

THE COVID-19 SEX-DISAGGREGATED DATA TRACKER

MAY UPDATE REPORT

Findings of the May Update

At the time of this upload, we are tracking the availability of data for 198 countries - which together account for 99.9% of all COVID-19 confirmed cases and reported deaths globally.

At the global level, as of mid-May 2021, 52% of countries tracked provided sex-disaggregated data for cases and/or deaths in the past month. Data availability varies by WHO Region, as shown in this report (Fig. 3,4,6). The Report also examines gender differences in outcomes along the clinical pathway by WHO Region and World Bank Income Level.

Globally, the sex of almost 50 million cases and almost 1 million deaths is unknown. The number of deaths with unknown sex has more than doubled since December 2020.

The Tracker now has vaccination data across 39 countries. This report includes data on vaccination distribution and coverage (at least one dose and fully vaccinated), as well as as well as age- and sex-disaggregated vaccination data.

KEY TAKEAWAYS FROM THE LATEST DATA UPLOAD

- 1 In 2 (51%) countries reported sex-disaggregated case data in the past month. Just 37% reported death data by sex, and fewer than 1 in 5 countries (18%) reported vaccination data by sex in the past month.
- 2 The availability of sex-disaggregated data varies by region and indicator. Last month, the sex of the majority of cases in the SEARO region were unknown, but this month it has the highest proportion of cases where the sex is known (97%), with India having resumed reporting of this data. Gaps across other regions and indicators could similarly be filled if countries begin or resume reporting sex-disaggregated data.
- 3 Across WHO regions, men continue to contribute a higher proportion of hospitalisations, ICU admissions and deaths, with the exception of the AFRO region. However this divergence is being driven by data from South Africa, without which the AFRO region mirrors the global pattern ([see regional brief](#)).

Global availability of sex-disaggregated data

The proportion of total cases and deaths where sex is known is roughly 7 out of 10 cases and 7 out of 10 deaths in mid-May, up from 5 out of 10 cases and 7 out of 10 deaths in December 2020 (see Figures 1 and 2). However globally, the number of countries reporting sex-disaggregated data has been declining since August 2020.

There remains an absence of data on non-binary and transgender populations. One country (Austria) is reporting vaccination data that includes non-binary populations, but otherwise we have not located any national-level COVID-19 surveillance data on non-binary or transgender populations. Two states in India (Tamil Nadu and Haryana) have reported data on cases and deaths among non-binary populations, but just one is currently reporting.

Fig 1. Number of Global COVID-19 Cases where the Sex is Known, December 2020 - May 2021

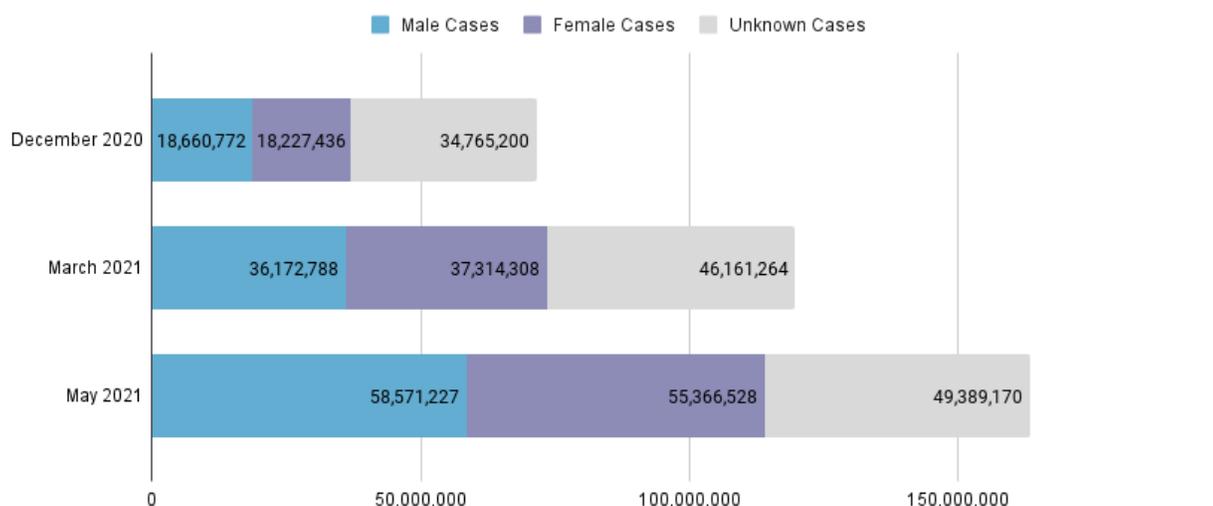
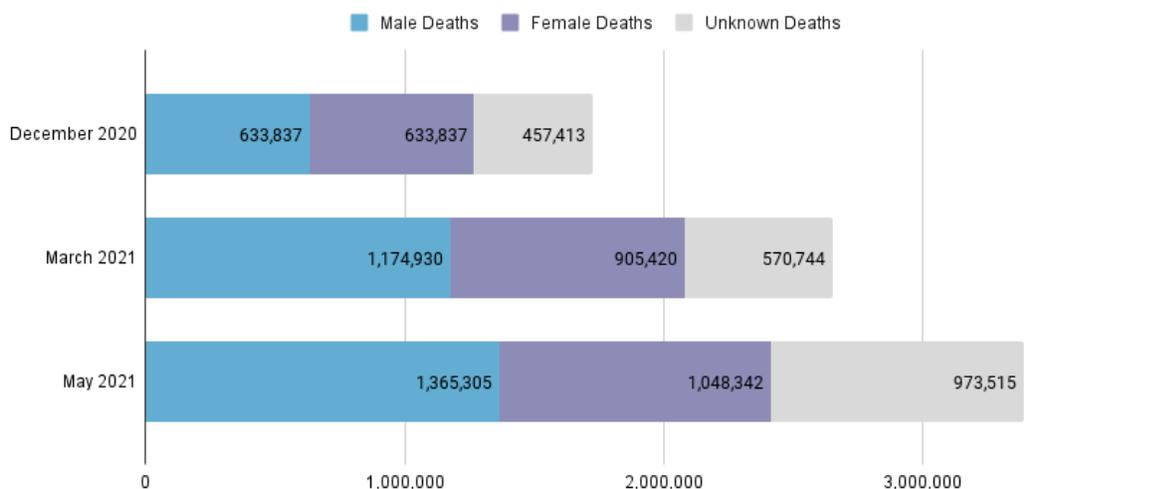


Fig 2. Number of Global COVID-19 Deaths where the Sex is Known, December 2020 - May 2021



Regional availability of sex-disaggregated data

Gaps in sex-disaggregated data for cases and death vary across regions. Looking at WHO regions, most cases with unknown sex are in AMRO and EMRO, which also contribute the majority of global cases.

EMRO, however, has the largest proportion of cases with unknown sex compared to other regions (Figure 3). For deaths EMRO and SEARO are contributing large numbers of deaths with unknown sex, particularly relative to their contributions to total global deaths (Figure 4). SEARO had a very large proportion of cases with unknown sex in April that has been filled in due to India's resumed reporting of cases by sex in May. Were India to also resume reporting deaths by sex, SEARO would see a similar reduction in the deaths with unknown sex.

WHO Regions

- African Region (AFRO)
- Region of the Americas (AMRO)
- South-East Asian Region (SEARO)
- European Region (EURO)
- Eastern Mediterranean Region (EMRO)
- Western Pacific Region (WPRO)

Fig 3. Proportion of COVID-19 Cases where the Sex is Known by WHO Region, May 2021

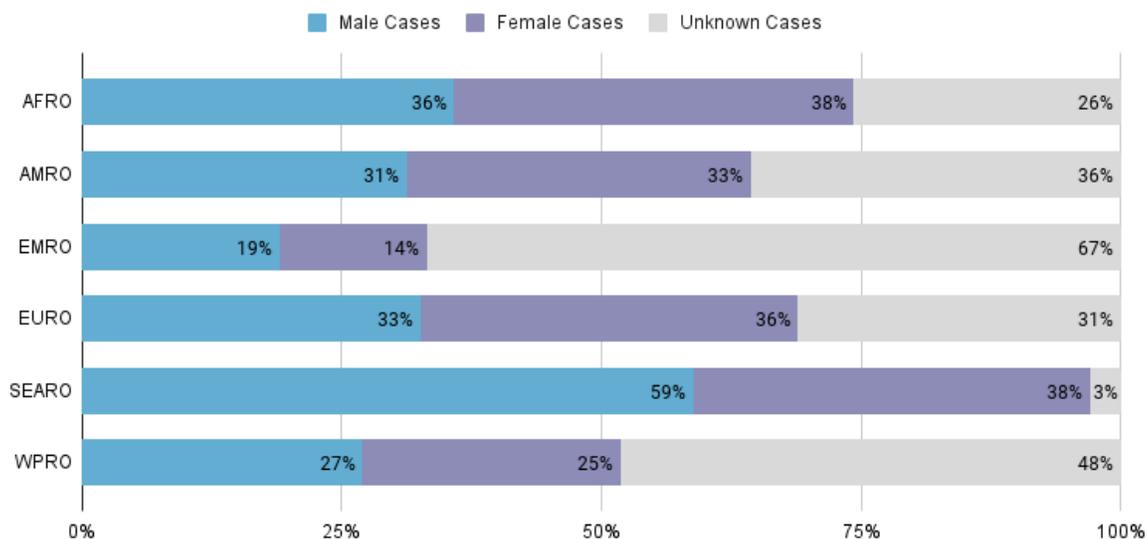
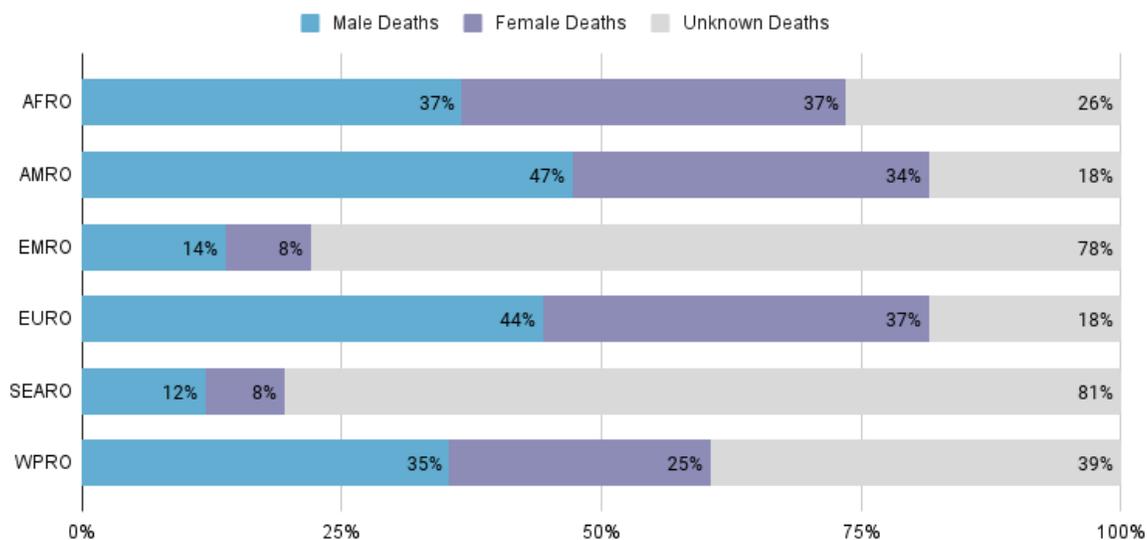


Fig 4. Proportion of COVID-19 Deaths where the Sex is Known by WHO Region, May 2021



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).

Russia has never reported any sex disaggregated data on cases or deaths that we have been able to locate. India updated their sex-disaggregated case data by sex in May 2021 but we have not been able to locate sex disaggregated data for deaths since May 2020. We have not been able to locate sex-disaggregated data for either cases or deaths for Turkey since October 2020. We have not been able to obtain sex disaggregated case data for Brazil since December 2020 and deaths since February 2021.

Table 1. Availability of Sex-Disaggregated Data within the Past Month amongst Countries with the Highest COVID-19 Caseload as of this Update¹

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

Country	Cases	Deaths
USA	Reporting	Reporting
India	Reporting	May 2020
Brazil	Dec 2020	Feb 2021
France	Reporting	Reporting
Turkey	Oct 2020	Oct 2020
Russia	Never	Never
The United Kingdom ²	Reporting	Reporting
Italy	Reporting	Reporting
Spain	Reporting	Reporting
Germany	Reporting	Reporting

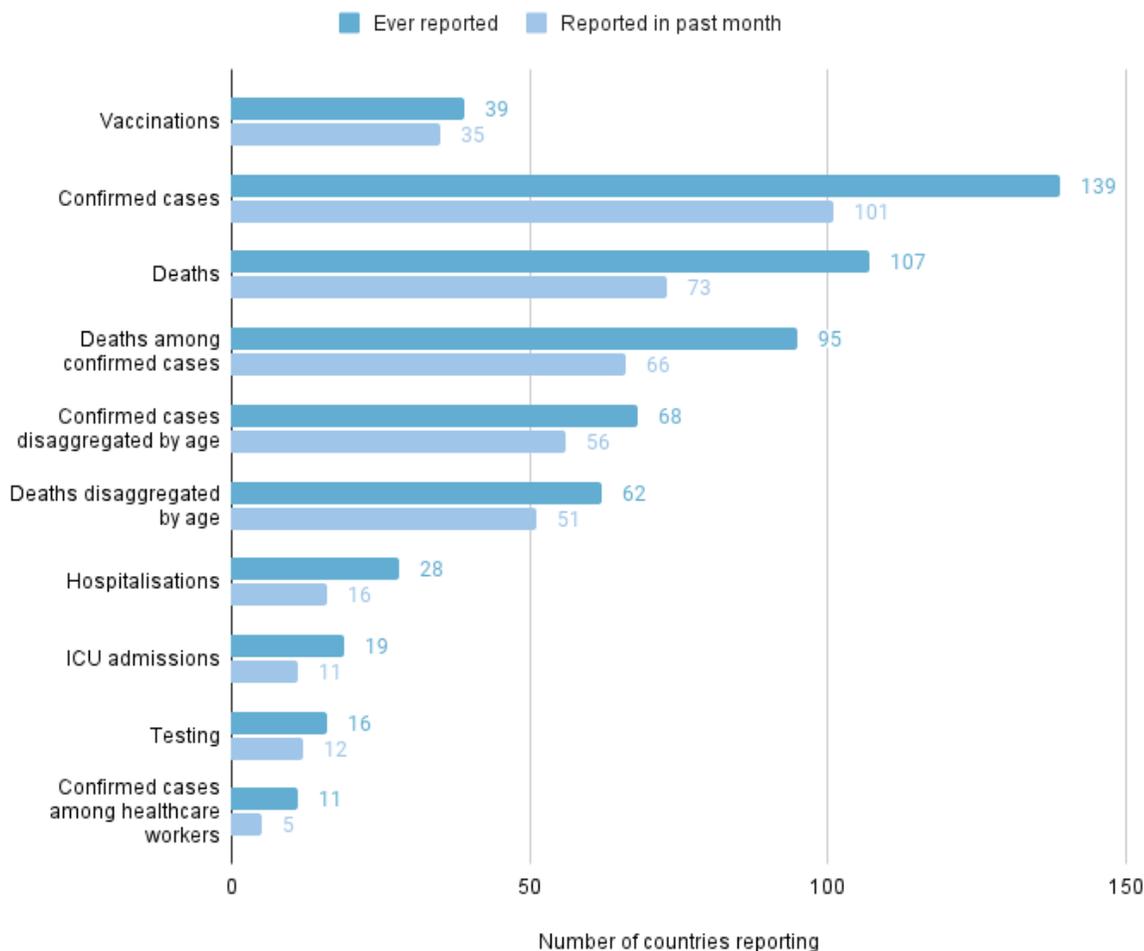
Countries report sex-disaggregated data inconsistently and incompletely across all key indicators. A notably smaller proportion of countries reported sex-disaggregated data in the past month than have ever reported such data over the course of the pandemic (Figure 5).

In the past month, 51% (101) of the 198 countries being tracked reported sex-disaggregated case data and 37% (73) reported sex-disaggregated death data, which was consistent with the proportion reporting in April. Thirty-eight countries that previously reported case data by sex have not updated their data in over a month and 32 of these countries have not updated their sex-disaggregated data at all in 2021. Thirty-four countries that previously reported death data by sex have not updated their data in over a month and 21 of these countries have not updated sex-disaggregated data in 2021.

¹ According to the World Health Organization, <https://covid19.who.int/>

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.

Fig 5. Number of Countries Reporting Sex-Disaggregated Data by Indicator, Ever and in the Past Month, across 198 Countries as of May 2021

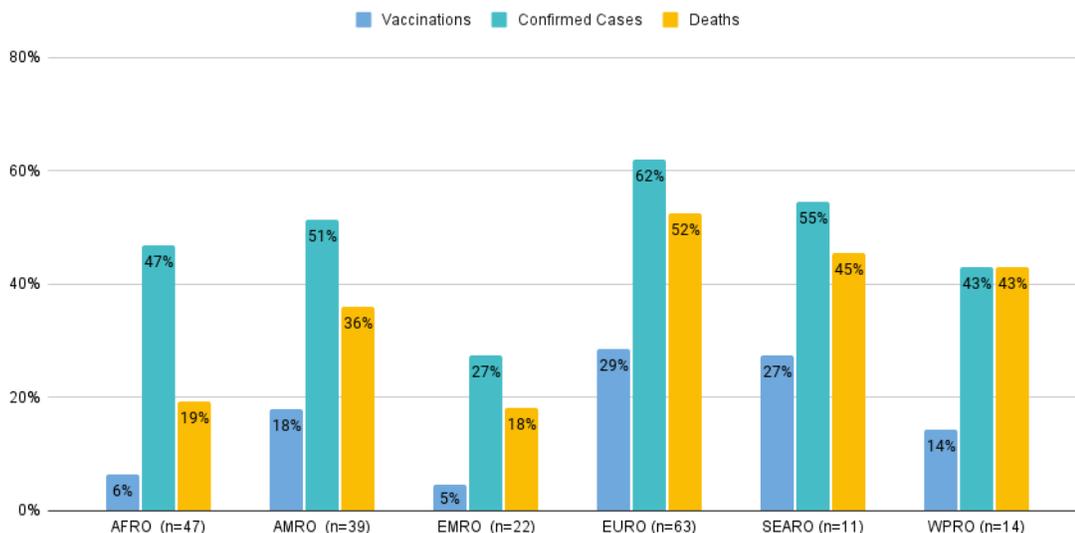


The full list of countries reporting on each variable and the corresponding data can be found [here](#).

Data availability across the indicators varies across WHO regions (Figure 6). Confirmed cases by sex is the most frequently available indicator available across regions, and even so less than half of countries in AFRO, EMRO and WPRO regions provided data on this indicator in the past month. EURO is the only region with more than half of countries reporting deaths by sex in the past month.

Other variables are not widely reported in any region, while three regions have no countries reporting ICU admissions by sex and only AMRO and EURO have any countries reporting confirmed cases among healthcare workers.

Fig 6. Proportion of Countries Reporting Sex-Disaggregated Data on vaccinations, cases and deaths, in the Past Month by WHO Region, as of May 2021

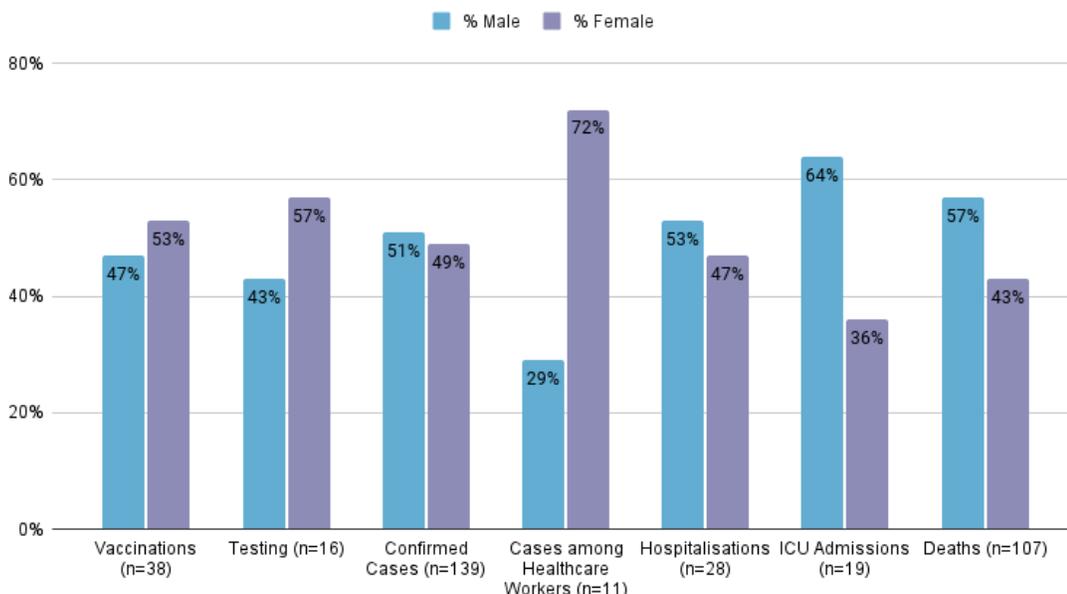


Global gender differences along the COVID-19 clinical pathway

Figure 7 shows the distribution of vaccinations, testing, confirmed cases, hospitalisations, ICU admissions and deaths in men and women across all available global data. This distribution varies along the pathway, with slightly more women than men getting vaccinated for COVID-19 and more women getting tested for COVID-19. Men and women account for similar numbers of confirmed cases, but the gender gap grows further along the pathway, with men accounting for a higher proportion of hospitalisations (53%), ICU admissions (64%) and deaths (57%).

These proportions have remained fairly stable over time. 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](#).

Fig 7. Gender differences along the COVID-19 clinical pathway



Gender Differences in the Clinical Pathway by WHO Region and Income Level

Despite variation in the proportion of female confirmed cases and testing across the regions, the pattern of higher hospitalisations, ICU admissions and deaths among males is found across all WHO Regions (Figure 8) with the exception of the AFRO region (which appears to be largely driven by data from South Africa, see [AFRO Regional Report](#)). All regions show a higher proportion of deaths among confirmed cases in males.

The pattern of higher hospitalisations, ICU admissions and deaths among males is replicated across all World Bank income groups (Figure 9).

Fig 8. Gender differences along the COVID-19 clinical pathway by WHO Region

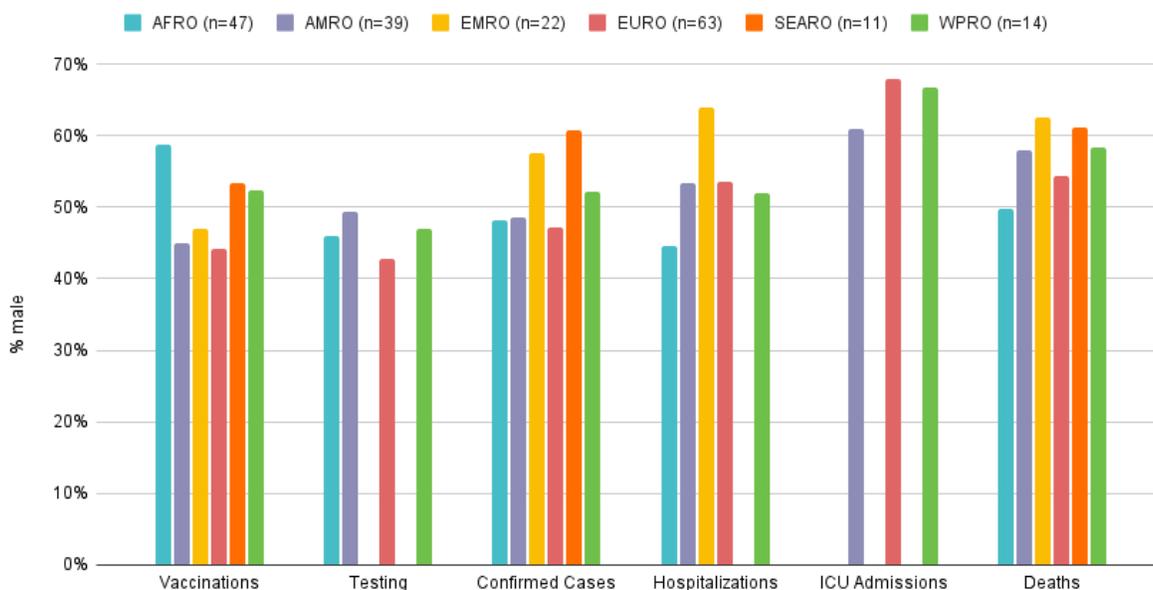
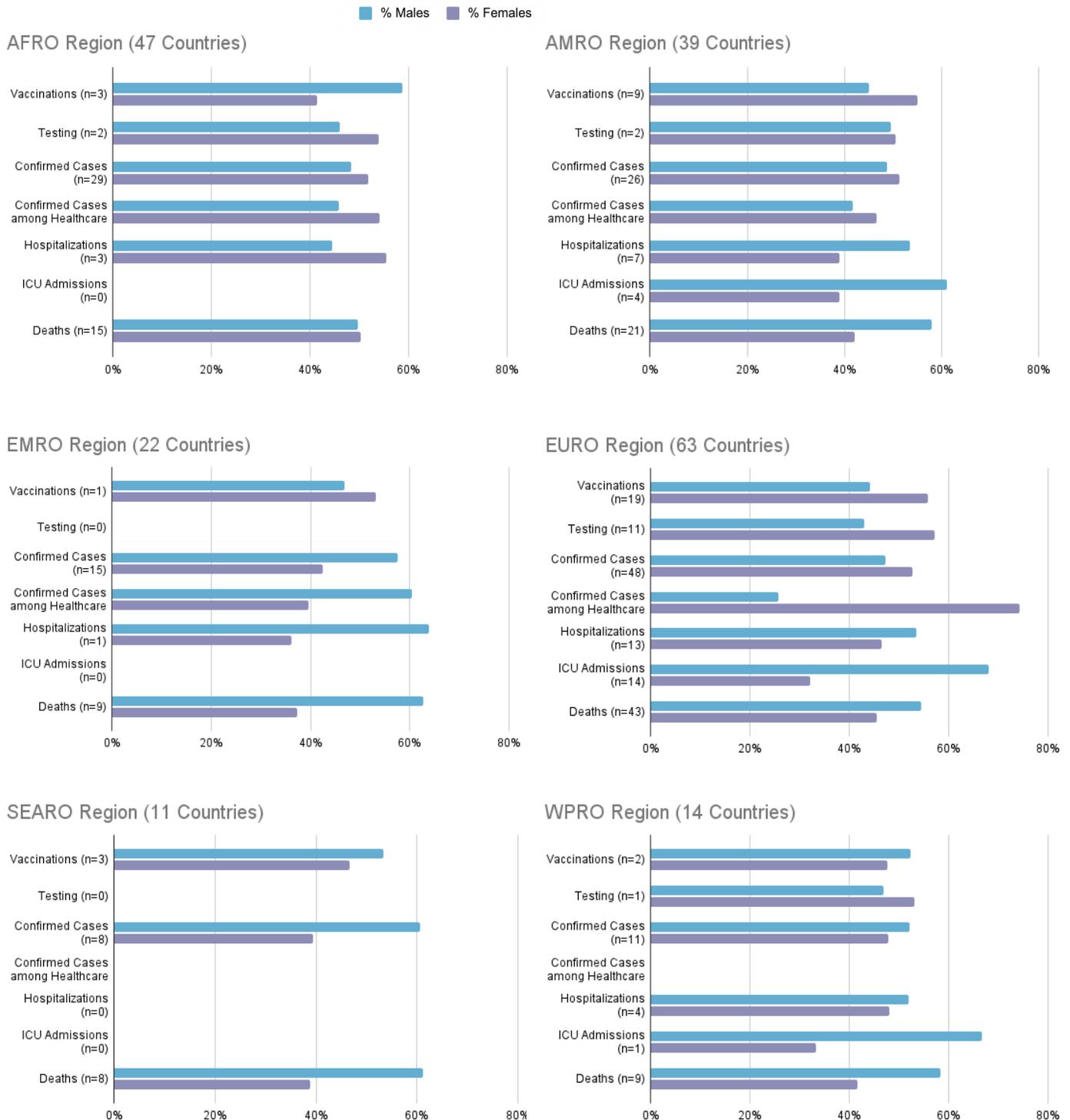


Fig 9. Gender differences along the COVID-19 clinical pathway by World Bank Income Level



Figure 10 shows regional differences along the COVID-19 clinical pathway. For example, AFRO, SEARO and WPRO regions have vaccinated more men than women, whereas in EURO, AMRO and EMRO, the opposite pattern is found. Confirmed cases among healthcare workers are higher among women than men in three of the four regions reporting. EMRO, however, reports a far higher proportion of confirmed cases among men healthcare workers compared to women.

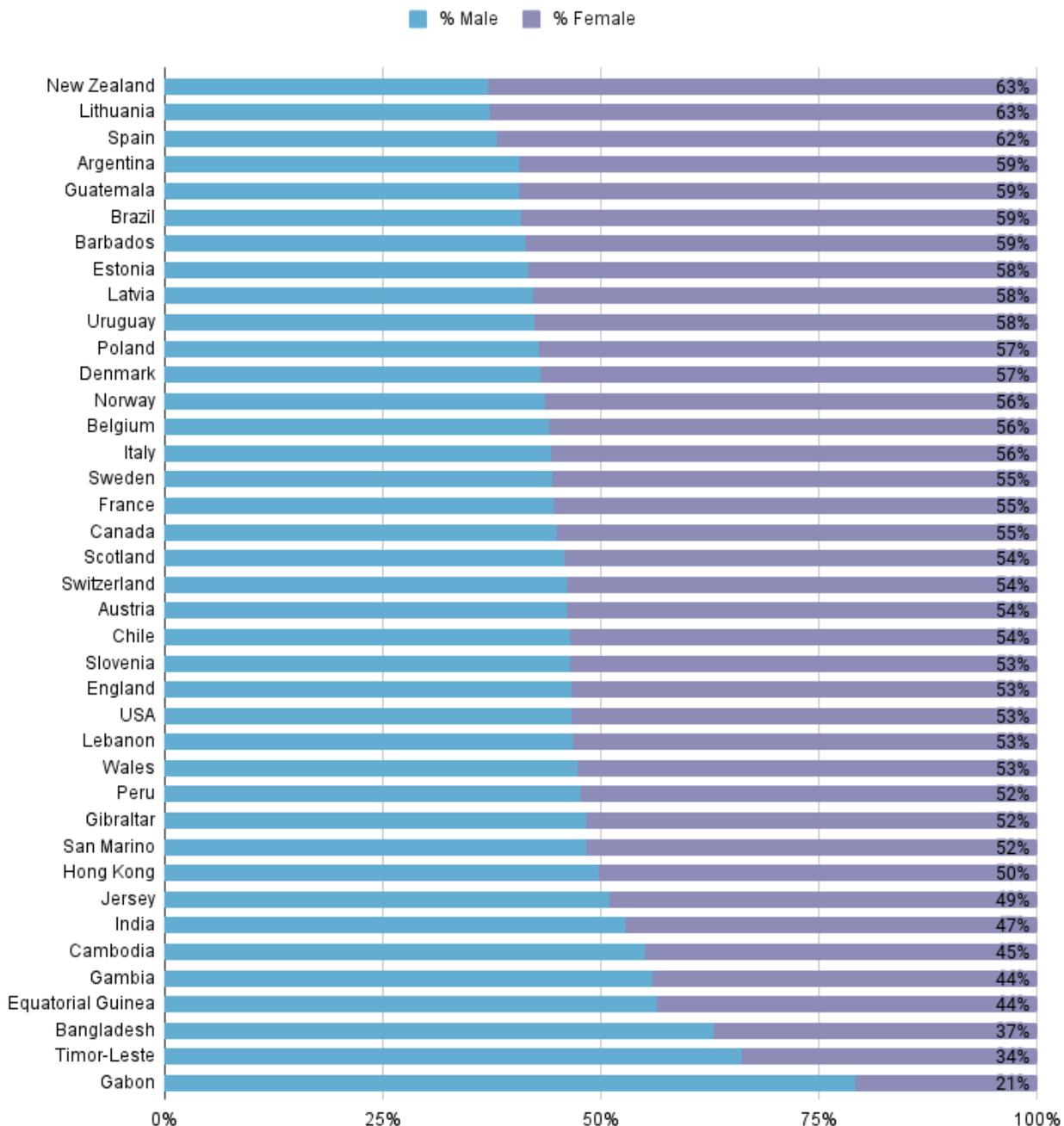
Fig 10. Gender differences along the COVID-19 clinical pathway for each WHO Region



Gender differences in COVID-19 vaccination distribution

Globally, 39 countries have reported on the sex breakdown of individuals receiving COVID-19 vaccinations. Three of those countries had not updated their data in the past month. Amongst those reporting, more women have received at least one dose than men with women making up 53% of individuals vaccinated with at least one dose globally. This was consistent with findings from our April update. However this varies across countries, ranging from New Zealand where 63% of vaccinated (at least one dose) are women to Gabon where women comprise 21% of individuals with at least one dose (Figure 11).

Fig 11. Vaccine Distribution, at least one dose, by Sex, May 2021

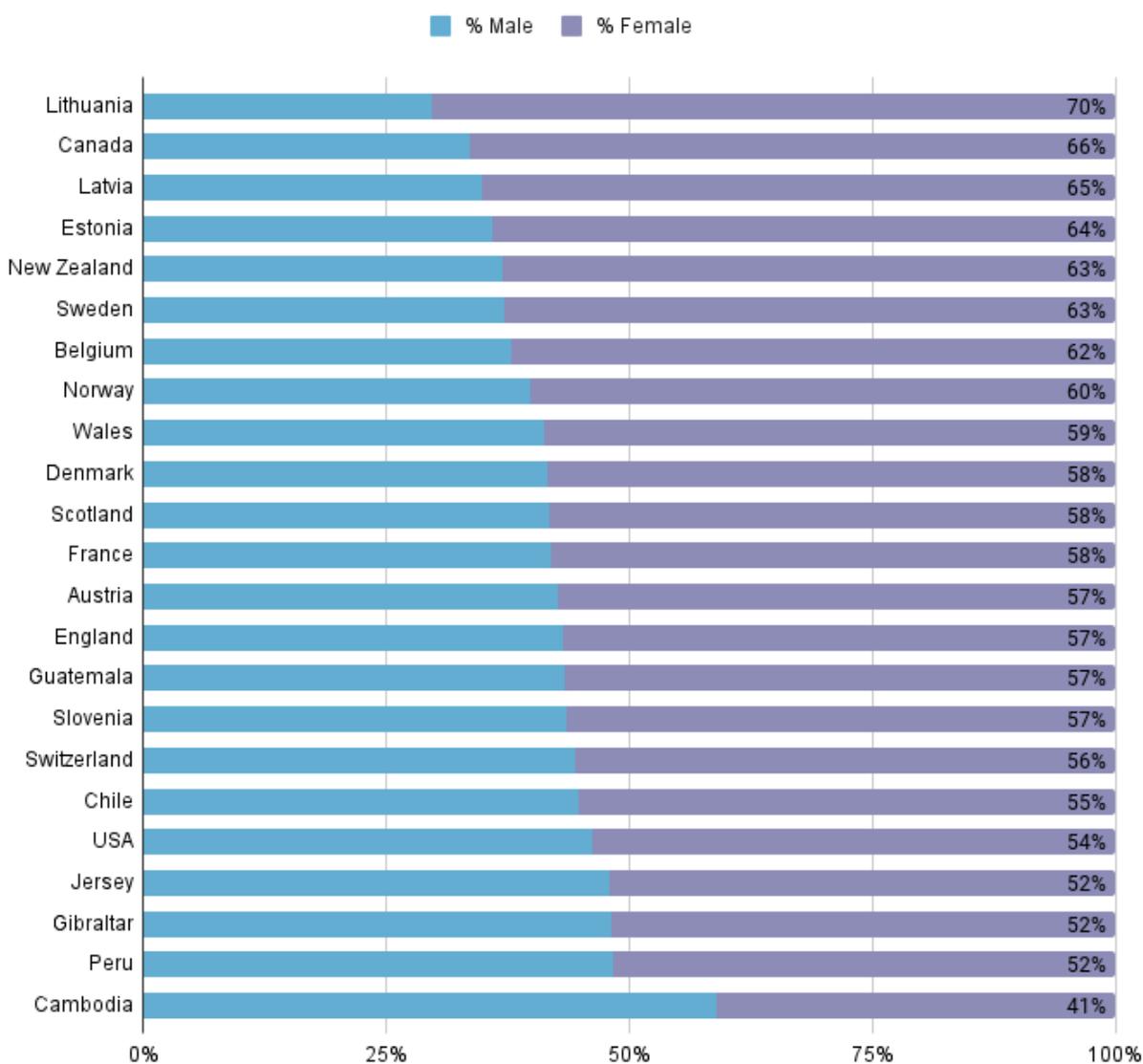


'At least one dose' refers to individuals who have received at least one dose of a COVID-19 vaccine. This includes individuals who have received one dose of a two dose vaccine as well as individuals who have received a single dose vaccine. Fully vaccinated refers to individuals who have received all 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'.

Of the 39 countries reporting vaccination data, 22 provide data on individuals who are fully vaccinated. More women than men have been fully vaccinated; 55% of fully vaccinated individuals for whom there is sex data were female. The proportion of fully vaccinated individuals who are female varies across these 22 countries, spanning 70% in Lithuania to 41% in Cambodia (Figure 12).

Only one country, Austria, is reporting vaccinations for individuals identifying as non-binary, reporting 6 having received at least one dose and three being fully vaccinated.

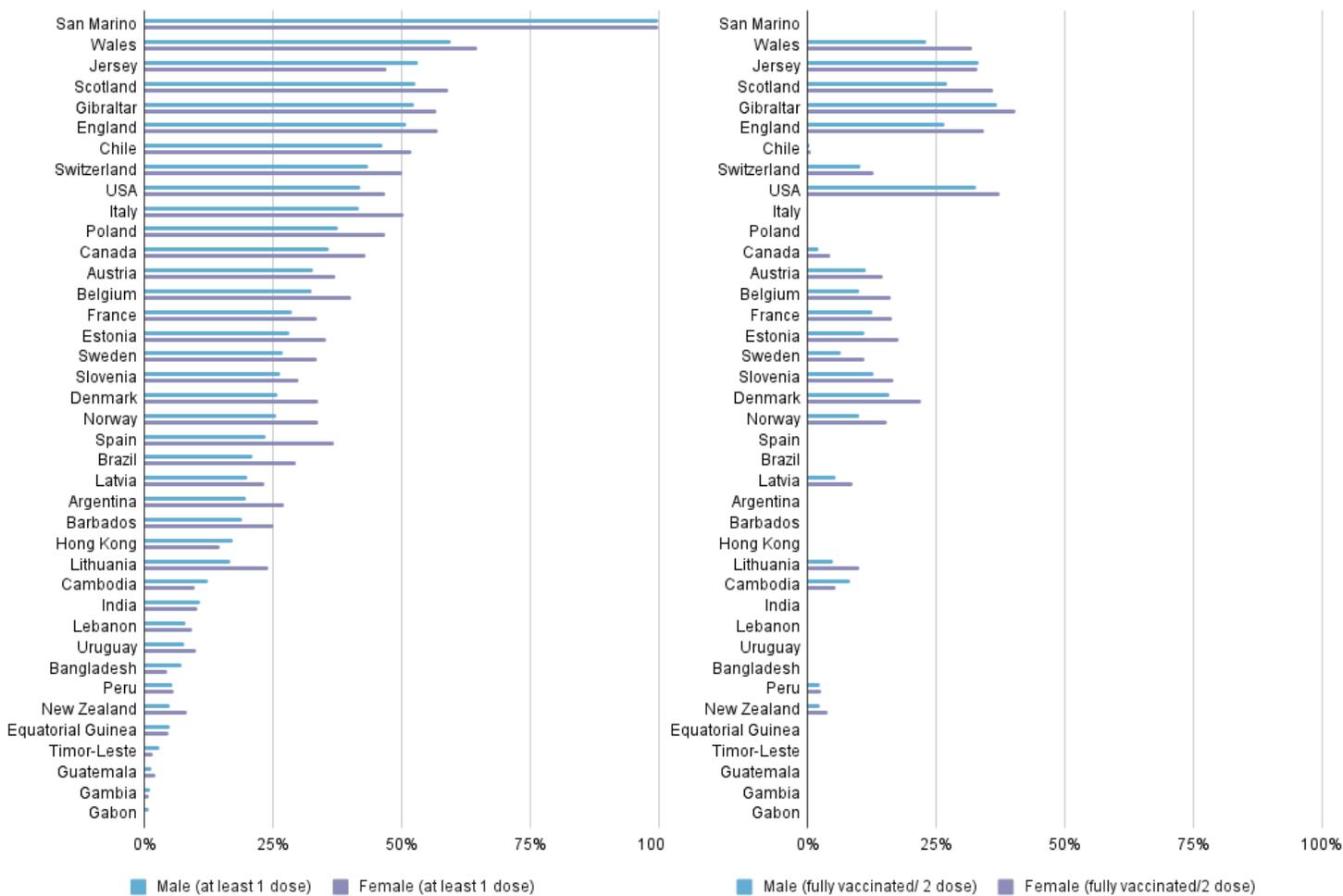
Fig 12. Vaccine Distribution, fully vaccinated, by Sex, May 2021



Gender differences in COVID-19 vaccination coverage

Vaccination coverage by sex varies across countries. Vaccination coverage (at least one dose) was higher among women in 21 of 38 countries (one country had universal coverage for both sexes based on 2019 population estimates; Figure 13). Vaccination coverage for fully vaccinated individuals was also higher in women across 19 of the 22 countries reporting data on full vaccination by sex (coverage was nearly equal in two countries). While most countries are only distributing vaccines to adults, the cut off varies slightly, and some countries are administering vaccines to individuals as young as twelve. Given the variation in vaccine policy, we look at coverage for the total population for comparability.

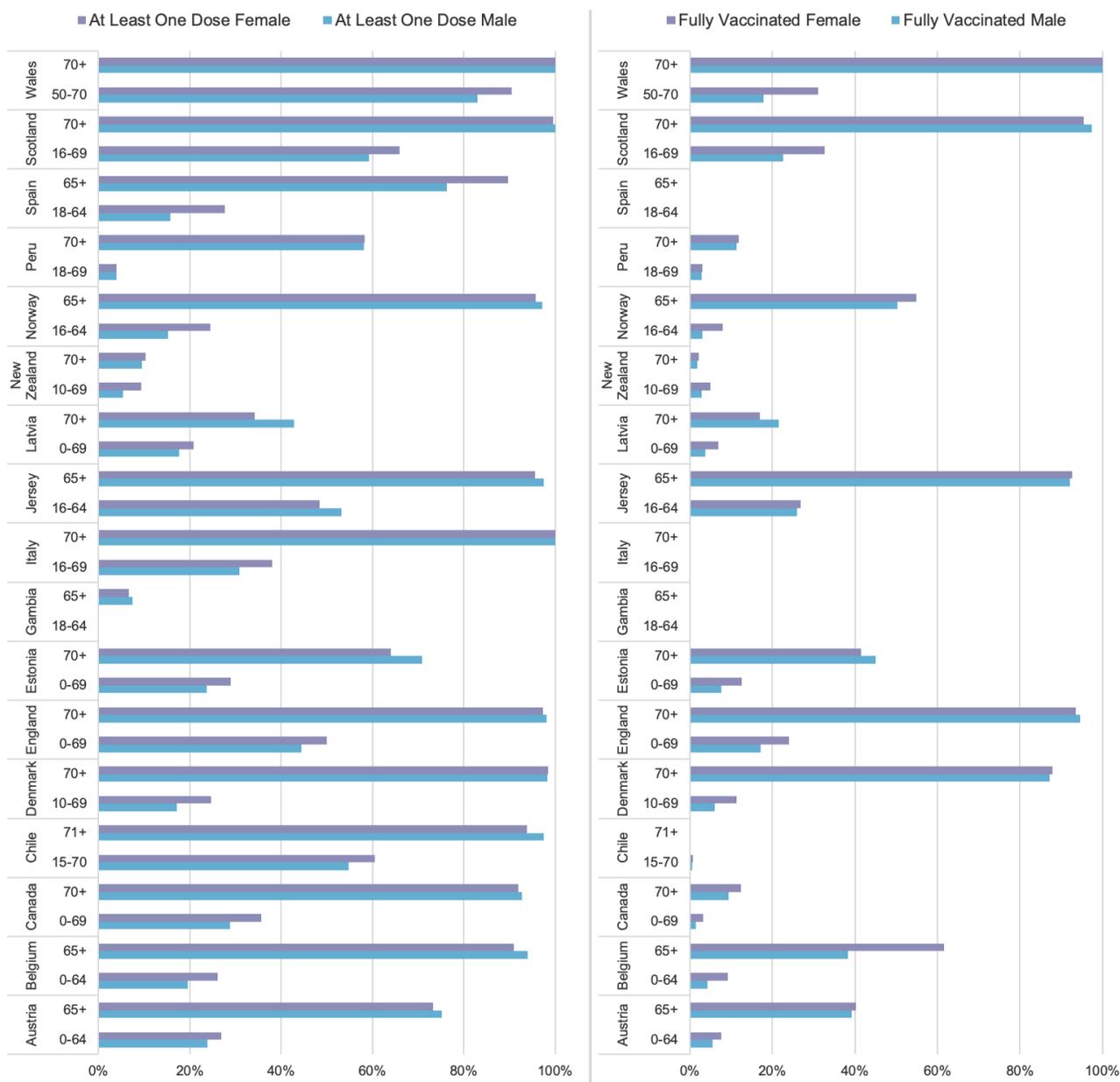
Fig 13. Vaccine Population Coverage by Sex, May 2021



Gender differences in vaccinations by age and sex

Seventeen countries provide data by age and sex which allows for further analysis of gender disparities in vaccination, particularly given the age-specific roll-out of vaccines in many locations (Figure 14). Many of the countries reporting vaccination data by age and sex have attained high levels of coverage and in most cases coverage dose not differ by more than a few percentage points between men and women in particular age groups, though there are some notable exceptions where women are experiencing higher coverage rates (for example, Belgium age 65 years and older fully vaccinated, Wales age 50-70 years fully vaccinated, Spain age 16-69 years at least one dose and Norway age 16-64 years with at least one dose).

Fig 14. Vaccination Coverage, by Age and Sex as of mid-May from 17 Countries



Note: This report was updated on 30/06/2021 due to an error in Figure 2 which has now been corrected.

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 two weeks.

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](#)
