), elaborate hunts for new methods of extracting oil and gas, and the commencement of production in environmentally sensitive areas such as the Arctic and in deep waters offshore, amount to either a rejection of the science of climate change, or a cavalier disregard of its outcomes, in the same way that development of tar sands amounts to a rejection or disregard of science by deed.

Differentiating the Companies

How would the companies targeted for divestment be identified?

Fossil Free Indexes LLC is a research and investment company based in New York. Its web site is [here](#). It identifies its mission as "to source and analyze carbon emissions data and to generate research, benchmarks, and investment solutions for investors who are attentive to climate risk." One of its products is the Carbon Underground 200, which it describes as "a list of the 100 largest public oil and gas and the 100 largest public coal companies globally, as measured by the potential CO2 emissions of their reported fossil fuel reserves."

The lists are proprietary and available from Fossil Free Indexes for a fee. Abby Schroering has a copy of the Carbon Underground 200 that she can share with the relevant individuals. This list would be a convenient way to identify the companies that, under the proposal, should not be in Columbia's portfolio.

The list of the 100 largest public oil and gas companies would also be a good starting point for identifying the companies that are engaged in offshore oil exploration and shale gas production. Much of this information is readily available. For example, Rigzone Data Services publishes information about the owners of offshore oil rigs, for example. See [here](#). Various centers or groups at Columbia could be engaged to carry out the needed research.

(I am aware that in April 2016 the ACSRI recommended that Columbia become an Investor Signatory to the CDP Climate Change program. I do not know whether this recommended has been acted upon.)

Another task required under the proposal is identifying each company "that directly or through organizations that it supports rejects the scientific consensus on climate change." The number of publicly traded companies that fall within that category today is probably very low. Some of those that formerly did, such as ExxonMobil, no longer do. Few trade associations do so any longer. Some substantial companies still actively do, directly or indirectly, most prominently Koch Industries and Murray Energy, but they are privately held. Ongoing research at Columbia could help identify any such companies, but this is not likely to be a large category.

To conclude, to remain invested in fossil fuel companies would be to willingly ignore the will of the Columbia faculty, Ivy League community, [the City of New York](#), and the students and other young people whose futures these companies have placed in existential peril. To argue that Columbia must remain invested in fossil fuels as long as it relies on them for its operations exhibits the same destructive logic that has placed the planet in this emergency in the first place by making decisions based on the present instead of the future. Columbia has the opportunity to significantly reduce, and ultimately eliminate or offset, its reliance on fossil fuels in the future

through building modifications and participation in power purchase agreements, the groundwork for which is already being laid (contact Michael Gerrard michael.gerrard@law.columbia.edu for more information on these initiatives). If Columbia is truly invested in the future of its students and other stakeholders, it is not invested in fossil fuels. To dismiss divestment as “merely symbolic” gesture is to miss the point. The climate crisis is, at its foundation, a crisis of values. We are not lacking in expertise or solutions to solve address our collective emergency, as the massive amount of relevant research at Columbia alone demonstrates; we are lacking only in will. Columbia’s divestment will be a powerful symbol from one of the most prodigious and influential institutions in the world that values have finally started to change, and the possible impact of that symbol on other institutions, companies, and world leaders should not be dismissed.

Conclusion

The ACSRI should recommend that the Trustees:

1. Direct the University's fund managers to engage in orderly divestment from the stock of any companies on the list of the Carbon Underground 200, and refrain from buying any such stock in the future.
2. Request the assistance of the ACSRI in helping the University become an active investor in companies whose shares it continues to hold. The University should initiate or participate in shareholder resolutions and other activities that urge companies to behave in a responsible manner toward climate change, including, *inter alia*, the reduction in the emission of greenhouse gases and the transition to non-fossil fuel energy sources. In doing so, the University should cooperate with other organizations engaged in similar activities.



ADVISORY COMMITTEE ON SOCIALLY RESPONSIBLE INVESTING

2020-2021 AGENDA

Last Revised: November 19, 2020

INTRODUCTION

At the recommendation of the President, and with the approval of the University Trustees, the Advisory Committee on Socially Responsible Investing (ACSRI) was established in March 2000 to address issues of corporate social responsibility related to investments in the University's endowment. The Committee's recommendations are advisory in nature as the final fiduciary responsibility for the management of the investments that support the University's mission lies with the University Trustees.

An endowment is a fund where the principal is invested and an annual distribution (payout), funded by income and appreciation on the investments, is utilized by the University for purposes in support of our mission. An [endowment gift](#) is a donation that is given with the intent to preserve the original value of the gift and to grow it over time. The funds are held in perpetuity and invested, and the accumulated appreciation and income on the investment is used to fund an annual distribution. The annual distribution is spent according to the donor's wishes.

Through this dedicated stream of income, an endowment gift ensures the stability of a scholarship, professorship or program. Endowed gifts provide a stable income stream to ensure Columbia's continued excellence in teaching, research and patient care.

The [Columbia Investment Management Company](#) (IMC) is a wholly-owned subsidiary of Columbia University that is charged with managing the bulk of the University's endowments, also known as managed assets.

AGENDA

The ACSRI was asked to "set out a specific agenda" for each academic year, and to provide it to the Columbia Community during the fall semester. The Committee has developed the following agenda for the 2020-2021 academic year, which reflects ongoing initiatives including divestment/non-investment monitoring.

During the 2020-2021 academic year, the Committee will continue to review selected shareholder proposals (proxies) for U.S. registered public corporations in which the University has a direct holding in its endowment. The Committee will recommend to the University Trustees how to vote on shareholder proposals on several broad social issue categories, including animal welfare; banking; board structure and composition; charitable donations; environment,

energy and sustainability; equal opportunity employment; health and safety; human rights; military and security; and political contributions.

In keeping with its precedent of recent years, the Committee anticipates excluding most shareholder proposals on corporate governance and executive compensation from its review. The Committee may further refine its activities as the nature of the proxies to be voted in the spring of 2021 becomes clearer.

Another core activity is the Committee's monitoring of the divest/non-invest lists (screens) for Private Prison Operators, Sudan, Thermal Coal and Tobacco. The screens are updated each academic year and are shared with Columbia Investment Management Company, which will refrain from investing in those companies.

- **Private Prison Operators:** In accordance with the Trustee Resolution dated June 12, 2015 on divestment from companies engaged in the operation of private prisons, the Committee will screen publicly-traded domestic and foreign companies engaged in the operation of private prisons.
- **Sudan:** Columbia's Sudan divestment policy is in accordance with the Committee's April 4, 2006 Statement of Position and Recommendation on Divestment from Sudan. In light of the recent changes that are occurring in Sudan, the ACSRI will revisit whether Columbia's continued divestment is in the best interest of the country and its citizens. If continued, the Committee will screen publicly-traded domestic and foreign companies operating in Sudan whose current activities, directly or indirectly, substantially enhance the revenues available to the government.
- **Thermal Coal:** In accordance with the Trustee Resolution dated March 13, 2017 on divestment from companies deriving more than 35% of their revenue from thermal coal production, the Committee will screen publicly-traded domestic and foreign thermal coal producers.
- **Tobacco:** In accordance with the Committee's January 31, 2008 Statement of Position and Recommendation on Tobacco Screening, the Committee will screen publicly-traded domestic and foreign companies engaged in the manufacture of tobacco and tobacco products.

Periodically, the ACSRI considers divestment proposals from the Columbia community and makes recommendations to the Trustee Subcommittee on Shareholder Responsibility of the Committee on Finance. In the Spring Term 2020, the ACSRI began consideration of a fossil fuel divestment proposal submitted by the student group, Extinction Rebellion. It continued work on this proposal over the summer of 2020 and completed its consideration of the matter this November with a divestment-related recommendation submitted to President Bollinger and the University Trustees. (See more information on the [ACSRI website](#)).

In addition, the ACSRI has formed a subcommittee to consider ways for involvement in the national conversation on racial justice issues.

Lastly, the Committee strives to hone its expertise and proficiency on matters identified on its agenda as well as new issues that may arise. To help develop sound and consistent positions, the Committee may invite outside experts and members of the University community with expertise in selected areas to address the Committee and further educate members on relevant issues.