Gender and sex-disaggregated data: Vital to inform an effective response to COVID-19

Real-time disaggregated data offers essential insights into who is getting infected, who is accessing care and who is dying from COVID-19. This data empowers countries to design more effective, sustainable, and people-centered approaches to treat and prevent COVID-19.

Overview: why disaggregated data is important to national responses to COVID-19

The COVID-19 virus continues to spread rapidly around the world. More than 200 countries and territories have reported cases, which together number in the tens of millions.

A failure to acknowledge sex and gender in health policies and responses, or to translate gender-responsive policies into robust programmes and results for people, leads to inequities. COVID-19 illustrates this in the clearest terms. In every country around the world, biological sex and gender (the roles and attributes that a society considers appropriate for people of different genders) are playing a role in the pandemic.

Despite clear gender differences in COVID-19 health outcomes, however, fewer than half of countries report confirmed cases and deaths separately for women and men.

All countries should collect and publish data on COVID-19 disaggregated by sex and age as an essential pillar of their reporting. Collecting sex-disaggregated data has immediate and long term benefits. Such data can inform more effective clinical guidance, treatment and vaccine research, and designing and monitoring the gendered impacts of population-level interventions.

Making this data available to the public further enables researchers to contribute to uncovering solutions, and responding to the health and socioeconomic impacts of COVID-19 - and improving our responses to future pandemics.

This brief focuses on the importance of data on the health impacts of COVID-19. The secondary impacts of COVID-19 - including disrupted health services, job loss, food insecurity, mental ill-health and rising rates of interpersonal violence and poverty - also have a gendered dimension, which will likely be disproportionately borne by women in many societies. Monitoring of and responses to broader health and socioeconomic impacts should equally be disaggregated by sex and gender-responsive.

Which data disaggregated by sex should be reported immediately?

- Diagnostic testing
- Confirmed cases, including among healthcare workers
- Hospitalisations
- ICU admissions
- Presence of comorbidities
- Deaths
COVID-19 affects people of different genders in different ways. Approximately the same number of men and women have been diagnosed with COVID-19 globally, but men are at higher risk of severe illness and death in most countries.

The higher rate of death among men due to COVID-19 is consistent with past outbreaks, such as SARS, MERS and the 1918 flu pandemic. Differences in women and men’s bodies due to their sex (biology) may be playing a role. To attribute gender differences in COVID-19 outcomes solely to biology however ignores the role that social environments, structures and norms are playing, and obscures the actions that can be taken to address these drivers.

In fact, evidence demonstrates that gender and its intersection with other social and demographic factors, including age, race, occupation, class and pre-existing health status, most likely account for a far greater portion of variation in COVID-19 outcomes between women and men.

For example, the high proportion of cases among men in some countries is likely related to gender norms around the use of public space, which are often male-dominated, and low levels of women’s participation in the paid labour market. In other settings, women face increased risk of infection, particularly in countries where they make up the majority of frontline health workers.

Higher mortality among men is likely linked to the fact that globally, men generally suffer higher rates of chronic illness than women. Poorer average health among men is largely driven by gender norms, such as the association of smoking and consuming alcohol with male identity.

Varying sex-disaggregated data availability: key insights remain untapped

Gender identities, linked to other intersectionalities, govern access to resources and services. Data without these nuances will not present an accurate picture of the situation.

Governments have a window of opportunity to use sex-disaggregated data and gender analysis to identify effective interventions for improving health for all. Yet despite clear gender differences in COVID-19 health outcomes, many countries are not yet reporting sex-disaggregated data on confirmed cases and deaths.

Among 174 countries tracked by the COVID-19 Sex-Disaggregated Data Tracker:

- 10 report testing rates
- 119 report confirmed cases
- 17 report hospitalisations
- 11 report ICU admissions
- 82 report deaths
- 51 do not report any data by sex
The solution: Data drives better decisions

Disaggregated data enables investigation into, and an understanding of, the role both biology and social environments are playing in the COVID-19 pandemic. It reveals essential insights into inequities in COVID-19 outcomes which otherwise would not be visible - including among those populations most at risk of death from COVID-19.

This understanding is essential to identifying specific preventive strategies and therapeutic targets for men, women and people with non-binary gender identities. Consequently, resources can be more effectively distributed to prevent avoidable severe illness and death and achieve better outcomes for everyone.

Intervention policies that take into account the needs of healthcare workers, who are predominantly women, could help prevent the higher infection rates currently observed among women in this group.

Sex-disaggregated testing data can provide a window into gender inequalities in access to health services. In many settings, women have less access to health care and health insurance than men, and are not allowed to make decisions about their own health care. These realities may be behind the disproportionately lower numbers of positive cases among women compared to men in some places. If women can’t access health services, they are less likely to be tested and treated for COVID-19, and are also more likely to spread the virus. This amplifies the risk for those they care for, especially young children and elderly people in the household, who are at a higher fatal risk from COVID-19.

In the case of COVID-19, sex-disaggregated data provides essential insights into who is getting tested, infected, hospitalised and dying. Analysing this data through a gender lens can help reveal larger social dynamics that may be driving people’s risk of infection and illness - and thus could be addressed to reduce the impact of COVID-19 for everyone. On the contrary, when sex and age are not acknowledged, gender norms and inequalities that influence health and health-seeking behaviors remain invisible. Supporting gender analysis and sex-disaggregated data is an integral part of a strong COVID-19 response.

Call to action

Governments responding to COVID-19 are under huge pressure to act quickly. Decisions that are informed by accurate data and include a gender perspective are more likely to be effective. That is why we are calling on decision-makers to ensure that COVID-19 data is collected and reported by sex, and that gender is integrated in national and sub-national COVID-19 response plans to achieve better outcomes for everyone.

We welcome the increase in countries reporting sex-disaggregated data. We urge those countries partially reporting, or not reporting at all, to begin reporting data on testing, confirmed cases and deaths from COVID-19 disaggregated by sex and age, at a minimum.

Additionally, countries are urged to report sex-disaggregated data on cases among health workers, hospital and ICU admissions, and pre-existing comorbidities.

Collecting and regularly reporting disaggregated data will inform more effective, equitable responses to COVID-19.
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 data on testing, confirmed cases (including among health workers), hospitalisations, ICU admissions and deaths among women and men. 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.

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.


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