THE COVID-19 SEX-DISAGGREGATED DATA TRACKER

NOVEMBER UPDATE REPORT

Findings of the November Update

At the time of this upload, we are tracking the availability of data for 205 countries - which together account for 99.9% of all COVID-19 confirmed cases and reported deaths globally.

The Tracker looks for sex-disaggregated data along the clinical pathway, which includes testing, vaccinations (at least one dose and fully vaccinated), confirmed cases, confirmed cases among healthcare workers, hospitalisations, ICU admissions and deaths. It also collects sex- and age-disaggregated data on cases, deaths and vaccinations.

In addition to capturing publicly available sex-disaggregated COVID-19 data, as of this month, the tracker has integrated additional sex-disaggregated data from the the WHO COVID-19 Detailed Surveillance Data Dashboard and the WHO Coronavirus Vaccination Dashboard, leading to a substantial increase in number of countries reporting sex-disaggregated data since last month (October 2021), with 57% of countries providing sex-disaggregated data for cases and/or deaths in the past month, and 41% of countries reporting on both cases and deaths in the past month. The integrated data are discussed in further detail below.

KEY TAKEAWAYS FROM THE LATEST DATA UPLOAD

1. This month sees the integration of sex-disaggregated data from the WHO Dashboards and the WHO Coronavirus Vaccination Dashboard for the first time. This has lead to an increase in the number of countries reporting sex-disaggregated data, with 57% of countries providing sex-disaggregated data for cases and/or deaths in the past month, and 41% of countries reporting on both cases and deaths in the past month.

2. Last month, the sex of 6 in 10 cases and 7 in 10 deaths was known. With the integration of this new data, the sex of 7 in 10 cases and 7 in 10 deaths globally is known, reflecting a slight increase in the proportion of cases where the sex is known but no increase in deaths.

3. This new data has not changed the sex differences seen along the clinical pathway, which continues to show that men are less likely to be tested (44%), make up a roughly equal number of cases (51%), but a greater share of hospitalisations (55%), ICU admissions (63%) and deaths (57%).

Integrating WHO Sex-Disaggregated Data to the Tracker

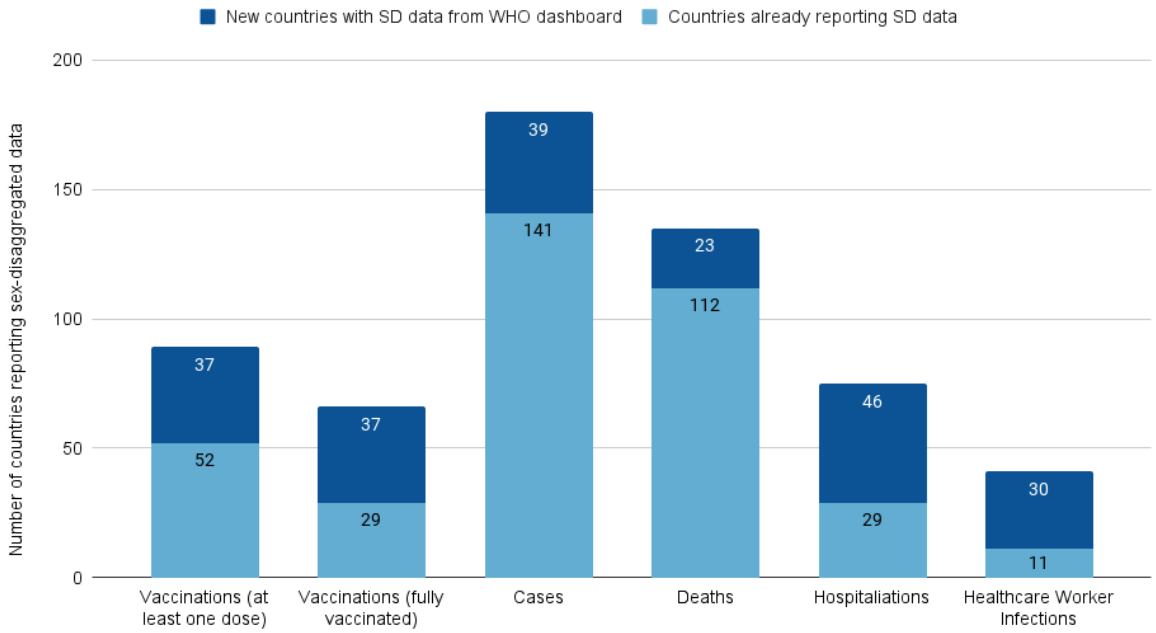
In November, the Tracker begun integrating sex-disaggregated data available on the WHO COVID-19 surveillance and WHO coronavirus vaccination dashboards for countries where public reporting could not previously be found, or where more comprehensive data was available from the WHO dashboard. This increased the number of countries with sex-disaggregated data available on our dashboard across vaccination indicators, cases, hospitalisations, deaths and infections among healthcare workers (see Figure 1).

New data from countries where no sex-disaggregated data on that indicator had previously been found was added for 37 countries on vaccinations, 39 on cases, 23 on deaths, 46 on hospitalisations and 30 on infections among healthcare workers (see Figure 1).

For countries where we had previously found data, but more comprehensive data was available from the WHO dashboard, data was updated for 5 countries on vaccinations, 22 on cases, 13 on deaths, 3 on hospitalisations and one on infections among healthcare workers.

Some countries were excluded from integration into our dashboard for reporting fewer than 20 instances on a particular indicator (one country was excluded for cases, three for deaths, 12 for hospitalisations, and 11 for infections among healthcare workers).

Figure 1. Number of countries reporting sex-disaggregated data by indicator in November 2021 after integration of sex-disaggregated data from WHO dashboards



Global availability of sex-disaggregated data

Globally, as of mid-November, the sex of roughly 7 in 10 cases (72%) and roughly 7 in 10 deaths (72%) from COVID-19 was known. This represents a modest improvement from October 2021, when the sex of roughly 6 in 10 cases and 7 in 10 deaths was known (Figs 2 and 3). This improvement can likely be contributed to the inclusion of sex-disaggregated data made available from the WHO dashboards (see Figure 1) which was integrated for the first time this month.

Fig 2. Number of Global COVID-19 Cases where the Sex is Known, January 2021 - November 2021

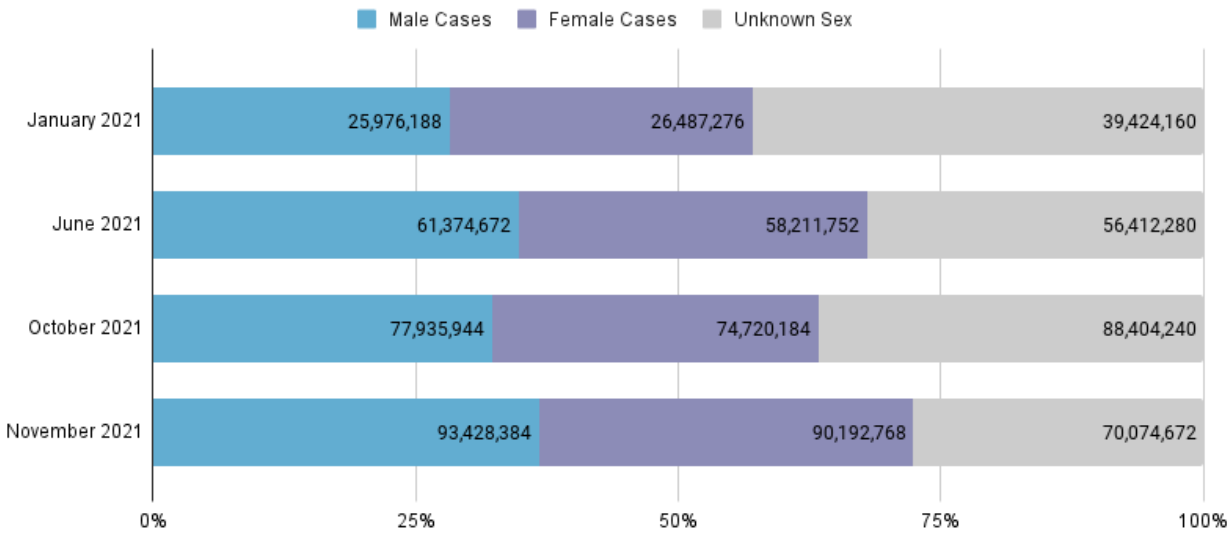
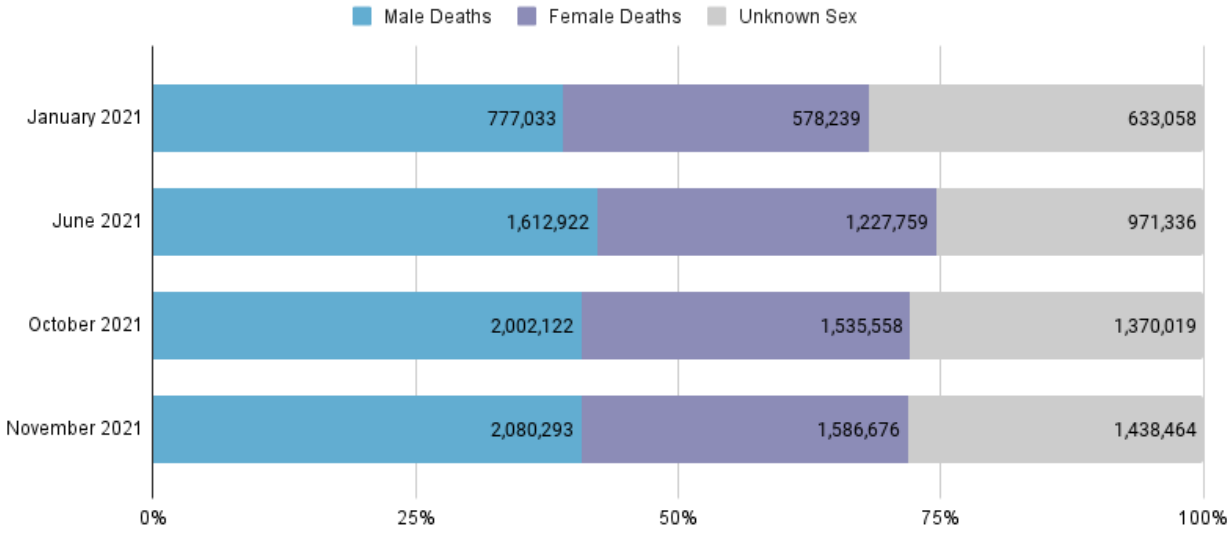


Fig 3. Number of Global COVID-19 Deaths where the Sex is Known, January 2021 - November 2021



Gaps in the availability of nationally-reported sex-disaggregated data on COVID-19

At the time of this upload, across the 10 countries with the highest number of confirmed cases globally, there are four countries with notable gaps in the availability of sex-disaggregated data (Table 1).

Sex disaggregated data on cases for Russia has only been available via reports to the WHO, however this data is very incomplete. No sex disaggregated data on deaths for Russia have been found. We have not been able to locate sex-disaggregated data for either cases or deaths for Turkey since October 2020 but were able to obtain more recent data from the WHO. We have not been able to obtain sex disaggregated case data for Brazil since December 2020 but were able to obtain more recent data from the WHO.

India last updated their sex-disaggregated case data by sex in May 2021 and sex-disaggregated death data in May 2020. We have not been able to locate sex disaggregated data for cases or deaths for Iran since March 2020.

Table 1: Availability of Sex-Disaggregated Data within the Past Month amongst Countries with the Highest COVID-19 Caseload[1] as of this Update, Oct 2021

Date indicates the last month where sex-disaggregated data was located for that country.

Country	Cases	Deaths
USA	Nov 2021	Nov 2021
India	May 2021	May 2020
Brazil	Aug 2021	Nov 2021
The United Kingdom [2]	Oct 2021	Oct 2021
Russia	Feb 2021	Never
Turkey	Aug 2021	Aug 2021
France	Nov 2021	Nov 2021
Iran	March 2020	March 2020
Argentina	Nov 2021	Oct 2021
Germany	Oct 2021	Oct 2021

Reported in past month

Last reported over a month ago

Never reported

[1] According to the World Health Organization, https://covid19.who.int/ as of 16 November 2021.

[2] Data for the United Kingdom is reported separately for England, Northern Ireland, Scotland and Wales in the COVID-19 Sex-Disaggregated Data Tracker. All are currently reporting sex-disaggregated data on cases and deaths.

Availability of sex-disaggregated data along the clinical pathway

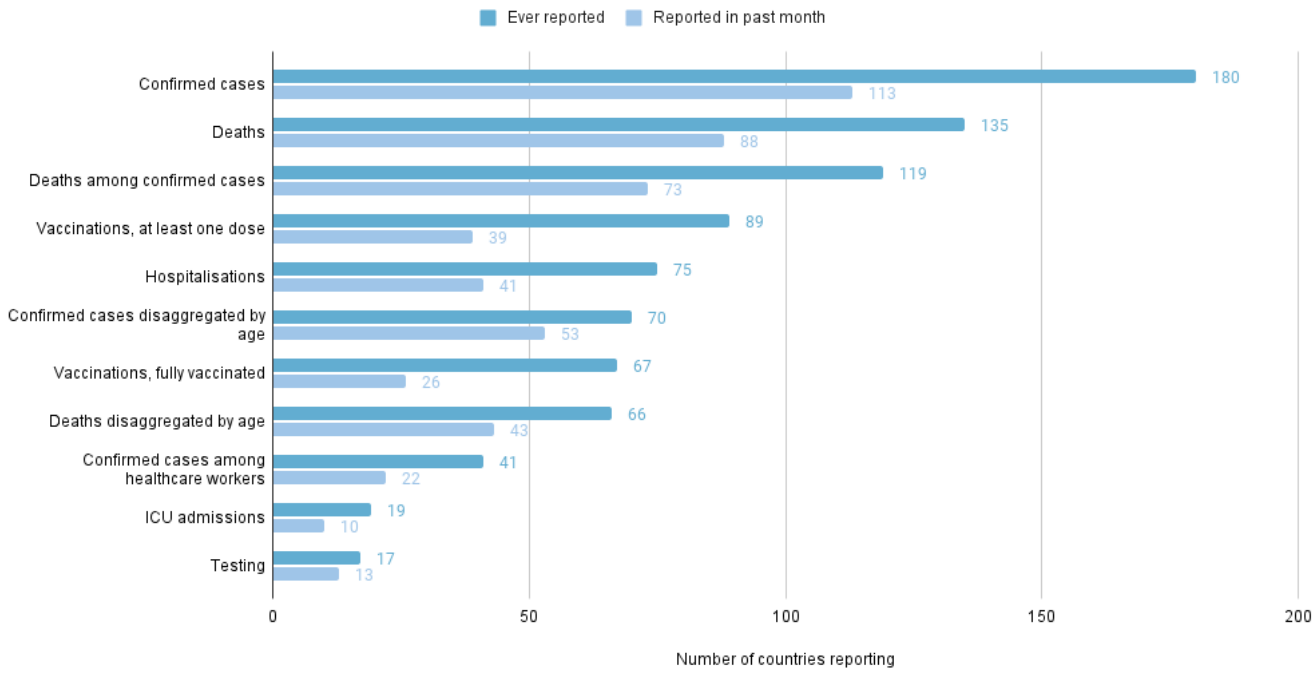
With the inclusion of data from the WHO Detailed COVID-19 Surveillance Data Dashboard and the WHO Coronavirus Vaccination Dashboard, the number of countries reporting sex-disaggregated data increased for vaccinations, cases, deaths, hospitalisations and healthcare workers (see Figure 1). However, these data come from reports made directly to the WHO; the number of countries reporting sex-disaggregated data publicly has declined since September 2020.

Countries report sex-disaggregated data inconsistently and incompletely across all key indicators. A notably smaller proportion of countries reported sex-disaggregated data in the past month than have ever reported such data over the course of the pandemic (Figure 4).

In the past month, 55% (113) of the 205 countries being tracked reported sex-disaggregated case data and 47% (88) reported sex-disaggregated death data, reflecting an improvement from earlier reports due to the inclusion of data from WHO. 67 countries that previously reported case data by sex have not updated their data in over a month (an increase from 49 last month due to the inclusion of historical data from the WHO dashboard) and 21 of these countries have not updated their sex-disaggregated data in 2021. As in September, 47 countries that previously reported death data by sex have not updated their data in over a month and 14 of these countries have not updated sex-disaggregated data in 2021.

The majority of countries do not report on other indicators if they are not reporting on cases or deaths. However, seven countries are currently reporting sex-disaggregated data for vaccinations but not on cases or deaths.

Figure 4. Number of Countries Reporting Sex-Disaggregated Data by Indicator, Ever and in the Past Month, across 205 Countries as of November 2021



Global gender differences along the COVID-19 clinical pathway

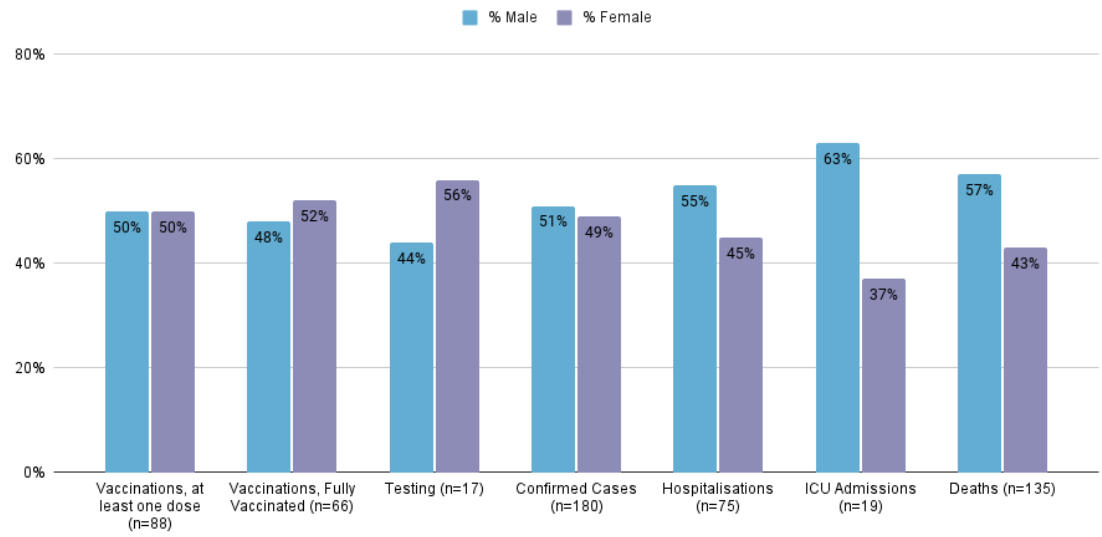
Figure 5 shows the distribution of testing, confirmed cases, hospitalisations, ICU admissions and deaths in men and women across all available global data.

Globally, these proportions have remained fairly constant over time. Even with the addition of new data on vaccinations, cases, hospitalisations and deaths from WHO data, these gender differences have remained stable.

This distribution varies along the pathway, with more women than men getting tested for COVID-19 and more women than men having received two doses of COVID-19 vaccines. Men and women accounting for similar proportions of individuals receiving at least one vaccination dose and of confirmed cases. The gender gap grows further along the pathway, with men accounting for a higher proportion of hospitalisations (55%), ICU admissions (63%) and deaths (57%) (Figure 5).

Proportions vary widely by country, but for individual countries these proportions are also largely consistent through time. Country-data on each of these variables can be explored here.

Figure 5. Gender differences along the COVID-19 clinical pathway, as of November 2021



COVID-19 Vaccinations: Dose definitions

'**At least one dose**' refers to individuals who have received at least one dose of a COVID-19 vaccine. This includes individuals who have received one dose of a two dose vaccine as well as individuals who have received a single dose vaccine. **Fully vaccinated** refers to individuals who have received all doses of required of their vaccine. This includes individuals who have received two doses of a two dose vaccine and individuals who have received a single dose of a single dose vaccine. Fully vaccinated individuals are counted in both 'at least one dose' and 'fully vaccinated'.

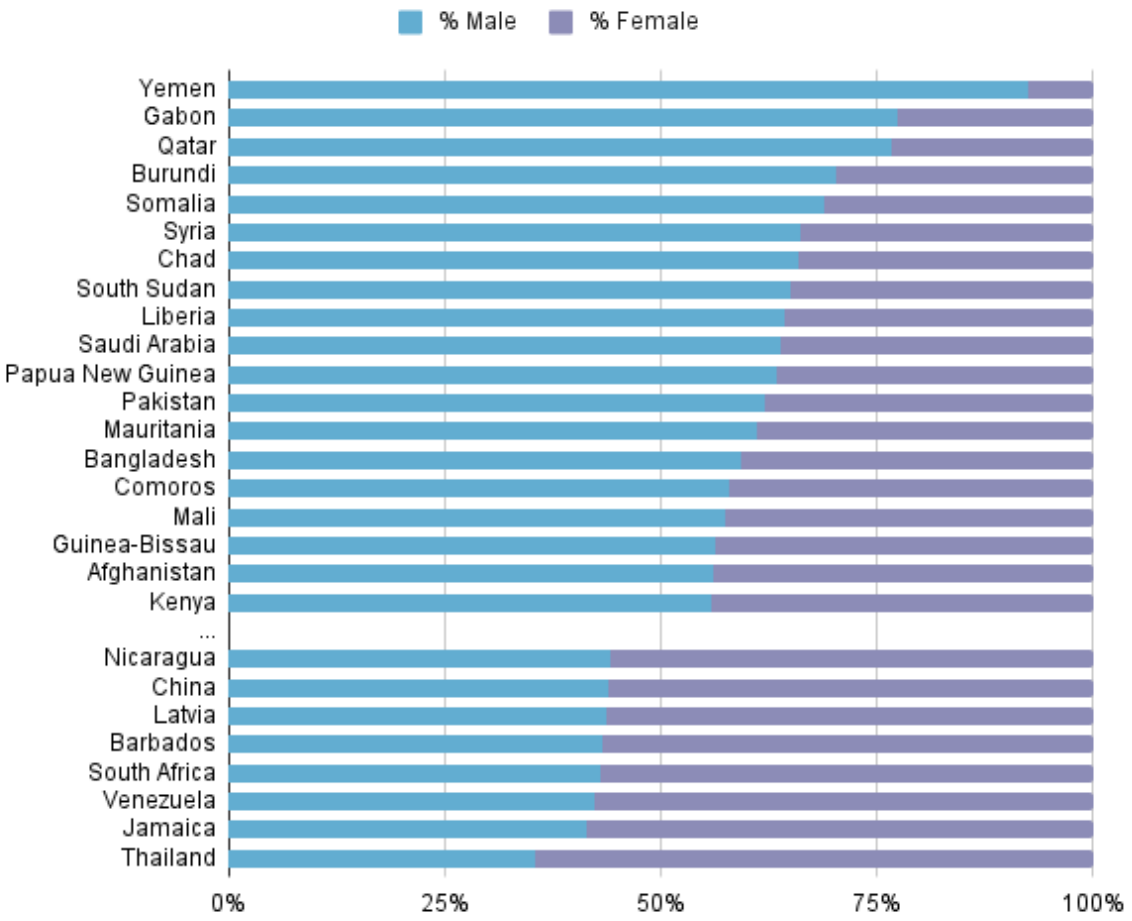
Gender differences in COVID-19 vaccinations

Globally, with the integration of data from the WHO Coronavirus Vaccination Dashboard, 89 countries have provided the sex breakdown of individuals receiving COVID-19 vaccinations as of mid-November. Just two countries (India and Austria) report vaccinations among non-binary people.

Sex-disaggregated data on individuals receiving at least one dose of a COVID-19 vaccine

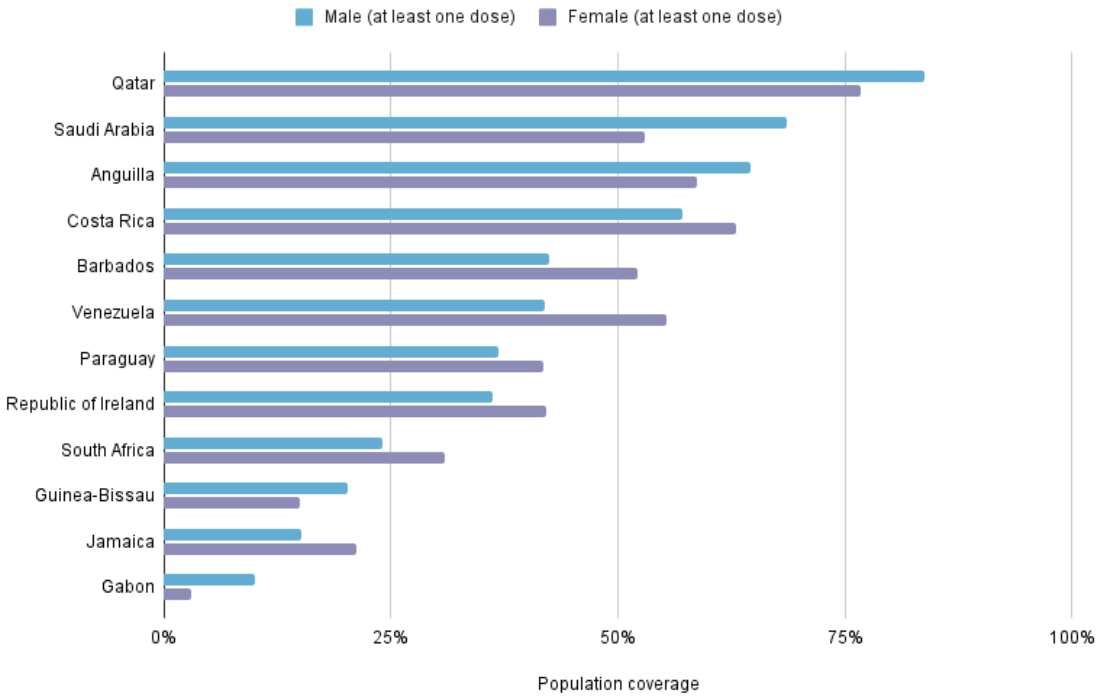
Overall among the 89 countries with sex-disaggregated data on individuals who received at least one dose of a COVID-19 vaccine, equal numbers of men and women were vaccinated (50% male, 50% female). Most countries (63) reported 55%-45% of recipients of at least one dose of the vaccine being male. However, there were notable outliers, for example Yemen reports 93% of individuals with at least one dose being male while Thailand reports 36% were male. Countries reporting unequal gender distributions of individuals receiving at least one vaccination dose are shown in Figure 6. The full country breakdown of data on vaccination distribution can be viewed here.

Figure 6. Vaccine Distribution, at least one dose, for Countries Reporting Unequal Distributions by Sex, November 2021



For most countries providing the sex distribution for individuals who have received at least one dose, the population coverage is nearly equal across the sexes. However, there are notable outliers, with five countries reporting coverage among males more than 5% higher than among women. Additionally, seven countries report coverage more than 5% higher among women than men. Figure 7 shows countries where population coverage per 100 is 5% or more different between the sexes.

Figure 7. Vaccine Population Coverage, at Least One Dose, for Countries Reporting Vaccine Coverage Different by at Least 5% by Sex, November 2021

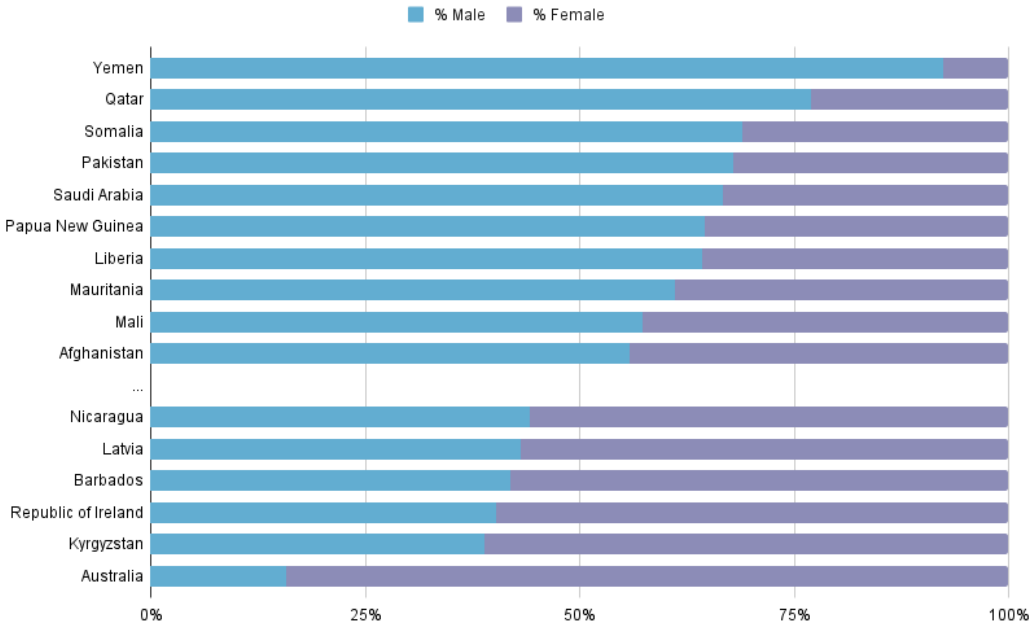


Sex-disaggregated data on fully vaccinated individuals

Of the 89 countries providing vaccination data, 67 provide breakdowns of fully vaccinated individuals by sex. Across these countries, 48% of fully vaccinated individuals are male and 52% are female.

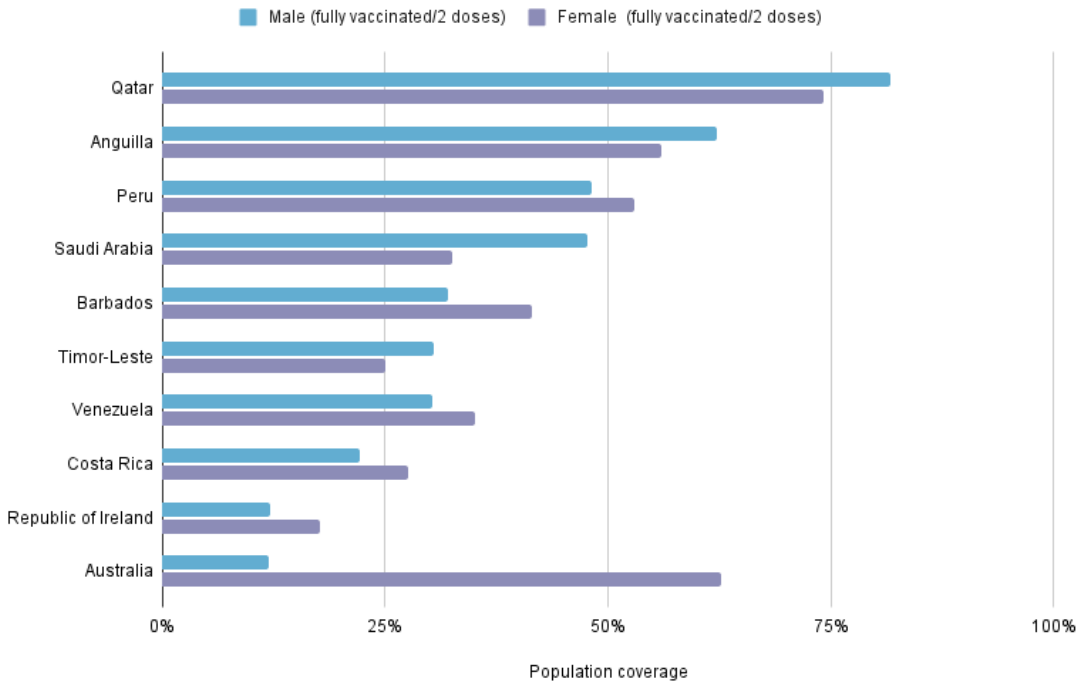
The vast majority of countries report a nearly equal distribution, with 76% of countries (51/67) reporting distributions within 10% of each other. There are, however, some extreme outliers on both ends of the distribution, from Yemen, where 92% of fully vaccinated individuals are male (a similar distribution for individuals receiving at least one dose), to Australia, where 84% of fully vaccinated individuals are female (although we see a far more equal split of individuals receiving at least one dose; 51% are female). Figure 8 presents the distribution of fully vaccinated individuals by sex for countries reporting an unequal distribution.

Figure 8. Vaccine Distribution, fully vaccinated/two doses, for Countries Reporting Unequal Distributions by Sex, November 2021



Looking at population coverage of full vaccination, 91% of countries (61 out of 67) have similar coverage for men and women (within 5%). Saudi Arabia, Qatar and Angilla, report higher full vaccination coverage among men than women and the Republic of Ireland, Barbados and Australia report higher full vaccination coverage among women (Figure 9).

Figure 9. Vaccine Population Coverage, Fully Vaccinated, for Countries Reporting Vaccine Coverage Different by at Least 5% by Sex, November 2021



Long Covid: Sex-disaggregated data

The Tracker has been searching for data on the sex distribution of 'Long COVID' cases, or other indicators tracking extended or unresolved COVID-19 infections by sex. Data on Long COVID, or similarly defined ailments, have only been found reportedly publicly by sex for two countries: the United Kingdom and Sweden (although there may however be further data that we have not yet found).

Sweden provides regular reports on individuals who have received a post-covid illness diagnosis and individuals diagnosed with multisystemic inflammatory condition associated with COVID by sex. The United Kingdom produces regular reports that include an estimate of individuals in the United Kingdom living with self-reported long COVID within the past four weeks, in the past 12 weeks and within the past 12 months by sex. Details on case definitions and data collection methods can be found in the respective sources. Long COVID reported in October 2021 is summarised in the table below. Due to the lack of a standard definition for 'long covid' and the relative rarity of this data, it is not yet being integrated into our online dashboard.

Table 2. Long COVID Data for Men and Women for Sweden and United Kingdom

Country	Date	Indicator	Number of males	Number of females	% Male	% Female
Sweden	13-Oct-2021	Individuals with post-covid diagnosis (U09.9 or Z86.1/U08.9)	2577	2652	49%	51%
	7-Sep-2021	Individuals with multisystemic inflammatory condition associated with COVID	305	183	63%	38%
United Kingdom	7-Oct-2021	Estimated number of individuals living with self-reported long COVID in four weeks prior to date	459	627	42%	58%
		Estimated number of individuals living with self-reported long COVID who had initial COVID infection at least 12 weeks previously, in four weeks prior to date	343	489	41%	59%
		Estimated number of individuals living with self-reported long COVID in four weeks prior to date and who reported initial COVID infection at least 12 months ago	173	232	43%	57%

About the COVID-19 Sex-Disaggregated Data Tracker

The COVID-19 Sex-Disaggregated Data Tracker is the world's largest database of sex-disaggregated data on COVID-19 health outcomes. The Tracker currently collects sex-disaggregated data on vaccinations, testing, confirmed cases (including among health workers), hospitalisations, ICU admissions and deaths, as well as by age for selected indicators. It is also tracking the availability of data disaggregated by other social and demographic characteristics as well as data on pre-existing comorbidities. Data is collected directly from official national sources, including ministry of health websites, national statistics sites, death registers and government social media accounts. The Tracker is updated every month.

About the Sex, Gender and COVID-19 Project

The Sex, Gender and COVID-19 Project is a partnership of Global Health 50/50, the International Center for Research on Women and the African Population and Health Research Center. Together, these partners are investigating the roles sex and gender are playing in the outbreak, building the evidence base of what works to tackle gender disparities in COVID-19 health outcomes, and advocating for effective gender-responsive approaches to COVID-19.

Learn more about sex, gender and COVID-19 and explore the Sex-Disaggregated Data Tracker here: https://globalhealth5050.org/the-sex-gender-and-covid-19-project/

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If you are aware of countries that are reporting data that we have not been able to locate or collect, we would be grateful if you could make us aware by emailing us at info@globalhealth5050.org and sharing a link to where the data can be found.

Engage with us: @Globalhlth5050 @APHRC @ICRW