GLOBAL COUNCIL ON
INEQUALITY
AIDS AND PANDEMICS

Breaking the inequality-pandemic cycle

Building true health security in a global age

Findings and recommendations of the Global Council

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About the Global Council

Council members

Winnie Byanyima (Convener)
UNAIDS Executive Director and Under-Secretary-General of the United Nations

Joseph E. Stiglitz (Co-Chair)
Nobel prize winning economist and professor at Columbia University

Monica Geingos (Co-Chair)
Third First Lady, Namibia, First Chancellor of Kepler College

Michael G. Marmot (Co-Chair)
Professor of Epidemiology and Director of the Institute of Health Equity at University College London

Adeeba Kamarulzaman
Pro Vice Chancellor and President of Monash University Malaysia and Honorary Professor of Medicine and Infectious Diseases at University Malaya

Ingrid T. Katz
Incoming Director of the Yale Institute for Global Health

Ruth Laibon Masha
CEO of the National Syndemic Diseases Control Council in Kenya

Richard Lusimbo
Human rights activist, health services authority, and a prominent figure in the LGBTQ+ community

Peter Sands
Executive Director of The Global Fund to Fight AIDS, Tuberculosis and Malaria

Chadchart Sittipunt
Governor of Bangkok (Bangkok Metropolitan Administration, BMA)

Imraan Valodia
Professor of Economics; Pro Vice-Chancellor: Climate, Sustainability and Inequality; and Director of the Southern Centre for Inequality Studies at University of the Witwatersrand, Johannesburg

Matthew M. Kavanagh
Director and Associate Professor, Georgetown University Center for Global Health Policy & Politics and Special Advisor to the Executive Director, UNAIDS

The Global Council on Inequality, AIDS and Pandemics was established in 2023 by UNAIDS Executive Director Winnie Byanyima in response to the growing recognition that structural inequalities are central drivers of both current and future pandemics, including HIV, COVID-19 and mpox. Its mandate is to gather and synthesize evidence, engage with strategic policy forums and influence global and national policies to ensure that pandemic prevention, preparedness and response efforts are sensitive to and address underlying inequalities.

The Council is led by Nobel prize-winning economist Joseph Stiglitz, former First Lady of Namibia Monica Geingos and Sir Michael Marmot of the Institute of Health Equity at University College London. The Council is composed of eminent experts from government, civil society and academia, representing the major stakeholder groups engaged in pandemic prevention, preparedness and response. This diverse composition ensures that the Council's work is informed by a broad range of perspectives and expertise.

Nísia Trindade
Former Minister of Health, Brazil

John E. Ataguba
Canada Research Chair in Health Economics at the University of Manitoba and Executive Director of the African Health Economics and Policy Association (AfHEA)

Helen Clark
Former Prime Minister of New Zealand and former Administrator of UNDP

María Fernanda Espinosa Garcés
Former President of the United Nations General Assembly

Mathume Joseph Phaahla
Deputy Minister of Health, South Africa

Javier Padilla Bernáldez
Secretary of State for Health, Spain

Erika Placella
Head of Health, Federal Department of Foreign Affairs, Swiss Agency for Development and Cooperation

Achal Prabhala
Director, AccessIBSA project

Rovshan Muradov
Secretary-General, Nizami Ganjavi International Center

The urgency of the Council's mission has been underscored by the shifting global political context, including reductions in traditional donor funding for HIV and global health. This context presents both risks and opportunities for shaping policy narratives and advancing innovative, equity-focused approaches to pandemic response.

The Council's overarching goal is to influence the development of policies, planning and service delivery environments that are sensitive to inequality, thereby enabling the world to end AIDS and better prepare for and respond to future pandemics. The Council's advocacy is grounded in evidence generated by its members, including an evidence review and original empirical research on the links between inequalities and pandemics and the role of community-led interventions in increasing access to services for marginalized populations.

The Council is convened by UNAIDS with the support of leading academic institutions, notably Georgetown University's Center for Global Health Policy & Politics, the Institute for Health Equity at University College London and The Southern Centre for Inequality Studies at the University of Witwatersrand. Council work and convenings have been supported by UNAIDS, the Swiss Agency for Development and Cooperation and the Nizami Ganjavi International Center.

Additional contributors to the report

Jessica Allen. Jaime Atienza. Antia Castedo. Christopher Fontaine. Eric La Montagne. Sanjana Mukherjee. Harsha Thirumurthy.

Photographs are from the collection Unequal Scenes by the South Africa-based photographer Johnny Miller. The entire collection can be viewed at https://unequalscenes.com/.

Executive summary

Photo: Jakarta, Indonesia.

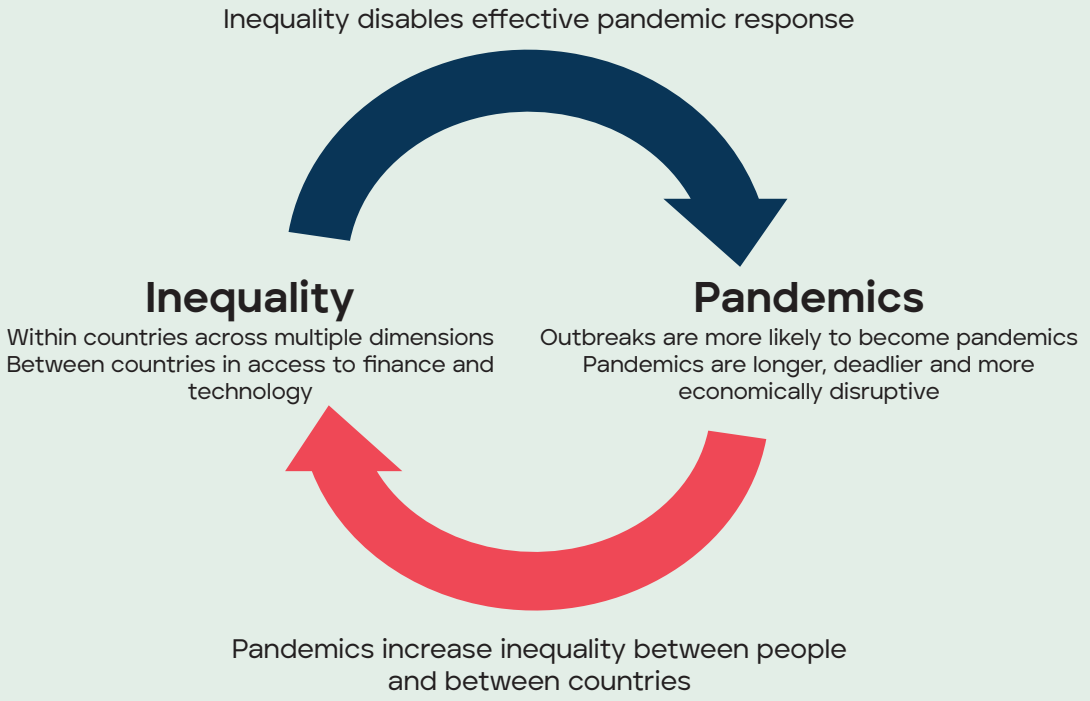
Breaking the inequality–pandemic cycle

Future disease outbreaks are inevitable. AIDS remains a pandemic. The impact of COVID-19 continues to reverberate. Humanity is in an era characterized by high and persistent inequality and accelerating risk of disease outbreaks and pandemics. Over the last two years, the Global Council on Inequality, AIDS and Pandemics undertook research, reviewed evidence and engaged in policy forums around the world. These efforts revealed that high inequality, both within and between countries, and global vulnerability to pandemics reinforce each other. This cycle helps explain why remarkable advances in science are failing to keep the world safer from pandemics. Susceptibility to, and the consequences of, pandemics are not just determined by pathogens. The social determinants of pandemics are critical, such as education, income, housing, environmental conditions and social conditions. So too are access to financing and the cutting-edge health technologies. All countries need the means to build strong health systems and a social response that addresses the social determinants of health. Accordingly, anyone concerned with pandemics and their impact must be concerned with inequality. The world needs an approach to pandemic prevention, preparedness and response that is capable of interrupting the cycle.

The inequality-pandemic cycle

Evidence shows that inequality makes communities and countries more vulnerable to disease outbreaks becoming pandemics. Inequality also undermines effective pandemic response, which prolongs pandemics and makes them deadlier and more economically disruptive—a phenomenon visible in the responses to COVID-19, AIDS, Ebola, influenza, mpox and beyond. International inequality between countries globalizes this vulnerability, increasing the risk of future pandemics and prolonging today's pandemics through unequal access to international finance and to the latest vaccines, medicines and diagnostics. And when pandemics hit, they increase inequality between people and between countries, which adds fuel to the cycle (Figure 1).

Figure 1. The inequality–pandemic cycle



The Council finds:

1. **High levels of inequality, within and between countries, are making the world more vulnerable to pandemics, making pandemics more economically disruptive and deadly, and making them last longer; pandemics in turn increase inequality, driving the cyclical, self-reinforcing relationship.**

   Within countries, intersectional inequality is clearly undermining pandemic responses. Research by the Global Council shows that more unequal countries have experienced significantly higher COVID-19 mortality, higher rates of HIV infection, and higher AIDS mortality as they struggled to mount effective pandemic responses. By contrast, more equal contexts are more resilient to pandemics. The analysis in the Council report shows, for example, that several of the countries in Africa making the most progress against AIDS have countered persistent urban inequality and equalized HIV rates for people living in informal settlements (urban 'slums') compared to other urban residents. Meanwhile, International Monetary Fund data following H1N1 influenza, severe acute respiratory syndrome (SARS), Middle East respiratory syndrome (MERS), Ebola and Zika show that pandemics led to a persistent increase in inequality.

   Social determinants of pandemics create underlying vulnerability, enabling viruses and bacteria to thrive. In Brazil, for example, people without basic education were several times more likely to die from COVID-19 than those completing elementary school. In England, living in overcrowded housing was linked to higher mortality rates from COVID-19.

   International inequalities between countries globalize pandemic vulnerability. When some countries can respond effectively to an outbreak, but others lack the means to do so, the world is more vulnerable. Insufficient fiscal space in some countries limited roll out of effective public health interventions for Ebola and HIV and let the viruses spread. During COVID-19, high-income countries spent four times more than low-income countries to address the pandemic's impact. Unequal access to medicines and vaccines has slowed the responses to HIV, COVID-19 and mpox, allowing the rise of variants and resistant strains.

2. **Failure to tackle key inequalities since COVID-19 has left the world extremely vulnerable to, and unprepared for, the next pandemic.**

   Since the start of the AIDS pandemic, the era of pandemics and inequality has seen income and wealth inequality in most countries grow to high levels and remain high. The COVID-19 pandemic pushed 165 million people into poverty while the world's richest people increased their wealth by more than a quarter. Social inequalities on gender, sexuality, ethnicity and education intersect with wealth inequality. Women, informal workers and ethnic minority groups, for example, experienced the largest employment and income shocks during the COVID-19 crisis. Forcing a choice between feeding one's family and following advice to stay at home undermined public health. Yet pandemic preparedness efforts largely do not account for these inequalities.

   Despite lower COVID-19 spending, developing countries find themselves suffocating under US$ 3 trillion in debt, with more than half of low-income countries either in debt distress or at high risk of it. Debt repayments crowd out spending on today's pandemics and preparation for tomorrow's. Recent efforts to manage the skyrocketing debt created by COVID-19 failed to deliver significant results. Meanwhile, the world still lacks clear surge funding structures to support robust responses to pandemics and address their economic impact.

   As new breakthrough pandemic technologies like long-acting HIV prevention medicines arrive in high-income countries, there remain major barriers to sharing these technologies for sustainable production and affordable access in much of the world.

3. **Insufficiently rapid action on today's pandemics and outbreaks like AIDS and tuberculosis sustains the cycle.**

   As pandemics increase inequality and undermine global capacity to respond to future outbreaks, it is deeply worrying that AIDS remains a pandemic, together with tuberculosis and malaria. These diseases continue to cause millions of deaths each year, disproportionately in low- and middle-income countries and among marginalized groups in high-income countries. Despite progress—new HIV infections in 2024 fell to their lowest level since 1980—rapid donor withdrawal in 2025 threatens these gains and leaves the most vulnerable dangerously exposed.

4. **There is clear evidence showing that the cycle can be interrupted. A new approach to health security is needed that is capable of interrupting this cycle with practical and achievable actions on the social and economic determinants of pandemics at both national and global levels.**

   The Council calls for a new approach to pandemic prevention, preparedness and response:

   - **Inequality-informed responses *during* a pandemic**, which take account of existing inequalities and respond with evidence-based polices to counter their effects.
   - ***Preparing* for future pandemics by reducing inequality** in specific, actionable areas shown to be driving vulnerability to disease.

Four recommendations to break the inequality-pandemic cycle

1. **Remove the financial barriers in the global architecture to allow all countries sufficient fiscal capacity to address the inequalities driving pandemics.**

   During a pandemic, including AIDS today: As a first step, put in place an immediate debt repayment standstill for distressed countries facing pandemics to 2030, pausing austerity measures, then move to comprehensive debt restructuring following the recommendations of the Jubilee Commission Report.

   To make the world safer from future pandemics: Create standby financing facilities in the Global North and South for countries working to prevent or respond to a pandemic, including the automatic issuance of International Monetary Fund Special Drawing Rights. Reorient international policies to address insufficient fiscal space and over indebtedness to stop the inequality-pandemic cycle.

2. **Invest in the social determinants of pandemics. Use social protection mechanisms to reduce socioeconomic and health inequalities while building societal resilience in order to prepare for, and respond to, pandemics.**

   During a pandemic, including AIDS today: Surge social protection during health crises through a ready system ready to reach everyone, including those often excluded and made vulnerable, as one part of a multisectoral outbreak response capable of addressing social determinants.

   To make the world safer from future pandemics: Make societies healthier and stronger with strategic action on the social determinants of health, which cause broad health inequalities and increase vulnerability to pandemics when they occur.

3. **Build local and regional production alongside a new governance of research and development capable of ensuring the sharing of technology as public goods needed to stop pandemics.**

   During a pandemic, including AIDS today: Put far more significant global funding behind coordinated regional production for the pandemics of today like HIV and tuberculosis to create the pull-mechanism for technology transfer.

   To make the world safer from future pandemics: Automatically waive global intellectual property rules on pandemic technology when a pandemic is declared. Create an R&D model for the long term that treats pandemic health technology as public goods, using innovative mechanisms like prizes instead of patents, increasing funding and expanding Southern-led efforts.

4. **Build greater trust, equality and efficiency in pandemic response by investing in responses that include multiple sectors, ministries and community-led pandemic infrastructure in partnership with government.**

   During a pandemic, including AIDS today: Shift funding and measurement of pandemic preparedness and response to include community-based and led organizations to reach those unreached by public and private health services. This should accompany, not replace, universal public services.

   To make the world safer from future pandemics: Establish multisectoral governance structures for pandemic response that include multiple ministries as well as community-organizations, rights groups and scientific leadership.

Full report

Photo: Bogota, Colombia.

Introduction: the inequality–pandemic cycle

An age of outbreaks and inequality

Humanity is in a period characterized by the risk of disease outbreaks, increasingly frequent pandemics and high and rising inequality (*1, 2, 3*). The work of the Global Council on Inequality, AIDS and Pandemics shows that these are linked, and dangerously so.

The AIDS pandemic broke into global consciousness in the 1980s and has taken millions of lives since. While remarkable progress against the virus has been made under a coordinated global response. Antiretroviral medicines prevent HIV infection and AIDS-related illnesses. However, these drugs are not universally available, and there remains no cure and no vaccine. AIDS remains a pandemic and, in some geographies and populations, a growing pandemic. Since that time, multiple pandemics and major outbreaks have occurred around the world: Ebola, COVID-19, mpox, influenza, cholera and tuberculosis, amongst others. While each has unique characteristics, the Global Council set out to look across pandemics to better understand what is driving our increasing global vulnerability.

In the period since the AIDS pandemic began, the world has also seen high and rising inequality. Key economic trends are documented in a new report by the G20 Extraordinary Committee on Inequality. Most countries now have a Gini index, which measures income inequality between people, that qualifies as "high inequality." Although total wealth in the world has nearly doubled since 2000, private wealth has grown far faster than public wealth, to the point that governments across the world, including in many of the richest countries, now struggle to provide key services and face significant debts. Private wealth exists globally, but it is also more unequally held, in the hands of a small number of people who are predominantly based in rich countries. And while some lower-income countries are catching up with high-income countries, between-country inequality remains high, leaving many countries without the fiscal capacity to respond to crises.

Meanwhile, these economic inequalities intersect with social inequalities. Progress against gender inequality has slowed or stagnated in much of the world (*4*). Inequality experienced by LGBTQ+ people in many countries has fallen, but in others it has risen sharply (*5*). Inequality along lines of race, ethnicity and as experienced by key populations, including sex workers and people who use drugs, are visible in health and pandemic data in nearly every country, and they are exacerbated by the economic inequalities that accompany them.

Building on the experience of the AIDS response, the Global Council set out to understand how inequality and pandemics are linked and whether it is possible to make the world less vulnerable to pandemics by acting on inequality.

A thorough review of evidence

Across a two-year period, the Global Council commissioned an evidence review and series of empirical studies to understand the relationship between inequality in its multiple forms and pandemics. The evidence review undertook systematic searches of peer-reviewed literature and reports from governments, multilateral agencies and research institutes across multiple pandemics (COVID-19, HIV, Ebola, severe acute respiratory syndrome (SARS), influenza and tuberculosis), screening more than 1500 records identified via academic research databases and grey sources (6). Complementary empirical studies, undertaken under the direction of Global Council members, are discussed below.

Drawing on the evidence review, original data from Council-commissioned studies and other sources, the Council has distilled four key findings:

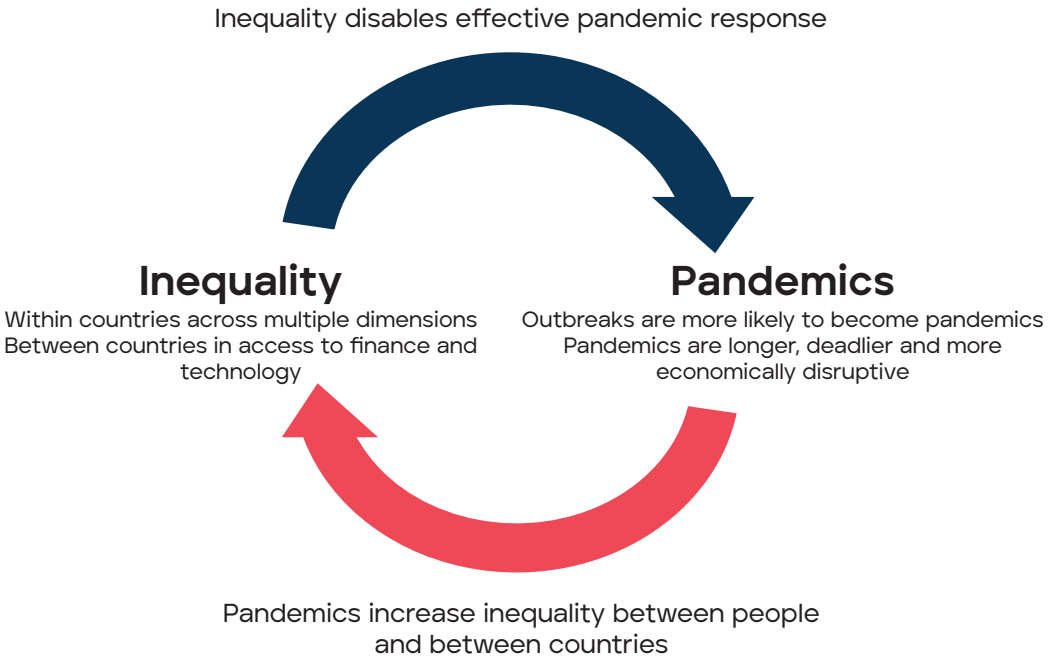
1. High levels of inequality, within and between countries, are making the world more vulnerable to pandemics, making pandemics more economically disruptive and deadly, and making them last longer, which in turn increases inequality driving the cyclical, self-reinforcing relationship.
2. Failure to tackle key inequalities since COVID-19 have likely left the world extremely vulnerable to and unprepared for the next pandemic.
3. Insufficiently rapid action on today's pandemics like AIDS and tuberculosis reinforces the cycle.
4. The cycle can be interrupted. Doing so requires practical and achievable actions that address the social and economic determinants of pandemics at both the national and global levels. We make recommendations for action against four drivers of inequality.

Defining the inequality-pandemic cycle

The Council's research demonstrates a cyclical, self-reinforcing relationship between inequality and pandemics (Figure 2):

- **Inequality across multiple intersecting axes makes communities and countries more vulnerable to disease outbreaks becoming pandemics.**
- **Within countries there are social determinants** of pandemics that lead to health inequities that create vulnerability as social and economic inequality fuel the spread of disease. Society's most vulnerable are especially exposed to pandemics.
- **International inequality** between countries, born of today's global financial architecture, also undermines pandemic preparedness and response through a lack of access to finance and technology by poorer countries. Unequal responses allow viruses to thrive.
- **Inequality disables effective pandemic response, which prolongs pandemics and makes them deadlier and more economically disruptive.** More unequal countries have been hit harder by pandemics and struggled more to mount an effective, coordinated response.
- **When pandemics hit, they increase inequality between people and between countries, which adds fuel to the cycle**, making the world more vulnerable to future pandemics.

Figure 2. The inequality-pandemic cycle



The Council's research shows that this inequality-pandemic cycle has distinct drivers, which we explore below (Figure 3). Within countries, intersectional inequality is clearly linked to pandemics. The social determinants of pandemics emerge as a strong factor that creates underlying vulnerability, enabling viruses and bacteria to thrive. When outbreaks occur, inequality undermines effective response as some groups are more vulnerable, and the needs of some go unnoticed. The type of unified, coordinated responses necessary to prevent pandemics, particularly mobilizing not just health services but multiple sectors of government and community, proves difficult to mount. Trust is low. These more unequal countries and communities have experienced worse pandemic outcomes.

Meanwhile, pandemics are inherently international phenomena—stopping outbreaks in some countries while they accelerate in others is a recipe for pandemic response failure. So between-country inequality matters deeply. Inequalities in fiscal capacity to act against diseases are stark and they are generating global pandemic vulnerability. Unequal access to pandemic technologies means that the breathtaking progress we have made in the science of fighting pandemics is failing to translate as inequality deepens and prolongs pandemics.

The Global Council has generated a set of evidence-based recommendations based on disrupting these drivers at different points in this cycle. Together, they hold promise to help break this cycle and support more realistic progress toward security against pandemics for the world.

Figure 3. The inequality drivers of the cycle

Photo: Buenos Aires, Argentina. © Johnny Miller/Unequal Scenes

Inequalities within countries create pandemic vulnerability

Economic inequality is dangerous in a pandemic

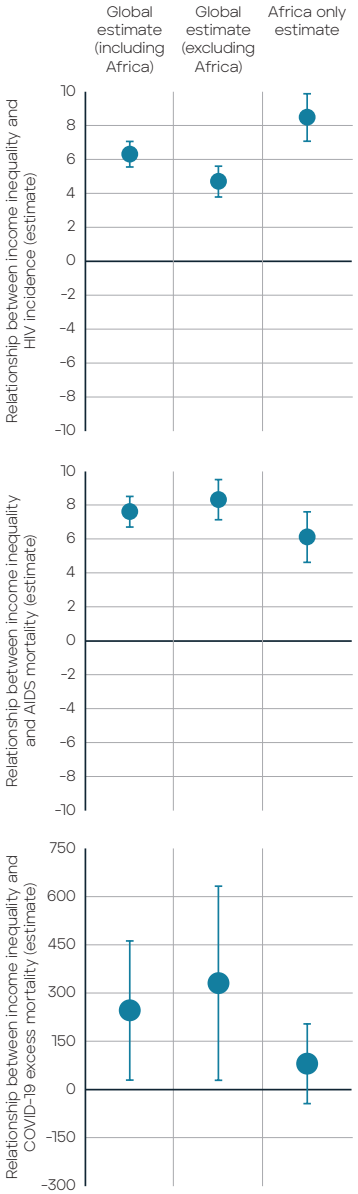
The Council's research finds that more unequal countries have struggled to mount effective pandemic responses. By contrast, more equal countries are more resilient to pandemics.

Countries with higher rates of inequality have seen higher COVID-19 mortality, higher rates of HIV infection and higher AIDS mortality than their more equal peers, according to research commissioned by the Council. This study assessed the relationship between income inequality and pandemics using a regression model to analyse HIV impact data from 217 countries and COVID-19 impact data from 151 countries. Controlling for national health expenditure, state capacity and income level, regional variations and other variables, the researchers found a clear association between the Gini index of income inequality and pandemic outcomes (Figure 4).

Three samples of countries were compared: (1) global; (2) Africa-only; and (3) global excluding Africa. The study found that a positive and significant relationship exists between the Gini index of income inequality and HIV incidence across all three samples and that a statistically positive association exists for all samples between income inequality and the AIDS mortality rate. For COVID-19, a positive and statistically significant relationship exists between income inequality and excess mortality for the global sample and the excluding Africa sample. The Africa-only sample is positive but not significant (7). An important question is whether it is inequality, deprivation, or both driving these results. For the Council report the research team re-ran this analysis controlling the proportion of the population in extreme poverty (living below US$ 3 a day). Inequality remained significantly associated with COVID-19 deaths, HIV incidence and HIV mortality. Poverty alone was a significant predictor in some contexts, but not others. This suggests that both probably play a role, but that the relationship is complex and further analysis is needed. These are, of course, associations. Further research is needed to explore causality and the mechanisms. But the results suggest that inequality undercuts effective pandemic response.

The Council analysis contributes to a growing body of research that demonstrates an association between income inequality and COVID-19 mortality *(8,9,10)*. One study that examined data from the early months of the pandemic—a 30-day period after a country's 10th confirmed death—found countries' income inequality and wealth inequality were positively and consistently related to higher mortality and that civic engagement and confidence in state institutions was related to lower mortality (11).

Figure 4. Income inequality and HIV incidence, AIDS mortality and COVID-19 mortality, 2020–2021

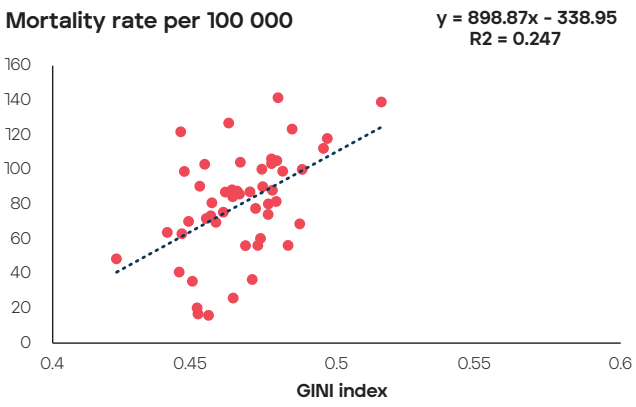


Source: Ataguba JEO, Birungi C, Cunial S, Kavanagh M. Income inequality and pandemics: insights from HIV/AIDS and COVID 19—a multi-country observational study. BMJ Glob Health. 2023.

Similar patterns exist within countries. In the United States of America (USA), state-level income inequality correlates with higher COVID-19 deaths, after adjusting for socioeconomic and health system covariates (Figure 5) (*12*). Seroprevalence surveys conducted in Brazil in mid-2020 showed that individuals in the poorest income quintile were more than twice as likely to have been infected compared to those in the wealthiest quintile, and infection rates were significantly lower among people with higher levels of education. Indigenous populations were nearly five times more likely to test positive than white individuals (*13*). More unequal states and municipalities in Brazil suffered higher COVID-19 mortality, reflecting differences in exposure risks (crowded housing, precarious work), access to care and local governance capacity (*14,15,16*) Illiterate Brazilians were also much more likely to die of COVID than those who had received at least elementary school level education (Figure 6) (*17*).

Council research also looked at urban inequality—a crucial setting for both pandemics and inequality dynamics. A team of researchers used data from population-based surveys and HIV service coverage and impact data within slum and non-slum areas of 222 cities across the world. The analysis tested HIV inequalities experienced by those living in informal settlements—labelled 'slums' in the data set[1]—as a measure of urban pandemic inequality. Overall, those living in informal settlements/slums had a higher HIV prevalence than non-slum dwellers, reflecting multidimensional inequalities including wealth, education, employment and housing (see Figure 7) (*19*).

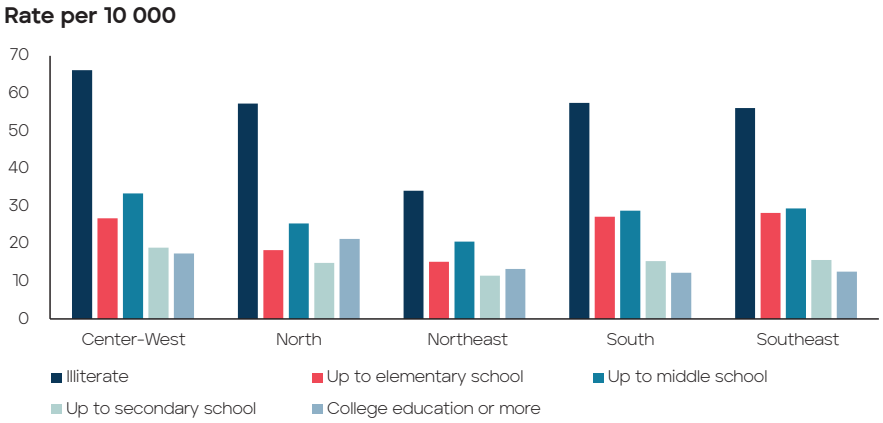
Figure 5. COVID-19 mortality and income inequality (GINI index), US states, 2020



Source: United States Census Bureau and National Center for Health Statistics.

[1] See UN Habitat definition (*18*).

Figure 6. COVID-19 mortality among those aged 18 and over, by educational level, in all Brazilian regions, 2020–2021



Source: Szwarcwald CL, Almeida WS, Boccolini CS, Soares Filho AM, Malta DC. The unequal impact of the pandemic at subnational levels and educational attainment-related inequalities in COVID-19 mortality, Brazil, 2020–2021. Public Health. 2024;231:39–46 (https://www.sciencedirect.com/science/article/pii/S0033350624001136; cited 24 September 2024).

Importantly, however, the study showed that the negative health impacts of urban inequality are not inevitable. In a small subset of countries there was either no discernible difference between informal settlement dwellers and the rest of the population (e.g. Senegal and the more recent Namibia survey), while in some countries informal settlement dwellers had lower HIV rates (e.g. Lesotho and Zimbabwe). Those are among the countries where international and national investment in a strong, multisectoral HIV response has been clearest, suggesting equity-focused responses can yield results.

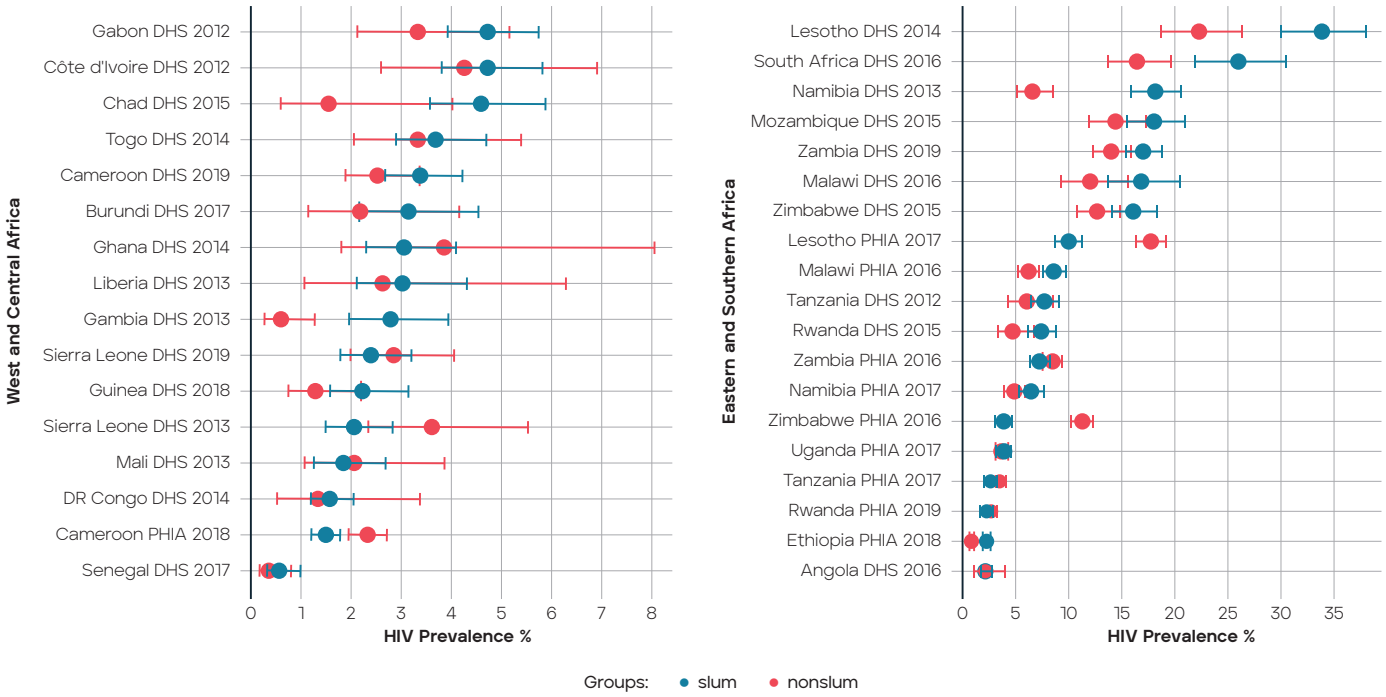
There are clear social determinants of pandemics

Research from the Global Council reveals that inaction on social determinants—broadly defined as the conditions in which people are born, grow, live, work and age, and people's access to power, money and resources—creates health inequities in non-pandemic times and drives pandemic risk and vulnerability. Inequalities in pandemic outcomes are in substantial part a result of inequalities in the social determinants of health, which make geographical areas (as shown in the previous section), socially defined groups and households/individuals both more exposed and more susceptible to infection, illness and death. The social determinants of pandemic risk, described below, are also determinants of broader health inequalities.

This heightened vulnerability arises from socioeconomic inequalities in income, education, race/ethnicity, gender and sexuality, and other markers of social stratification; it exists before the health system comes into play and cannot be entirely mitigated by health care or access to medical technologies. For example, in Sweden, the relative risk of being hospitalized in an intensive care unit between March 2020 and March 2022 in the COVID-19 pandemic followed an income gradient—the lower the income, the higher the relative risk—that was not eliminated when adjusted for vaccination status (*20*).

Socioeconomic inequalities are a result of economic, political, institutional, cultural and legal frameworks that favour some socially defined groups over others. For example, by weakening public services through austerity measures, governments can remove the levers that protect those with fewer resources, hindering social

Figure 7. Prevalence of HIV in African countries in informal urban settlements versus others ('slum' and non-'slum')



Source: DHS, Demographic Health Surveys; PHIA, Population-Based HIV Impact Assessment.

mobility and thus solidifying intergenerational inequalities, including in health *(21, 22)*. Groups with worse ill-health in non-pandemic times will also be worse affected when a pandemic happens *(23)*. The lack of a protective social infrastructure before the onset of a pandemic, including in the labour and housing markets, exposes the more disadvantaged through overcrowding, the lack of social protection and other mechanisms during pandemics *(23)*.

In England, the level of overcrowding was an important mediating factor between area-level deprivation and mortality rates from COVID-19 *(24)*. In low-income settlements such as in Harare, Zimbabwe, people living in overcrowded accommodation in highly populated suburbs encountered huge barriers to observe lockdown, which would mean "death due to hunger, death due to charcoal fumes, and death due to sanitation problems" *(25)*. The need to get out to guarantee basic survival, however, exposed them to the virus.

Having an informal job; experiencing job insecurity or precarious employment; being unable to work from home; or lacking power to enforce workplace regulations all increase the risk of being severely affected by pandemics, as evidence shows from COVID-19 *(26, 27, 28, 29, 30)*. Precarious and informal workers, and those out of employment often lack access to social protection which, as shown in the Council's evidence report, is a strong mitigator of negative socioeconomic and health impacts during pandemics *(6)*.

Unemployment has long been recognized as a health risk. Unemployment and underemployment are associated with societal circumstances known to increase the risk of acquiring HIV and the prevalence of HIV and other co-morbidities *(31)*. In South Africa, men and women who were unemployed had higher odds of HIV infection compared with the employed, based on data from the 2016 South Africa Demographic and Health Survey *(32)*. Being unemployed or underemployed was associated with increased odds of having depression during the COVID-19 pandemic in the USA *(33)*.

As shown in the Council's evidence review, education is a major predictor of pandemic impacts, and providing education to girls and women is highly protective of health. In Brazil, lower educational attainment was associated with higher HIV incidence and mortality *(34)*. In Namibia, an analysis of population-based household survey data found that HIV prevalence was higher among poorer and less educated women *(35)*. Similar studies in other African countries show variation in the relationship between education and HIV prevalence among women and girls. Nonetheless, lower education often correlates with lower income and disadvantages faced by specific groups such as migrants and ethnic minorities, highlighting how social determinants compound to increase vulnerability and often decrease access and uptake of critical health services, including COVID-19 and influenza vaccination and HIV testing and treatment initiation *(36, 37, 38, 39)*. In addition, during the COVID-19 pandemic, people with less education appeared to be more susceptible to misinformation and more distrustful of pandemic prevention measures *(40)*.

Gender inequalities can make women particularly vulnerable during pandemics due to increased work and caring responsibilities, reduced access to maternal and reproductive health services, increased exposure to gender-based violence, and their overrepresentation in the global health and care workforce, disproportionately exposing them to pathogens *(41)*. Due to structural gender inequalities, women can also be excessively affected by the lockdowns and economic shocks that usually accompany pandemic emergencies *(42)*. Adolescent girls and young women in sub-Saharan Africa remain three times more likely to acquire HIV than their male peers *(43)*. Among the findings of a regression analysis of HIV prevalence against eight societal determinants was that gender equality had a negative effect on HIV prevalence (lower disease burden) *(44)*. Studies suggest that education can help counter discrimination against women and girls. When girls reach or exceed boys in secondary school enrolment, their higher social status gives them increased agency, which protects their health and decreases both HIV prevalence and AIDS-related mortality rates *(45)*.

Discrimination based on gender, race, sexual orientation, disability or migration status; economic inequities, classism and neighbourhood deprivation often compound structural inequities and make groups experiencing discrimination much more likely to be infected and suffer severe consequences from pandemics *(46)*. Racism can affect health in three interrelated ways. Firstly, experiencing racism directly damages physical and mental health. Secondly, it is often linked to socioeconomic disadvantage. Thirdly, it can damage health via discrimination in the health-care system and in other services *(47)*.

Many migrant groups have disadvantaged positions in their host countries, leading to disadvantage in housing, income and occupation which negatively impact their health, compared to host populations *(48)*. A meta-analysis with data from 53 million participants in high-income countries found that international migrants had an 84% higher risk of COVID-19 infection than non-migrants and that these inequalities were greater in North America and northern Europe than in southern Europe *(49)*.

In HIV, key populations (e.g. gay and bisexual men and other men who have sex with men, sex workers, people who inject drugs, transgender people and people in prisons and other closed settings) experience higher HIV prevalence and worse outcomes due to stigma, discrimination, criminalization and gaps in service coverage *(50)*. Studies have shown these differences cannot be explained by biology or behaviour, as shown in quantitative and qualitative work and in comparisons of similar populations in different socio-legal contexts *(40)*. Research conducted by the Global Council as well as others show how legal and policy environments, characterized by the absence of criminalization and the promotion of non-discrimination, are consistently associated with improved HIV outcomes *(51, 52, 53)*. When looking at criminalizing

environments, research by Council members shows that criminalization of same-sex relationships was associated with a 7.6% lower HIV testing rates and knowledge of HIV status, sex work criminalization with a 9.9% lower HIV status awareness, and drug use criminalization with a 14.8% lower HIV status awareness.[2] Researchers created a composite measure to represent a legal environment where same sex relationships, sex work, drug use or HIV exposure were not criminalized and found that this composite measure was associated with a 13.7% increase in proportion of people living with HIV initiating antiretroviral therapy, as well as a 8.5% decrease in new infections between 2017 and 2023 *(51)*.

Silos undermine effectiveness, trust and mobilization of communities

Pandemics are more than just health crises; they are crises affecting both the lives and livelihoods of people. Focusing on purely biomedical tools such as therapeutics, vaccines and diagnostics to respond to pandemics will not suffice to address the social or economic determinants of pandemics. Additionally, there was a failure to reach many vulnerable groups and populations during the COVID-19 pandemic for numerous reasons. Inequalities in education contributed to a failure to equip significant portions of populations to understand fully the risks they were being exposed to and the consequences of not practicing social distancing or getting vaccinated. Communication channels were often ineffective, partly because of the lack of timely and culturally responsive materials that adequately took into account fear of authority figures. And, of course, there was a lack of access to health care *(54, 55)*. Marginalized groups were also hit hard by the COVID-19 pandemic inability to work from home.

Furthermore, the COVID-19 pandemic demonstrated how the lack of public trust in institutions erodes a robust pandemic response. Public trust in governments and national institutions is critical in promoting public willingness to follow public health guidance and uptake of pandemic mitigation measures. Studies have documented how countries with higher levels of public trust in government were associated with lower COVID-19 infection rates *(56)*. Community participation helps in the development and implementation of interdisciplinary pandemic responses that counter denialism and disinformation *(57)*. In Brazil, denialist policies discouraged the adoption of preventive measures and eroded public trust, which exacerbated the spread of COVID-19, particularly among vulnerable populations. With only 2.7% of the world's population, Brazil accounted for 23.5% of global COVID-19 deaths in March 2021 *(58)*.

Community-led organizations are often better able to reach those who are not reached by mainstream public and private health services. From the start of the AIDS pandemic, one of the distinguishing features of the AIDS response has been the central role played by communities. In the face of fear, stigma and discrimination, communities of people living with HIV, people from key populations and other affected communities have served as vocal advocates for their health rights and broader human rights, and they have played a critical role in the delivery of services that curb the toll of HIV *(59)*. A recent review of studies from southern Africa, for example, reported that peer support projects, treatment adherence clubs and community-led HIV testing led to increased uptake of testing, improved adherence to antiretroviral therapy, stronger retention in care, reduced vertical transmission, and higher levels of viral load suppression *(60)*. In Brazil, programmes aimed at eliminating leprosy—a disease historically linked to poverty, stigma and barriers to access—have shown that

[2] Among populations at high risk of HIV infection, periodic HIV testing and knowledge of HIV status are critical to the early initiation of antiretroviral therapy after HIV acquisition, which improves health outcomes among people living with HIV.

social mobilization is an important component of targeted interventions within primary health-care strategies that effectively reduce deep-seated inequities.

In countries with high burdens of HIV, the COVID-19 pandemic saw a rapid mobilization of existing HIV-related civil society and community infrastructure to respond to the pandemic. Indeed, not only did community-led HIV responses ensure continuation of HIV services during the health emergency, but they also quickly adapted preexisting services and activities to support national COVID-19 responses *(61, 62, 63, 64, 65)*. For instance, HIV community-based organizations in Kenya helped in the COVID-19 response through community education and outreach efforts and by distributing personal protective equipment *(62)*. Research from Liberia has also shown how community led efforts have contributed to health system resilience in the face of other pandemics such as Ebola, including through responding to the Ebola outbreak, and also have helped ensure the continuation of treatment for other public health services such as immunizations and treatment of child illnesses *(66, 67)*.

Analysis of data from the HIV Policy Lab[3] found that countries with policies that support civil society organizations to legally register, operate and provide services, including those serving marginalized populations, had more effective HIV responses *(68)*. Despite these benefits, almost 50% of all countries have not adopted such policies *(69)*.

Community-led organizations face numerous challenges which hinder their ability to engage meaningfully in pandemic responses, including insufficient funding of community-led programmes which impact the long-term sustainability of their operations *(59)*. Global funding for community-led operations within the AIDS responses declined drastically from 31% of total AIDS response funding in 2012 to 20% in 2021. Much of this funding is from foreign donors. A quarter of donor funding for HIV programmes in 2023 went to civil society organizations and community networks *(70)*. Since then, the recent abrupt cessation of US funding for AIDS initiatives in low- and middle-income countries is having a huge impact on community-led and other nongovernmental organizations and the services they provide. The situation highlights the need for these countries to establish national mechanisms to fund civil society and community-led organizations to deliver health services.

Human rights are a cornerstone of public health. Strong qualitative evidence shows that when legal frameworks and government institutions—including the justice system—respect human rights, it builds trust among communities that have been historically marginalized *(71, 72)*. Human rights violations surged during the COVID-19 pandemic, with women and girls, LGBTQ+ populations, sex workers, refugees and migrants and children with disabilities among the populations affected. For example, increases in domestic violence and sexual violence occurred in some countries during lockdowns. Within these difficult environments, human rights institutions were key to promoting access to services and building trust among marginalized populations.

[3] https://www.hivpolicylab.org/

Inequalities between countries globalize pandemic vulnerability

Uneven national capacities fuel global vulnerability to pandemics

Pandemics are definitionally international in nature. Borders do not stop the spread of communicable disease. The Global Council finds that key aspects of the international order are driving inequalities that make the world more vulnerable to pandemics and less capable of stopping them.

When pandemics have hit, some countries have the fiscal capacity to respond, but others lack it. That was apparent during COVID-19, during the Ebola outbreak and remains evident for today's major killers of AIDS and tuberculosis. During COVID-19, high-income countries were able to finance surges in health spending and economic mitigation measures. They also had near exclusive access to mRNA vaccines and other new technologies for many months. Low-income countries, by contrast, had weak response capacity, uncontrolled outbreaks and largely unvaccinated populations.

When some countries can respond effectively, but others lack the fiscal space to do so, everyone is more vulnerable. When some countries can use new vaccines and medicines to protect their populations while others cannot, the world sees not just transnational infections but the rise of viral variants and resistant strains. During COVID-19, the Delta variant arose in India and was recognized as a significant threat in mid-March 2021, when India had 2% vaccine coverage. Higher and more equitable vaccine coverage could have led to a different outcome. Multiple modelling studies show an empirical link between inequitable vaccine availability and a prolonged pandemic with more variants *(73, 74)*.

Inequalities in the global financial architecture

When COVID-19 overwhelmed health systems, many countries responded with lockdowns and other measures designed to limit social interactions and slow the spread of the coronavirus. These disruptions caused massive economic contractions. High-income countries made large fiscal interventions which helped in macroeconomic stabilization as well as in providing a lifeline to millions of companies and citizens. Many low and middle-income countries, however, lacked the means for extra spending due to high debt levels and limited access to credit markets *(75)*. Low-income countries ultimately spent about 2% of gross domestic product (GDP) on non-health pandemic measures, compared to the more than 8% of GDP spent by high-income countries. In per capita terms, the gap was even wider. Almost half of

households in upper-middle-income countries received cash transfers, compared to only 15% in low-income countries. Similarly, 43% of firms in upper-middle-income countries received support, versus 6% in low-income countries *(76)*.

Despite the lower spending, the external debt of low-income countries rose 12% in 2020, the largest increase in years *(77)*. Developing countries today are suffocating under US$ 3 trillion in debt, with more than half of low-income countries either in debt distress or at high risk of it *(78)*.

As a result, the world's 26 poorest economies—home to about 40% of all people who live on less than US$ 2.15 a day—are deeper in debt today than at any time since 2006. At the same time, international aid as a share of their GDP has dwindled to a two-decade low, leaving these countries few sources of affordable financing *(79)*. Debt service payments by low- and middle-income countries have surged, crowding out essential public spending, including on health care and social determinants of health.

UNAIDS analysis shows that these debt burdens are endangering the significant progress made over the past decade against AIDS in sub-Saharan Africa, where many countries were on track to ending their epidemics *(80)*. Today, 3.3 billion people live in countries that spend more on interest payments than on health care. Sub-Saharan African countries spend 11% of GDP and 62% of tax revenue on debt servicing, with 35 countries in the region badly affected. This reflects a global financial architecture that pushes countries to borrow on harsh terms in times of need. African countries suffer interest rates eight times higher than high-income economies, and then they face harsh financial punishments when shocks—often externally driven—occur. The strong dependence of many countries, especially in Africa, on international development cooperation to finance their health systems and pandemic and HIV responses, the recent closure of the United States Agency for International Development (USAID) and cuts to the United States President's Emergency Plan for AIDS Relief (PEPFAR) programme for the global AIDS response, as well as the region's vulnerability to external shocks and economic events, has brought forward the urgency of acting upon current financing challenges.

Meanwhile there has been an abrupt and unplanned retreat from official development assistance (ODA) on which many pandemic-fighting efforts depended. According to the Development Assistance Committee of the Organisation for Economic Co-operation and Development (OECD-DAC), an estimated 16–28% drop in ODA to sub-Saharan Africa is expected in 2025 compared to the previous year *(81)*. This sudden retreat has been especially profound for the HIV response, which relied on international financing for an average 60% of total funding in 2024, It also ironically comes at the very moment that science and community action could end the AIDS pandemic.

Financing gaps persist even as preventable diseases spread. There is something deeply wrong with an economic system that fails to prioritize social protection, universal health coverage and pandemic preparedness.

The COVID-19 pandemic, like the HIV pandemic before it, clearly exposed the human and economic costs of underinvesting in both social determinants of health and resilient health systems *(82)*. It became clear, during the pandemic, that strong universal health coverage (UHC) systems were not sufficient—as governance failures and social determinants drove high cases and deaths in some countries with strong UHC systems *(83)*. But there is good evidence that resilient and universal health systems were essential for successful pandemic responses in many places *(84)*. During outbreaks, UHC systems that remove financial barriers to care facilitate early case detection, identification of contacts and contributes to reduce health care expenditures and hospitalization *(85)*. The costs of pandemic health care can be catastrophic for families in pandemics when they are not protected by UHC

programmes—driving greater inequality *(86, 87)*. One study estimated that a more universal health-care system in the USA during COVID-19 could have saved 212 000 lives and US$ 105.6 billion in 2020 alone *(88)*. In the case of HIV and tuberculosis, it is clear that health system constraints have undermined the response on multiple levels and limited the impact of funding in HIV testing and treatment *(89)*.

Austerity drives further pandemic response inequalities

Pandemics can lower GDP and lower tax revenues; at the same time, they put greater demands on government expenditures. Many governments respond to the resulting deficit by undertaking austerity measures (and they are typically advised to do so by the international financial institutions). However, the evidence makes it clear that austerity measures are active drivers of the inequality–pandemic cycle: First, they undermine pandemic response and efforts to address the inequality drivers of those pandemics. Addressing the social determinants of pandemics is impossible under austerity. Second, when pandemics hit, austerity measures amplify the inequality-producing impact of those pandemics that we have previously described.

Austerity tends to worsen inequality, reduce access to health, education and safety nets, hurt vulnerable populations disproportionately and degrade public health systems *(90, 91)*. This matters for pandemics both because reductions in spending and workforce undermine the capability of health systems to detect, treat and control infectious disease outbreaks directly and also because they undermine the capacity of governments to address the social determinants of pandemics. Cuts in spending often affect health, education and welfare disproportionately, and these cuts disproportionately impact the poor and vulnerable.

It has been estimated that International Monetary Fund (IMF) programmes linked to austerity led to over 70 excess deaths from respiratory diseases and tuberculosis per 100 000 population *(92)*. They have also been linked to increased tuberculosis incidence, prevalence and mortality rates in post-communist countries *(93)*. Studies have linked austerity and the policies of international financial institutions to the Ebola outbreak *(94)*, to the AIDS pandemic *(95, 96)*, and to COVID-19 *(97)*. Austerity has also been linked to higher income inequality due, among other reasons, to cuts in public wages *(98, 99, 100)*. This further exacerbates the cycle described here. Indeed, IMF data show that the rise in inequality in the aftermath of major epidemics over the last two decades has been nearly three times higher when they hit countries where governments had in place strict austerity programmes *(101)*.

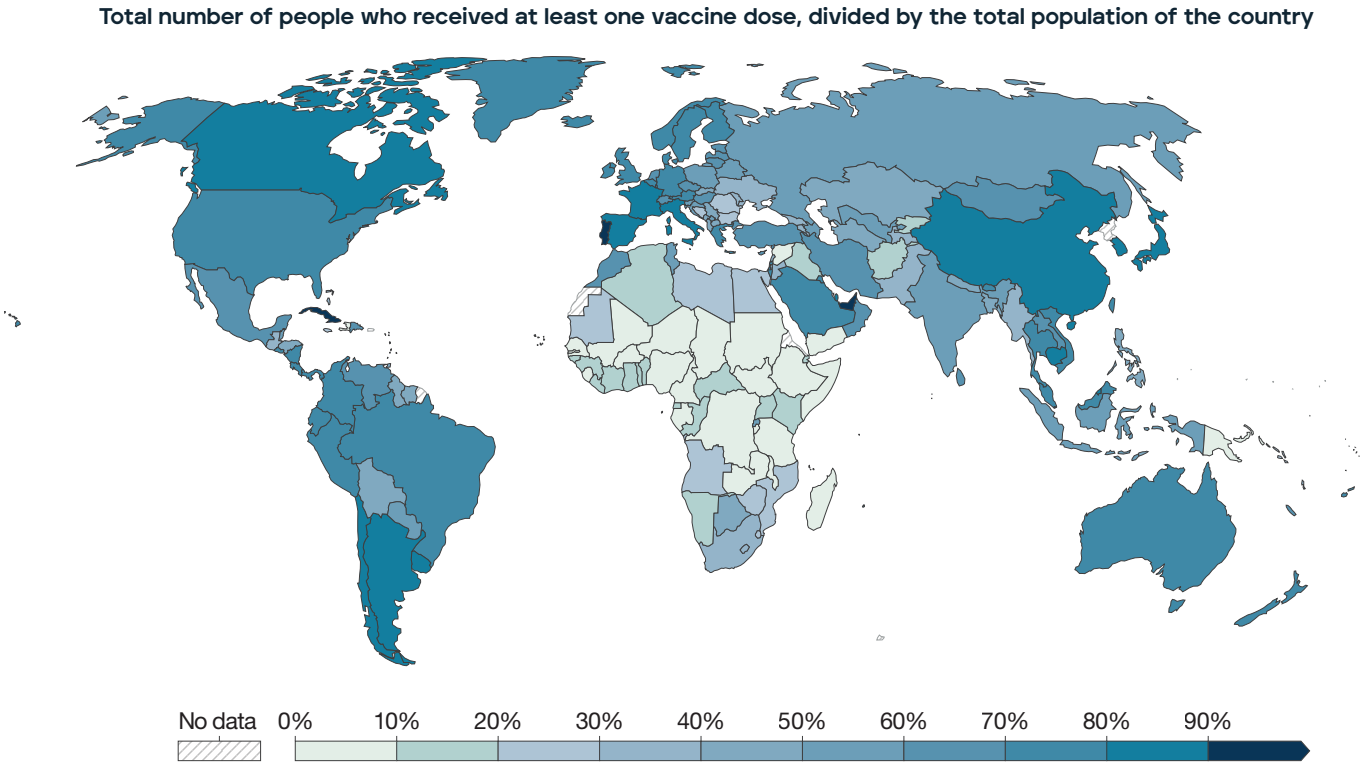
Unequal access to pandemic science and technologies

Pandemic responses from HIV to COVID-19 to mpox share a grim reality: breakthrough health technologies such as vaccines, medicines and diagnostics, are quickly made available in the global North, but slow to reach the Global South, claiming countless lives and allowing prevention infections to continue.

After the scientific triumph of developing highly effective mRNA vaccines against COVID-19 in record time, production was limited to a few producers and doses were hoarded by high-income countries, leaving low- and middle-income countries exposed. Six months after COVID-19 vaccines received approvals, high-income countries had 90% of what they needed to cover priority populations of health workers and people over 65, while low-income countries had received only enough to cover 12% of their highest-priority populations *(102)*. One year into vaccine distribution, coverage in sub-Saharan Africa remained alarmingly low (Figure 8).

This 'vaccine apartheid' caused an estimated 1.3 million preventable deaths (*103*). Efforts to overcome patent barriers at the World Trade Organization (WTO) took years, even though the principle of compulsory licences and of waivers to protect public health had been established by the WTO in 1994 and reiterated in the Doha Declaration of 2001.

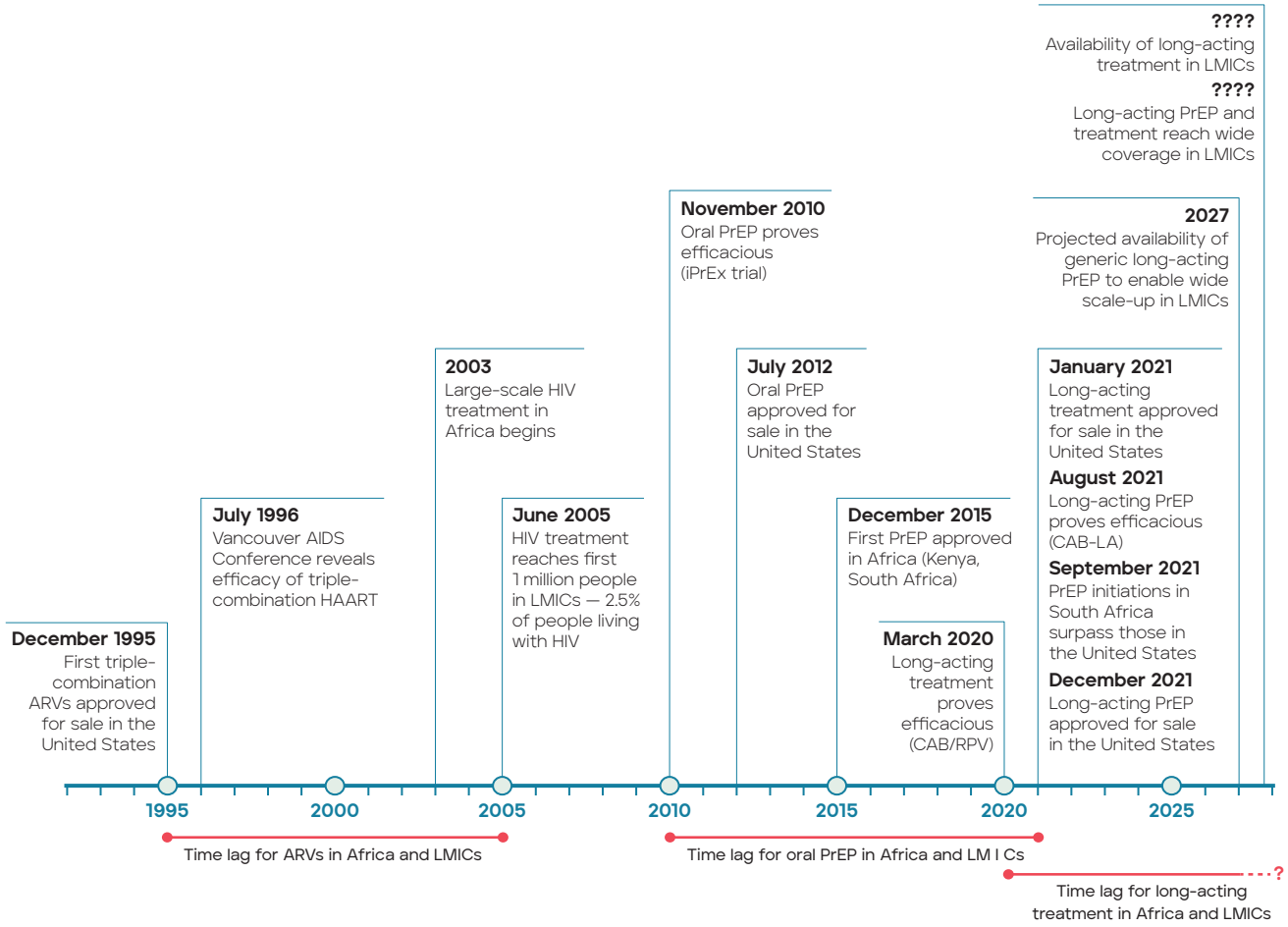
Figure 8. Share of people who received at least one dose of COVID-19 vaccine one year into vaccine distribution (28 December 2021)



Data source: Official data collated by Our World in Data (2024); World Health Organisation (2025); Population based on various sources (2024).

A similar failure to provide new HIV technologies to low and middle-income countries has repeatedly undermined efforts to end the AIDS pandemic (Figure 9). Slow rollout of antiretroviral medicines to low-income countries in the 1990s and 2000s caused millions of avoidable deaths from AIDS. Civil society activism eventually inspired a mix of government action and generic production that brought down the price of these drugs by over 99%, and today tens of millions access them every day. Similarly, the rollout of daily antiretrovirals pills for HIV prevention has been deeply uneven. Today, remarkably long-acting medicines for HIV are coming to market. They are the closest thing to an HIV vaccine we have ever seen—with nearly complete protection against the virus with a few injections, as few as twice a year. But they are currently only being produced by a few companies and sold at high prices that are a multiple of the cost of production, and so most low and middle-income countries have little or no access. Intensive public advocacy by AIDS response activists has recently been followed by price reductions for generic version of the latest injectable medicines for HIV prevention. Individual victories such as this one, however, have not addressed the broader issue of patent protections standing in the way of equitable rollout of health innovations.

Figure 9. Time lags in access to HIV treatment and prevention technology in Africa and low and middle-income countries



Source: Byanyima W, Bekker L-G, Kavanagh MM. Long-Acting HIV Medicines and the Pandemic Inequality Cycle — Rethinking Access. N Engl J Med 2025;392:90-96. Vol 392, No 1. doi: 10.1056/NEJMms2412286.

Each failure is met with international soul-searching and the establishment of new mechanisms—with many achieving major success. For example, the Global Fund to Fight AIDS, Tuberculosis and Malaria has saved 70 million lives including through interventions against the three diseases, including the procurement of antiretroviral medicines for more than 20 million people in 55 countries annually. Since its establishment in 2006, Unitaid has accelerated the development and rollout of more than 100 innovative health products that reach more than 300 million people annually. The Coalition for Epidemic Preparedness Innovations (CEPI), has delivered world firsts for vaccines against priority pathogens, including chikungunya, Lassa fever and MERS and is now trying to build the capacity to respond to the next Disease X threat with a new vaccine in just 100 days. The Pandemic Agreement and the G20's Global Coalition for Local and Regional Production, Innovation and Equitable Access are recent efforts to rebalance the research, development, procurement and distribution of health technologies in favour of more equitable and more effective outcomes.

However, these efforts have yet to get at the heart of the inequality in access. Excellent science has still been met by a failure to share technology across borders in pandemics. Intellectual property barriers and insufficient manufacturing capacity together continue to mean that the supply of pandemic technologies continues to be insufficient to the needs. The need to incentivize innovation to fight pandemics is very real, but patents are not the only means of stimulating innovation and there is a need to find a balance to ensure innovation and access.

Pandemics increase inequality

The devastating impacts of the COVID-19 pandemic were felt most heavily by the world's poor *(104)*. In 2020, during the first year of the pandemic, the number of people facing hunger globally increased from an estimated 650 million in 2019 to between 720 and 811 million people *(105)*. An estimated 165 million people were pushed into poverty; informal workers and women experienced the largest employment and income shocks. At the same time, the world's richest people used their vast resources to take advantage of volatility in global markets. Billionaires increased their wealth by more than a quarter (27.5%) at the height of the crisis from April to July 2020, just as millions of people around the world were trapped at home, unable to work and (if lucky) treading water by accessing social protection benefits *(106)*.

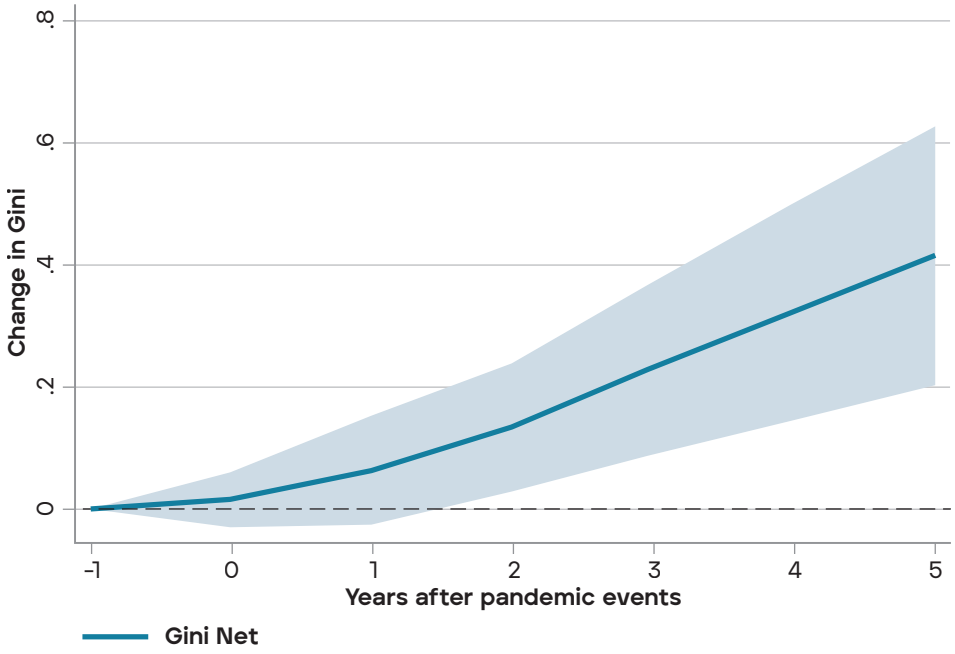
The disparate experiences of rich and poor can be seen in macroeconomic data. The World Bank estimated a significant rise in the global Gini index in 2020—the largest since at least 1990—with distributional losses concentrated among lower-income households *(107)*. Analysis of payroll data in Spain show that impact of the COVID-19 crisis on inequality is explained in part by its outsized effect on low-wage workers *(108)*. Similarly, surveys undertaken in the United Kingdom during the COVID-19 pandemic show that declines in earnings were highest in the bottom pre-pandemic income quintiles, and that individuals in precarious employment, aged under 30 and from minority ethnic groups faced the biggest labour market shocks *(109)*.

The AIDS pandemic, which hit sub-Saharan Africa much harder than other regions, widened inequalities between Africa and the rest of the world. Studies estimate that a 1% increase in HIV prevalence reduces per capita income growth by about 0.47% in sub-Saharan Africa, with the strongest effects in Eastern Africa *(110)*. At the height of the pandemic in 2004, AIDS had slowed economic growth in more than half of the countries in the subregion, slowed average national economic growth rates significantly and threatened to reverse decades of gains in human resources development, education, health and business, undermining the well-being of Africa's future economic growth and development *(111, 112)*.

It is not just COVID-19 and AIDS. IMF data from the last two decades looking at H1N1 influenza, SARS, MERS, Ebola, and Zika shows that when pandemics have hit countries, they have led to a persistent increase in inequality, as measured by the Gini coefficient, with a peak effect of about five years after the pandemic (Figure 10) *(113)*. Different pandemics, of course, have had different impacts—COVID-19 had a global impact on Gini, while HIV's impact appears more concentrated. Analysis of additional data sets shows that the share of total income increases for the people in the highest income quintile and decreases for those in the lowest income quintile; employment

rates fall for those with basic education, while those with higher education are much less affected. One IMF study compared the impact of pandemics to other shocks and found that pandemics have a larger and clearer impact on inequality than financial crises, where impact is more shared across social strata (113).

Figure 10. Impact of pandemics on net Gini



Note: The graph shows the response and 90% confidence bands. The x-axis shows years (k) after pandemic events; t = 0 is the year of the pandemic event.

Source: Furceri D, Loungani P, Ostry JD, Pizzuto P. Will COVID-19 have long-lasting effects on inequality? Evidence from past pandemics. IMF Working Paper. Washington, DC: IMF; 2021 (113).

However, the fiscal responses to crises can have a big impact on inequality—not all countries experience increases in inequality during pandemics. Another IMF study found that austerity measures introduced after the onset of a pandemic led to bigger increases in inequality. In sharp contrast, when the fiscal response to a pandemic is strongly supportive, inequality barely increases. Inequality-informed policy can make a difference (114).

Failure to tackle today's pandemics sustains the cycle

Pandemics on top of pandemics

AIDS remains a pandemic, and along with tuberculosis and malaria continues to cause millions of deaths annually, disproportionately in low- and middle-income countries and among the marginalized in high-income countries.

A global, decades-long effort to mobilize resources, develop cutting-edge prevention and treatment technologies, reduce the prices of those technologies and channel them to the countries and communities in greatest need has seen, by the end of 2024, the annual number of people newly acquiring HIV reach its lowest since the mid-1980s, and the annual number of people dying of AIDS-related causes reduced to levels last seen in the early 1990s (*115*). However, with no cure and no vaccine, the declines are not yet sufficient to reach the internationally agreed goal of ending AIDS as a public health threat by 2030.

However, this could change—new breakthrough long-acting technologies are the closest thing available to an HIV vaccine and could revolutionize the AIDS response. Realizing their vast potential depends upon these technologies being affordable and widely available worldwide.

In sub-Saharan Africa, where the disease burden is highest, women and adolescent girls are at far higher risk of HIV infection than men and adolescent boys. Gay men, people who use drugs, sex workers and people in prisons are at higher risk of infection globally. Societal barriers, such as stigma, discrimination and gender-based violence, as well as structural barriers such as punitive laws, impede access to HIV services, especially for key and priority populations.

In early 2025, HIV programmes in low- and middle-income countries were rocked by sudden, major financial disruptions that threaten to reverse decades of hard-won progress against HIV. Wars and conflict, widening economic inequalities, geopolitical shifts and climate change shocks—the likes of which are unprecedented in the global HIV response—are stoking instability and straining multilateral cooperation. Many countries remain highly dependent on external funding for their HIV, tuberculosis and malaria responses. Rapid donor withdrawal and subsequent transitions of specialized services into generalized health-care delivery risk leaving the most vulnerable behind.

The AIDS response is now being starved of the long-term investments that build sustainable systems. This sudden retreat from the global AIDS response ironically comes at the very moment that science and community action could end the AIDS pandemic. HIV is in danger of following the long and destructive path of tuberculosis,

which has plagued humanity since antiquity, has been largely controlled in the Global North, but continues to cause illness in more than 10 million people and kill more than 1 million people annually—mostly in the Global South.

The COVID-19 and HIV pandemics clearly exposed the human and economic costs of underinvesting in resilient health systems and the social protection mechanisms that underpin equitable societies. New disease threats, such as mpox, are emerging in the poorest and most neglected countries and communities. As the Council has shown, inequality, both within and between countries, amplifies vulnerability. Revived solidarity and new models of pandemic response financing are needed to sustain the gains made in addressing the HIV pandemic and prevent a resurgence of HIV and other pandemic and endemic threats.

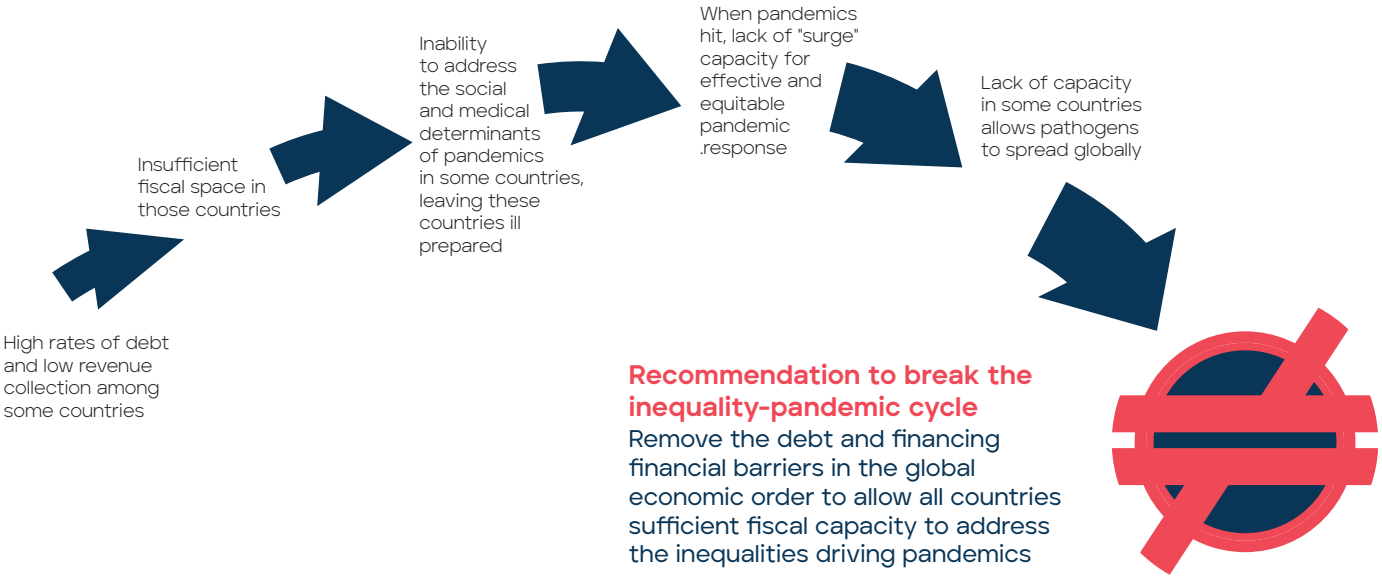
Real health security: recommendations for preparedness and response to interrupt the inequality-pandemic cycle

Research by the Global Council reveals an inequality-pandemic cycle: Inequality within and between countries is making the world more vulnerable to pandemics, making pandemics more economically disruptive and deadly, and making them last longer. And when pandemics hit, it increases inequality, fuelling the cycle. Given the continued high levels of inequality, the world may be *no more prepared today* than when COVID-19 hit. Pandemic preparedness that focuses only on better surveillance or faster vaccine development alone will not be enough to stop pandemics.

Reimagining global health security will require including measures that both account for the high levels of inequality we have today and addressing economic, social and legal determinants of pandemics in the long run. Stopping today's pandemics like AIDS and preparing effectively to prevent the pandemics of the future requires a new approach capable of interrupting this cycle by:

- **Inequality-informed pandemic response**, taking into account the inequality that exists and responding with evidence-based polices to counter the effects.
- **Preparing for future pandemics by reducing inequality** in specific, actionable areas shown to be driving vulnerability to disease.

1. Interrupting international economic inequalities driving pandemics



Summary Recommendation 1

Remove the debt and financing barriers in the global economic order to allow *all* countries sufficient fiscal capacity to address the inequalities driving pandemics.

- **During a pandemic, including AIDS today:** As a first step, put in place an immediate debt repayment standstill for distressed countries facing pandemics to 2030, pausing austerity measures, then move to comprehensive debt restructuring following the recommendations of the Jubilee Commission Report.
- **To make the world safer from future pandemics:** Create standby financing facilities in the Global North and South for countries working to prevent or respond to a pandemic, including the automatic issuance of International Monetary Fund Special Drawing Rights. Reorient international policies to address insufficient fiscal space and over indebtedness to stop the inequality–pandemic cycle.

The rationale for action

Over the past decade, a mix of policy and debt has shrunk fiscal space to respond to pandemics. Financing gaps persist even as preventable diseases spread. Debt and cuts to development assistance mean many countries are now being starved of the investments that build sustainable pandemic systems. But there are solutions.

On debt, there is evidence that the most recent efforts to manage debt troubles created by COVID-19 and other shocks, such as the Debt Service Suspension Initiative (DSSI) and the G20 Common Framework, failed to deliver significant results because

they operated under the wrong principles and lacked arrangements with private creditors that hold a growing share of developing country debt. The latest iteration, the Global Sovereign Debt Roundtable, does not guarantee the necessary progress in debt restructuring either. Stronger reforms are urgently needed, especially for Africa, beyond what was agreed in the Seville Commitment during the United Nations 4th International Conference on Financing for Development held in July 2025. There are better ways to operate, including following what worked and learning from what did not under the Heavily Indebted Poor Countries (HIPC) Initiative. The Jubilee Report commissioned by the Pope made a set of broader recommendations that could fix many of the issues encountered to date *(116)*. The Council considers debtor coordination, especially in the Africa region, to be a necessary step. Countries facing simultaneous debt distress or high risk and a heavy HIV burden would require special measures, including a debt standstill with interim interests forgiven, formulated as a special grace period to get to 2030 with sufficient fiscal space to fulfil the Sustainable Development Goals for health and HIV.

Counter-cyclical policies employed during the COVID-19 pandemic have reinforced their essential value in responding to crises. However, international financial institutions recommend, and at times impose, the opposite. Measures of austerity—reducing spending on health, education, social protection—are a common response to urgent budget deficits, but exactly the opposite of what is needed in a pandemic.

Surge funding during crises is important. The world still lacks clear surge funding structures to support pandemic response and address the economic impact during pandemics. During COVID-19, IMF Special Drawing Rights (SDRs) proved an effective tool for fighting pandemics but took far too long and was too dependent on particular political players to make it happen.

The limited fiscal capacity in developing countries is part of the root cause of their overreliance on an unbalanced debt and financing system. The Africa region has had the lowest level of domestic revenue mobilization for over a decade: 16% revenue collection to GDP. Necessary actions to grow domestic revenue collection include: reforming global taxation; curbing illicit financial flows; adopting progressive taxation reforms at the national level, such as those that eliminate tax incentives and holidays for corporations, especially in the extractive sector; introducing taxation on wealth, including a minimum wealth tax as discussed in the G20; ensuring that resource-rich countries get full value for their resources; and fighting tax avoidance.

Meanwhile, as the gap between rich and poor persists, prioritizing policies that work to counter inequality are needed. Investment in publicly funded, truly universal health systems does just that, ensuring everyone has access to health care and also strengthening economies as a result *(117)*. Similar efforts are needed across the social determinants, as described in recommendation 2—all of which require fiscal space.

The Global Council therefore makes recommendations to interrupt the cycle at the international level as a precursor to the rest of our recommendations.

Full recommendation

A. During a pandemic, including AIDS today: As a first step, urgently agree to a debt repayment standstill for distressed countries to 2030, pausing austerity measures, then move to comprehensive debt restructuring following the recommendations of the Jubilee Commission Report.

An automatic international debt standstill should be agreed and enforced for distressed countries that are struggling with high disease rates in a pandemic, to allow countries to reprioritize resources to address the pandemic. Given the ongoing AIDS pandemic, a debt standstill for distressed countries with high HIV burdens until 2030 is warranted. Fast-track debt restructuring should be discussed immediately after, recognizing the dangers of the 'too little, too late' syndrome: delayed restructurings that are not deep enough set the stage for another crisis shortly down the line.

1. **Deliver immediate and comprehensive debt restructuring and relief** using a differentiated approach according to countries' situations: (i) For countries with access to financial markets, prioritizing the refinancing of their private debts at lower borrowing costs to allow for sustainability. Guarantees by multilateral development banks and other development finance institutions should be used, ensuring they do not constitute a bailout for the private sector, which would only serve to incentivize more irresponsible lending, and recognizing that if debt restructurings are sustainable, the interest rates charged by the private sector should reflect the lower risk; (ii) For countries without regular access to markets and in debt distress or at high risk, comprehensive debt reduction is needed either through a 10-year debt service holiday or debt cancellation, with the aim to reduce debt service to no more than 15% of budget revenues.
2. **Pause measures of austerity during a pandemic.** It is clear that austerity harms health, undermines countries' capacity to respond to the social determinants of pandemics and build medical responses, and increases the inequality-driving impact of pandemics. Governments and international financial institutions should focus on finding substitute financing to enable recovery.
3. **Institute a 'no bailout' rule so any development financing prioritizes domestic investments and is not diverted to debt repayments to private creditors.** In recent years, hard currency coming in from multilateral institutions have been the source of hard currency to repay private creditors and not used for the intended developmental purposes—a de facto bailout for private creditors.

B. To make the world safer from future pandemics: Create standby financing facilities in the Global North and South for countries working to prevent or respond to a pandemic, including the automatic issuance of International Monetary Fund Special Drawing Rights. Reorient international policies to address insufficient fiscal space and over indebtedness to stop the inequality-pandemic cycle.

1. **Create pandemic funding and lending facilities at both the international financial institutions and Southern-led Institutions like the BRICS bank.** Designed to sustain macroeconomic stability and enable inequality-informed pandemic response in the face of a pandemic-generated contraction, such as occurred with COVID-19, these facilities should use sustainable financing streams and secure democratic management of priorities. These should build off synergic international solidarity mechanisms including the Global Fund and regional bodies like the Africa Centres for Disease Control and Prevention, recognizing that the world still lacks a significant pool of funding for pandemic response.

2. **Issuance of SDRs in the event of a pandemic should become automatic to assist with these efforts.** Among the limited tools available, this one should become a central part of pandemic response, and the criteria for the allocation of resources out of any new issuance should be negotiated and reset in the short term.

3. **Establish a permanent, rules-based sovereign debt resolution mechanism.** This would replace the current unpredictable system, so that debt repayments do not drain countries' capacity to invest in health systems and pandemic preparedness, and lower income countries do not face the disadvantage of paying abusive interest rates.

4. **Decisively reorient the international financial institutions.** They should move towards the use of counter-cyclical policies and financial mechanisms to allow for sufficient room for action at the national, regional and global levels to stop pandemics.

5. **Invest the available funds in truly universal services and strengthening of health and social systems.** Interrupting the inequality–pandemic cycle requires true universalism based on public funding to improve rapid uptake of health services in a pandemic, address social determinants of pandemics and also prevent catastrophic expenses in a pandemic that exacerbate inequality.

2. Addressing the social determinants of pandemics

Summary recommendation 2

Invest in the social determinants of pandemics. Use social protection mechanisms to reduce socioeconomic and health inequalities while building societal resilience in order to prepare for, and respond to, pandemics.

- **During a pandemic, including AIDS today:** Surge social protection during health crises through a ready system ready to reach everyone, including those often excluded and made vulnerable, as one part of a multisectoral outbreak response capable of addressing social determinants.
- **To make the world safer from future pandemics:** Make societies healthier and stronger with strategic action on the social determinants of health, which cause broad health inequalities and increase vulnerability to pandemics when they occur.

The rationale for action

Improving conditions in the social determinants of health and reducing socioeconomic inequalities would significantly improve outcomes during pandemics.

Lessons from past pandemics, from influenza to AIDS and Ebola, could have mitigated the impacts of COVID-19, but were not heeded. Widespread poverty, discrimination, overcrowding and labour market inequalities were not sufficiently addressed and again became risk factors impacting the more disadvantaged. Social and economic inequities lowered the effectiveness of public health and social measures at reducing the impact of the pandemic *(118)*.

Those groups which, due to their situations of vulnerability have been disproportionately impacted by AIDS and Ebola, were largely also vulnerable to COVID-19, with the addition of other groups such as essential workers. Although it is too early, the lasting negative impacts of the 1918 influenza pandemic are likely to be felt again as a result of the COVID-19 pandemic, through mechanisms such as lower educational attainment in school and lower income in adulthood.

Evidence compiled by the World Health Organization indicates that reducing economic inequality and investing in universal public services is necessary to build health equity *(118)*. Evidence gathered across several decades in countries like the United Kingdom or Norway shows that investing in education, health and the early years pays off and that austerity has a very negative impact on health *(119, 120, 121)*. Large investments need both political will and enough fiscal space (see Recommendation 1).

Tackling the social determinants is very effective in protecting health and fostering social progress. For example, after controlling for the prevalence of HIV infection, secondary school enrolment is strongly and negatively associated with disease-related deaths, according to evidence from 115 high-, middle- and low-income countries published in 2010; the relationship between economic development and mortality is mediated by education too *(45)*.

Action to address overcrowded housing proved particularly important in addressing respiratory disease pandemics like tuberculosis and COVID-19 *(122, 123)*. Damp and mould damaged people's lungs and made them more susceptible to harm from COVID-19. Action on discrimination and legal interventions have been particularly crucial in improving AIDS responses *(124)*.

The Council's evidence review highlights the intersectional nature of the social determinants of pandemics—it is not just poverty but the intersection of social inequalities along lines of gender, sexuality, wealth, race/ethnicity and beyond *(125)*.

Social protection sustains people through life and health events and is therefore crucial during pandemics, which often result in illness, unemployment and/or loss of income. To be most effective in reducing inequality, it needs high coverage and to reach those who often fall through the cracks, such as people with intermittent work histories due to health problems or those in informal employment. There is a substantial evidence base compiled in the Council's review supporting the effectiveness of social protection interventions in mitigating the impacts of pandemics and reducing the exposure of the most vulnerable *(6)*.

Numerous studies have found positive effects of cash transfers on health, food security, social inequality and several important social determinants of health during the COVID-19 pandemic. In South Africa, for example, households with members who lost their jobs were less likely to suffer from hunger if they received a child support grant (17% less likely) or a state pension for the elderly (24%) *(126)*. In Brazil, the Bolsa Família conditional cash transfer programme has proven to be a key ally of public health strategies by contributing directly to reductions in poverty-related health burdens. Studies have linked this programme to improvements in Brazil's responses to leprosy, tuberculosis and HIV *(127, 128, 129, 130, 131)*.

The Council recommends tackling the social determinants of health—crucially addressing economic inequality and investing in universal public services—to reduce the risk of pandemics and increase the effectiveness of inequality-informed response during a pandemic.

Full recommendation

A. During a pandemic, including AIDS today: Surge social protection during health crises through a ready system ready to reach everyone, including those often excluded and made vulnerable, as one part of a multisectoral outbreak response capable of addressing social determinants.

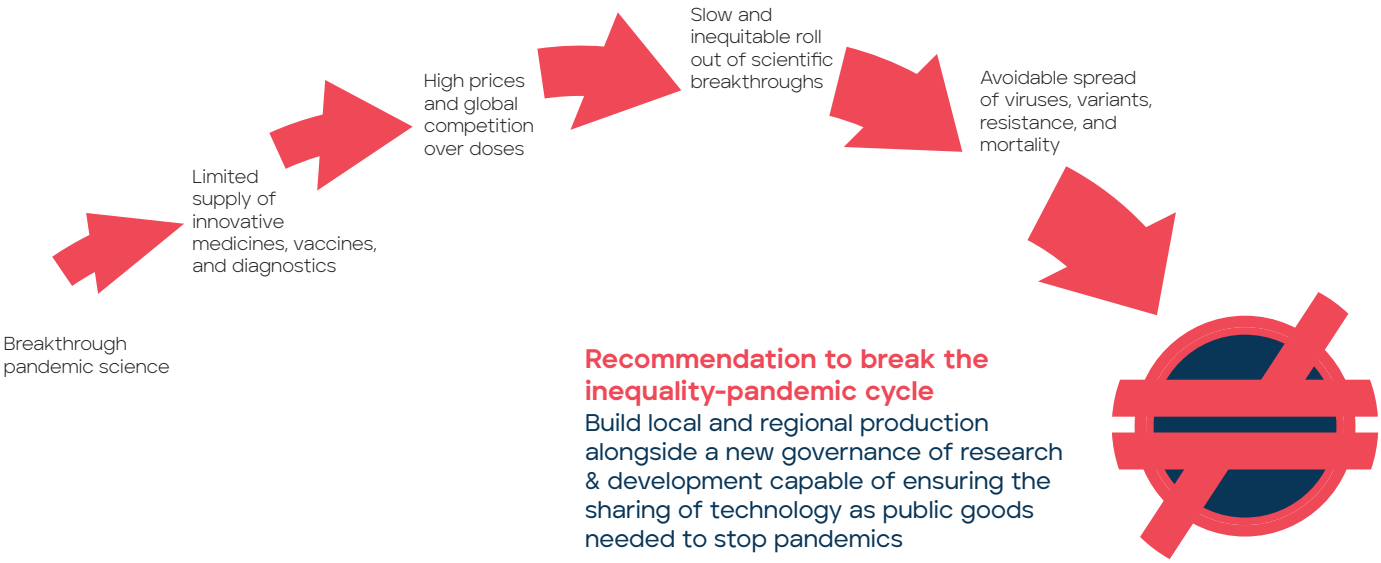
1. **Governments should create advance plans to finance a surge in social protection measures during pandemics.** These include social insurance, cash transfers, expanded unemployment benefits and health subsidies. When people are asked to stay at home or take other non-pharmaceutical measures to stop the spread of respiratory diseases, they need sufficient money and resources to replace lost income. The international measures describe earlier, for instance automatic issuance of SDRs in the event of a pandemic, will be important in providing developing countries the resources they need
2. **Create multisectoral responses capable of addressing the full set of social determinants of pandemics** (see also Recommendation 4). Recognizing that preventing and responding to pandemics requires actions well beyond the health system, build governance structures, programmes and data monitoring measures for outbreaks that include ministries of education, gender, human rights, finance, industry, environment and beyond.

B. To make the world safer from future pandemics: Make societies healthier and stronger with strategic action on the social determinants of health, which cause broad health inequalities and increase vulnerability to pandemics when they occur.

Different viruses follow different social paths, but each outbreak can be addressed through attention to specific social drivers. Nobody knows what form the next pandemic will take; but experiences so far give good guidance for some of the things the world should be doing. The following efforts to improve societal health should be built into efforts to prepare for pandemics:

1. **Create a comprehensive social determinants plan to build societies that are more pandemic resilient. Specifically:**
    - **i.** Promote **decent housing** and address overcrowding.
    - **ii.** Reduce inequities in **primary and secondary education**, particularly attending to those areas that create pandemic vulnerability (e.g. equitable access to education for girls decreases risk of HIV).
    - **iii.** Address **structural racism and discrimination, including against key populations**, in current political, economic, legal and social systems and establish access to legal services, reparations and redistributive justice policies.
    - **iv.** Implement **universal public services**, including in education, health and the early years, proportionally funded according to need.
    - **v.** Improve access to **decent jobs**, including for people in the informal economy, and eliminate any form of discrimination in the workplace.
    - **vi.** Address **economic inequality** by implementing the whole range of options presented by the Extraordinary Committee on Inequality established by the South African Presidency of the G20.
    - **vii.** Reduce child poverty and invest in **early child development**.
    - **viii.** Ensure that **populations in vulnerable situations** have sufficient economic security access to services to navigate emergencies like a pandemic.
    - **ix.** In many countries, there is a need for an increased provision of contributory and non-contributory pensions for those at the bottom, including for those with insecure or informal work trajectories—and securing the systems for the future.

3. Speeding access to pandemic science and technologies



Summary recommendation 3

Build local and regional production alongside a new governance of research and development capable of ensuring the sharing of technology as public goods needed to stop pandemics.

- **During a pandemic, including AIDS today:** Put far more serious global funding behind coordinated regional production for the pandemics of today like HIV and TB to create the pull-mechanism for technology transfer.
- **To make the world safer from future pandemics:** Automatically waive global intellectual property rules on pandemic technology when a pandemic is declared. Create an R&D model for the long term that treats pandemic health technology as public goods using innovative mechanisms like prizes instead of patents, increasing funding and expanding Southern-led efforts.

The rationale for action

In a pandemic, deploying medical countermeasures like vaccines and medicines is all about speed and broad coverage. Yet pandemic responses from HIV to COVID-19 to mpox have witnessed a repeated cycle: breathtaking scientific advance and breakthrough health technologies such as vaccines, medicines and diagnostics only belatedly reach the Global South. This delay is not only unjust, it is dangerous. The rise of viral variants, resistant to disease, and the continued spread of viruses is enabled by unequal access to pandemic technologies.

There are clear, evidence-based solutions. One is expanding the 'AIDS model' of action on multiple fronts to make medicines more affordable and accessible *(132)*. The model built by international cooperation that followed had four key law and governance elements: (1) use of law by national governments to compel sharing of technology; (2) mechanisms for voluntary sharing of patents and technology transfer, (3) decentralized generic manufacturing; and (4) substantial international funding and pooled procurement. These were synergistic and, in combination, created a remarkable new ecosystem: prices of AIDS medicines fell by more than 99%, factories in Southern countries produced for millions, and today three-quarters of all people living with HIV are accessing lifesaving and HIV-preventing antiretroviral drugs *(133, 134)*.

This model was not used during COVID-19, when the world depended too heavily on only one response—funding and pooled procurement—and failed to achieve vaccine equity. Efforts led by South Africa and Brazil to waive WTO intellectual property rules took far too long and resulted in far too little

Meanwhile, there are strong proposals, backed by the world's health ministers, to de-link the production of health technologies—which can often be made at high quality for affordable prices—from the urgently needed investment for R&D. Under the current model, governments invest billions in early R&D costs and then billions more in the procurement of medicines at high monopoly prices. Alternatives like those pioneered by the Drugs for Neglected Diseases Initiative, show it is possible to do things better by making products outside the regular intellectual property system. Other proposals would substitute large amounts of funding as prizes instead of today's mix of grants and procurement budgets. With massive payouts for those that develop new treatments or vaccines up front instead of patents, this means that those products can be manufactured around the world at much lower cost *(135)*. While some companies may be good at development, the AIDS response has shown that other companies based in the Global South are far better at innovating in production to make medicines affordable at scale.

During COVID-19, the vast majority of COVID-19 vaccine R&D was funded by public sources—a mix of upfront grants and procurement contracts at high prices. Had mRNA vaccines been developed with prizes instead, the world could have focused on producing them in Africa, Asia and Latin America at quality and at scale rather than arguing over a limited number of doses produced by a handful of companies.

The Pandemic Agreement and the G20-backed Global Coalition for Local and Regional Production, Innovation and Equitable Access are recent efforts to rebalance research, development, procurement and distribution of health technologies in favour of more equitable and more effective outcomes. But fundamentally, these have not gone far enough. Without greater action, in the next pandemic emergency, breakthrough technologies are likely to face the same fate—slow and unequal rollout, with millions of avoidable deaths and infections. International trade governance is in a period of transition—and there is an opportunity to take advantage of this moment of disruption to review how medicines are treated and produced.

Full recommendation

A. During a pandemic, including AIDS today: Put far more substantial global funding resources into coordinated regional production for the pandemics of today like HIV and tuberculosis to create the pull-mechanism for technology transfer:

1. **Dramatically increase funding for regional production and innovation of pandemic-related products. Build the pull-mechanism for transfer of the pandemic technology.** International financial institutions should channel major funding, largely through the G20-backed Global Coalition on Local and Regional Production, Innovation and Equitable Access, to ensure significant and stable investments in the research, development and manufacturing capacities for pandemic-related health innovations in the Global South. A meaningful level of support provided by the Coalition requires capital that international financial institutions can provide, and there must be a transfer of technology. Advanced countries supporting research should require this as a condition.

2. **To prepare for the pandemics of tomorrow, start with the pandemics of today including AIDS and tuberculosis.** Breakthrough technologies like the long-acting HIV prevention shot Lenacapavir, the next phase of mRNA vaccines, or new innovations for tuberculosis still face major barriers in that they are produced in only a few places, by a few makers, thus limiting their potential. If the Coalition tackles pandemics which affect millions of vulnerable people globally, the platforms for these disease responses will be primed and ready to fight future disease outbreaks.

B. To make the world safer from future pandemics: Automatically waive global intellectual property rules on pandemic technology when a pandemic is declared. Create an R&D model for the long term that treats pandemic health technology as public goods, using innovative mechanisms like prizes instead of patents, increasing funding and expanding Southern-led efforts.

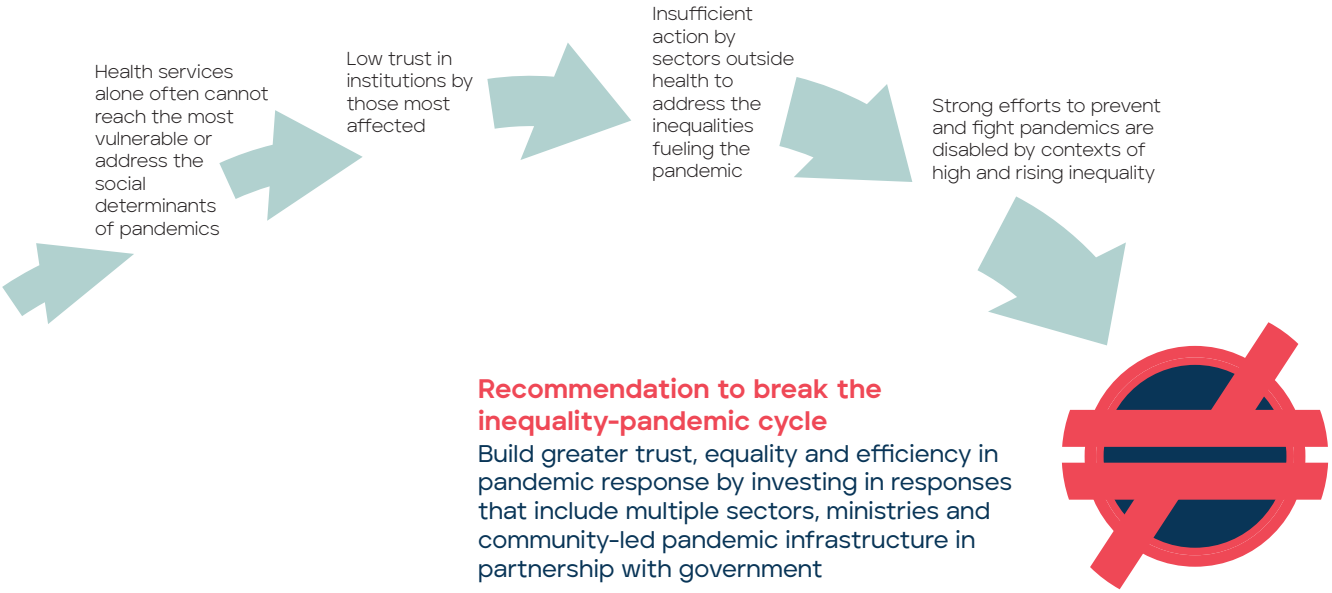
There has been a lot of energy spent on minor changes to the R&D and access systems, but the fundamental challenges remain. A major rethink is needed:

1. **Replace the current strategy of paying high prices globally for doses from limited suppliers with a fund to pay large upfront prize payments for the discovery of medicines and vaccines, with global licencing for production. Prizes instead of patents.** This is a bold idea ripe for use in the pandemic space. A mix of government funding and philanthropy could create the new structure that would complement the expanded production discussed above without the inefficiencies of monopolization. In particular, new efforts led by the Global South—BRICS, the African Union and others—could create space under a new paradigm of undertaking global health R&D.

2. **Make waiver of WTO rules *automatic* when WHO declares a pandemic emergency.** The principles of compulsory licences have already been well-accepted but the WTO system for using compulsory licensing in emergencies is not working (given both the complexity of some products, entailing multiple patents and the obstructionism of some companies). This means that a full waiver is necessary to avoid a repeat of the experience of vaccine apartheid. Under the new Pandemic Agreement, WHO has been directed to declare a pandemic emergency when needed. With that declaration, global leaders should insist that a temporary waiver on products related to the pandemic is automatic, avoiding confusion and delay that fuels pandemics.

3. **Improve pooled procurement mechanisms.** Include more mixed-income-level countries and tying the procurement of those goods to the sharing of technology for decentralized production.
4. **Adopt a global anti-hoarding agreement to promote wide, affordable, accessible production and access to pandemic technologies.** Hoarding of materials and supplies needed to make vaccines, medicines, and other technologies has been frequent—in violation of the spirit of global norms and trade agreements. An international agreement to avoid hoarding could help governments coordinate and build trust to avoid this in the next pandemic.
5. **Condition pandemic-related public science funding to open licencing.** This is a goal of Article 11 in the WHO Pandemic Agreement but fundamentally needs to be put into national laws.

4. Multisectoral and community-led responses to increase efficacy, trust and inequality responsiveness



Summary recommendation 4

Build greater trust, equality and efficiency in pandemic response by investing in responses that include multiple sectors, ministries and community-led pandemic infrastructure in partnership with government.

- **During a pandemic, including AIDS today:** Shift funding and measurement of pandemic impacts and preparedness and responses to include community-based and led organizations to reach those unreached by public and private health services. This should accompany, not replace, universal public services.
- **To make the world safer from future pandemics:** Establish multisectoral governance structures for pandemic response that include multiple ministries as well as community organizations, rights groups and scientific leadership

The rationale for action

Communities affected most by pandemics have insisted that there be room for them at policy-making tables, echoing the pioneering call of disability rights activists of 'nothing about us without us'. Today, people living with HIV and the communities most heavily affected by HIV are represented on the governing bodies of key global health institutions engaged in the HIV response, including the Global Fund, UNAIDS and Unitaid, and are active participants in country-level prioritization processes of the Global Fund and PEPFAR. Communities have created pioneering service organizations, they have participated in research, and they monitor programme implementation.

Involving communities in decision-making results in significant benefits by centring the response on the needs of those most detrimentally impacted by pandemics. However, many past lessons about community engagement during pandemics are continuously ignored and have not been incorporated into responding to future outbreaks, epidemics and pandemics. Despite ample evidence of the critical and beneficial impact of involving communities in the HIV response, including benefits at the societal and structural level *(136)*, they are frequently excluded from decision-making. Many COVID-19 responses did not take onboard the lessons learned from HIV regarding the transformative value of community engagement and community-led communications. Decision-making was done at a very high level using a top-down approach *(137)*. This resulted in failures to reach vulnerable groups and populations due to a failure to consider the needs of specific populations through ineffective communication channels and a lack of timely and culturally responsive materials *(138)*.

By establishing formal mechanisms for partnerships with community-based organizations, especially in policy-making, governments can significantly transform their pandemic responses through increased relevance and uptake of services that are tailored to the lived experiences and needs of critical vulnerable populations, resulting in more effective and sustainable health outcomes.

Decision-making about pandemic response and preparedness must incorporate more varied voices. Doing so can build trust within the pandemic response, foster social cohesion and be able to reach communities during pandemics. In the AIDS response, National AIDS Councils in many countries have proved important structures for enabling multiple ministries to engage, political leaders to support and communities to participate. Lessons from the HIV pandemic show that multisectoral efforts build trust, establish lines of communication and reach communities, including hard to reach groups that the government health ministry cannot reach alone *(139)*. This is not just effective, but an efficient pandemic response.

Full recommendation

A. During a pandemic, including AIDS today: Shift funding and measurement of pandemic impacts and preparedness and responses to include community-based and led organizations to reach those unreached by public and private health services. This should accompany, not replace, universal public services.

1. **Funding agencies should include community-led groups, particularly those most affected by a given pandemic, to partner with government in what's funded for pandemic preparedness and response.** These include organizations providing services, participating in decision-making and supporting accountability in the pandemic response to provide government with important insights. Since communities can reach those most vulnerable, pandemic responses can be tailored to the lived experiences and needs of populations, resulting in increased relevance and uptake of services, and thereby leading to more efficient and sustainable health outcomes. This should include building up organizations that are based in and led by community members to fight the pandemics of today, and to be ready for the pandemics of tomorrow. By establishing funding and social contracting mechanisms for community-led responses, states can form meaningful partnerships with community-based organizations, thus helping states provide health services to communities which are hard to reach, resulting in more efficient pandemic responses. Community organizations, however, cannot take the place of strong, universal public services supported by public financing—which are crucial to reducing overall inequalities.

B. To make the world safer from future pandemics: Establish multisectoral governance structures for pandemic response that include multiple ministries as well as community-organizations, rights groups and scientific leadership.

1. **Build multisectoral governance and approaches to respond to pandemics in ways that build trust and address the socioeconomic impacts of pandemics.** There are important lessons from National AIDS Councils and similar structures of what has worked and what challenges are faced *(140)*.

References

1 Haileamlak A. Pandemics will be more frequent. Ethiop J Health Sci. 2022;32(2):228. doi: 10.4314/ejhs.v32i2.1.

2 Poorolajal J. The global pandemics are getting more frequent and severe. J Res Health Sci. 2021;18;21(1):e00502. doi: 10.34172/jrhs.2021.40. PMID: 34024760; PMCID: PMC8957694.

3 Qureshi Z. Rising inequality: A major issue of our time. Washington, DC: Brookings Institution; 2023 (https://www.brookings.edu/articles/rising-inequality-a-major-issue-of-our-time/?b=1).

4 UN Women, United Nations Department of Economic and Social Affairs. Progress on the Sustainable Development Goals: the gender snapshot 2025. New York: UNWomen; 2025.

5 Mendos LR, Rohaizad DR. Laws on us: a global overview of legal progress and backtracking on sexual orientation, gender identity, gender expression, and sex characteristics, 1st edition. Geneva: ILGA World; 2024).

6 Inequality, pandemics and the role of social protection. Evidence review for the Global Council on Inequality, AIDS and Pandemics. London: University CollegeLondon-Institute for Health Equity; 2025.

7 Ataguba JEO, Birungi C, Cunial S, Kavanagh M. Income inequality and pandemics: insights from HIV/AIDS and COVID 19—a multi-country observational study. BMJ Glob Health. 2023.

8 Sepulveda ER, Brooker AS. Income inequality and COVID-19 mortality: Age-stratified analysis of 22 OECD countries. SSM-Pop Health. 2021;16 (https://www.scopus.com/inward/record.uri?eid=2-s2.0-85122498754&doi=10.1016%2fj.ssmph.2021.100904&partnerID=40&md5=e4a8fbab541a634c62c641b7d0ceb5c8).

9 Wildman J. COVID-19 and income inequality in OECD countries. Eur J Health Econ. 2021;22(3):455–62 (cited 4 February 2025). https://doi.org/10.1007/s10198-021-01266-4.

10 Su D, Alshehri K, Pagán J. Income inequality and the disease burden of COVID-19: Survival analysis of data from 74 countries. Prev Med Rep. 2022;27:101828.

11 Elgar FJ, Stefaniak A, Wohl MJA. The trouble with trust: time-series analysis of social capital, income inequality, and COVID-19 deaths in 84 countries. Soc Sci Med. 2020;263:113365 (https://www.sciencedirect.com/science/article/pii/S0277953620305840; cited 8 February 2025).

12 National Center for Health Statistics. COVID-19 mortality by State. Atlanta: Centers for Disease Control and Prevention; 2023 (https://www.cdc.gov/nchs/pressroom/sosmap/covid19_mortality_final/COVID19.htm; cited 4 June 2025).

13 Hallal Pedro C. et al. SARS-CoV-2 antibody prevalence in Brazil: results from two successive nationwide serological household surveys. The Lancet Glob Health. 2020:8(11);e1390–e1398.

14 Demenech LM, Dumith S de C, Vieira MECD, Neiva-Silva L. Desigualdade econômica e risco de infecção e morte por COVID-19 no Brasil. Rev Bras Epidemiol. 2020;23:e200095 (https://www.scielo.br/j/rbepid/a/fm3gkNqTH9XS9nBfqcGwgfG/?lang=p; cited 24 September 2024).

15 Da Silva CFA, Silva MC, Dos Santos AM, Rudke AP, do Bonfim CV, Portis GT, et al. Spatial analysis of socio-economic factors and their relationship with the cases of COVID-19 in Pernambuco, Brazil Trop Med Int Health. 2022;27(4):397–407.

16 Raymundo CE, Oliveira MC, Tatiana de Araujo E, André SR, da Silva MG, da Silva Queiroz ER, et al. Spatial analysis of COVID-19 incidence and the sociodemographic context in Brazil. PLoS ONE. 2021:1 (https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0247794; cited 24 September 2024).

17 Szwarcwald CL, Almeida WS, Boccolini CS, Soares Filho AM, Malta DC. The unequal impact of the pandemic at subnational levels and educational attainment-related inequalities in COVID-19 mortality, Brazil, 2020–2021. Public Health. 2024;1231:39–46 (https://www.sciencedirect.com/science/article/pii/S0033350624001136; cited 24 September 2024).

18 Definition of informal settlements. Nairobi: UN Habitat; 2025 https://unhabitat.org/sites/default/files/2025/08/definitions_-_informal_settlements_concept_note_14.08.2025.pdf; cited 7 October 2025).

19 Katz IT, Thomson DR, Ravishankar S, et al. Intersectional forces of urban inequality and the global HIV pandemic: a retrospective analysis. BMJ Glob Health. 2025;10:e014750. doi:10.1136/ bmjgh-2023-014750.

20 Gauffin K, Östergren O, Cederström A. Waves of inequality: income differences in intensive care due to Covid-19 in Sweden. Eur J Public Health. 2023;33(4):574–9; cited 25 September 2024. https://doi.org/10.1093/eurpub/ckad094.

21 World report on social determinants of health equity. Geneva: World Health Organization; 2025 (https://iris.who.int/server/api/core/bitstreams/b88a62f3-2f12-4001-840d-db0ef78dce71/content).

22 Rajmil L, Hjern A, Spencer N, Taylor-Robinson D, Gunnlaugsson G, Raat H. Austerity policy and child health in European countries: a systematic literature review. BMC Public Health 2020;20:564.

23 COVID-19 and the social determinants of health and health equity: evidence brief. Geneva: World Health Organization; 2021 (https://iris.who.int/server/api/core/bitstreams/53c42918-80f1-44cd-97e9-3d4a884e788d/content).

24 Marmot M, Allen J, Goldblatt P, Herd E, Morrison J. Build back fairer: The COVID-19 Marmot Review. London: Institute of Health Equity; 2020 (https://www.instituteofhealthequity.org/resources-reports/build-back-fairer-the-covid-19-marmot-review; cited 22 September 2024).

25 Zvokuomba K, Kabonga I. Disaster response feasibility: poverty and inequality as sources of community fragility during Covid-19 lockdown in Zimbabwe. J Soc Dev Afr. 2021;36(1):9–32 (https://www.proquest.com/docview/2583605930/abstract/315258B60AFC469DPQ/1; cited 27 September 2024).

26 McNamara CL, McKee M, Stuckler D. Precarious employment and health in the context of COVID-19: a rapid scoping umbrella review. Eur J Public Health. 2021;31(Suppl 4):iv40–9 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8576296/; cited 27 September 2024).

27 COVID-19 health equity impact policy brief: informal workers. Geneva: World Health Organization; 2020 (https://www.who.int/europe/publications/i/item/WHO-EURO-2020-1654-41405-56445; cited 15 February 2025).

28 MacEachen E, Meyer SB, Majowicz S, Hopwood P, Crouch M, Amoako J, et al. Perceived COVID-19 health and job risks faced by digital platform drivers and measures in place to protect them: a qualitative study. Am J Ind Med. 2022;65(9):731–42.

29 Hummel C, Knaul FM, Touchton M, Guachalla VXV, Nelson-Nuñez J, Boulding C. Poverty, precarious work, and the COVID-19 pandemic: lessons from Bolivia. The Lancet Glob Health. 2021;9(5):e579–81 (https://www.thelancet.com/journals/langlo/article/PIIS2214-109X(21)00001-2/fulltext; cited 12 July 2025).

30 Shahidi FV, Liao Q, Landsman V, Mustard CA, Robson L, Biswas A, et al. Precarious employment and the workplace transmission of COVID-19: evidence from workers' compensation claims in Ontario, Canada J Epidemiol Commun Health. 2024;78(11):675–81.

31 Conyers L, Chen Chiu JY, Rueda S, Misrok M, Lynn V, McKinney-Prupis E. Employment as a Social Determinant of HIV Care and Prevention Outcomes. AIDS Updates - Recent Advances and New Perspectives. 9 July 2021. doi: 10.5772/intechopen.98418.

32 Ugwu CLJ, Ncayiyana JR. Spatial disparities of HIV prevalence in South Africa. Do sociodemographic, behavioral, and biological factors explain this spatial variability? Front Public Health. 2022;10:994277.

33 Lee JO, Kapteyn A, Clomax A, Jin H. Estimating influences of unemployment and underemployment on mental health during the COVID-19 pandemic: who suffers the most? Public Health. 2021;201:48–54.

34 Lua I, Silva AF, Guimarães NS, Magno L, Pescarini J, Anderle RVR, et al. The effects of social determinants of health on acquired immune deficiency syndrome in a low-income population of Brazil: a retrospective cohort study of 28.3 million individuals. Lancet Reg Health Am. 2023;24:100554.

35 Ekholuenetale M, Onuoha H, Ekholuenetale CE, et al. Socioeconomic inequalities in human immunodeficiency virus (HIV) sero-prevalence among women in Namibia: further analysis of population-based data. Int J Environ Res Public Health 2021;18:9397.

36 Blondel B, Mahjoub N, Drewniak N, Launay O, Goffinet F. Failure of the vaccination campaign against A(H1N1) influenza in pregnant women in France: results from a national survey. Vaccine. 2012;17:30(38):5661–5.

37 Barceló MA, Perafita X, Saez M. Spatiotemporal variability in socioeconomic inequalities in COVID-19 vaccination in Catalonia, Spain. Public Health. 2024;227:9–15 (https://www.sciencedirect.com/science/article/pii/S0033350623004547; cited 20 September 2024).

38 Bartig S, Müters S, Hoebel J, Schmid-Küpke NK, Allen J, Hövener C. Social differences in COVID-19 vaccination status—Results of the GEDA 2021 study. J Health Monit. 2023;8(Suppl 2):2 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10155233/; cited 20 September 2024).

39 Rodrigues A, Struchiner CJ, Coelho LE, et al. Late initiation of antiretroviral therapy: inequalities by educational level despite universal access to care and treatment. BMC Public Health. 2021;21:389. https://doi.org/10.1186/s12889-021-10421-8.

40 Siani A, Green I. Scientific misinformation and mistrust of COVID-19 preventive measures among the UK population: a pilot study. Vaccines. 2023;11:301. https://doi.org/10.3390/vaccines11020301.

41 Simba H, Ngcobo S. Are pandemics gender neutral? Women's health and COVID-19. Front Glob Womens Health. 2020;1 (https://www.frontiersin.org/journals/global-womens-health/articles/10.3389/fgwh.2020.570666/full; cited 14 February 2025).

42 Binagwaho A, Mathewos K. Infectious disease outbreaks highlight gender inequity. Nat Microbiol. 2022;7(3):361–2 (https://www.nature.com/articles/s41564-022-01075-2; cited 14 February 2025).

43 UNAIDS estimates, Geneva: UNAIDS; 2025.

44 McIntosh WA, Thomas JK. Economic and other societal determinants of the prevalence of HIV: a test of competing hypotheses. The Sociological Quarterly (TSQ). 2004;45(2):303–24; cited 24 September 2024. https://doi.org/10.1111/j.1533-8525.2004.tb00014.x.

45 Burroway R. Schools against AIDS: secondary school enrollment and cross-national disparities in AIDS death rates. Soc Probl. 2010;57(3):398–420. https://doi.org/10.1525/sp.2010.57.3.398.

46 COVID-19 and the social determinants of health and health equity: evidence brief. Geneva: World Health Organization; 2021 (https://www.who.int/publications/i/item/9789240038387; cited 27 September 2024).

47 Marmot M, Allen J, Goldblatt P, Willis S, Noferini J, Callaghan O. Structural racism, ethnicity and health inequalities in London. London: University College London-Institute of Health Equity; 2024 (https://www.instituteofhealthequity.org/resources-reports/structural-racism-ethnicity-and-health-inequalities; cited 9 October 2024).

48 Refugee and migrant health. Geneva: World Health Organization; 2022 (https://www.who.int/news-room/fact-sheets/detail/refugee-and-migrant-health; cited 14 February 2025).

49 Hintermeier M, Gottlieb N, Rohleder S, Oppenberg J, Baroudi M, Pernitez-Agan S, et al. COVID-19 among migrants, refugees, and internally displaced persons: systematic review, meta-analysis and qualitative synthesis of the global empirical literature. eClinical Med. 2024;74 (https://www.thelancet.com/journals/eclinm/article/PIIS2589-5370(24)00277-3/fulltext; cited 14 February 2025).

50 Equity in the HIV response: assessing progress and charting a way forward. Geneva and Washington, DC: UNAIDS, PEPFAR, Bureau of Global Health Security and Diplomacy, United States Department of State; 2024. Licence: CC BY-NC-SA 3.0 IGO.

51 Srivatsan et al. Human rights laws and protections and the AIDS response: an analysis. Working Paper.

52 Lyons CE, Rwema JOT, Makofane K, Diouf D, Njindam IM, Ba I, et al. Associations between punitive policies and legal barriers to consensual same-sex sexual acts and HIV among gay men and other men who have sex with men in sub-Saharan Africa: a multicountry, respondent-driven sampling survey. Lancet HIV. 2023;10(3):e186–e194.

53 Kavanagh MM, Agbla SC, Joy M, Aneja K, Pillinger M, Case A, et al. Law, criminalisation and HIV in the world: have countries that criminalise achieved more or less successful pandemic response? BMJ Glob Health. 2021;6(8):e006315.

54 Hoffman SJ, Garcia Y, Altamirano-Crosby J, Ortega SM, Yu K, Abudiab SM, et al. How can you advocate for something that is nonexistent? (CM16-17) Power of community in a pandemic and the evolution of community-led response within a COVID-19 CICT and testing context. Front Public Health. 2022;10:901230.

55 Davis H, Elmer S, Graves K, Learmonth C. Codesign and community outreach to create COVID-19 safe communities: A Karen community case study. Front Public Health. 2023;11:1081767.

56 COVID-19 National Preparedness Collaborators. Pandemic preparedness and COVID-19: an exploratory analysis of infection and fatality rates, and contextual factors associated with preparedness in 177 countries, from Jan 1, 2020, to Sept 30, 2021. Lancet. 2022:16;399(10334):1489–1512.

57 Lima NT. Pandemic and interdisciplinarity: challenges for collective health. Saúde em Debate. 2022;46:9–24. https://doi.org/10.1590/0103-11042022E601.

58 Hallal Pedro C; Victora CG. Overcoming Brazil's monumental COVID-19 failure: an urgent call to action. Nature Med. 2021;27(6):933.

59 Let communities lead. World AIDS Day report 2003. Geneva: UNAIDS; 2003.

60 Moyo E, Moyo P, Murewanhema G, et al. Community-led interventions for HIV and AIDS prevention, treatment, and care in southern Africa: a scoping review. Discov Public Health. 2025;22(78). https://doi.org/10.1186/s12982-025-00468-y.

61 Di Ciaccio M, Bourhaba O, Khoury C, Assi A, Abu Zaki S, Lorente N. EPIC study group. How community-based organizations responded to the Covid-19 crisis to maintain HIV services among vulnerable populations in Burundi, Mauritania, and Lebanon: qualitative results from the multicountry EPIC program. J Int Assoc Provid AIDS Care. 2024;23:23259582241263686.

62 Leveraging the HIV response for stronger health systems and pandemic preparedness: early lessons from COVID-19 responses in six countries. Washington DC: Friends of the Global Fight Against AIDS, Tuberculosis and Malaria; 2021 (https://www.theglobalfight.org/issue-brief-leveraging-the-hiv-response-for-stronger-health-systems-and-pandemic-preparedness/.

63 Golin R, Godfrey C, Firth J, Lee L, Minior T, Phelps BR, et al. PEPFAR's response to the convergence of the HIV and COVID-19 pandemics in Sub-Saharan Africa. J Int AIDS Soc. 2020;23(8):e25587.

64 van Ryneveld M, Whyle E, Brady L. What Is COVID-19 teaching us about community health systems? A reflection from a rapid community-led mutual aid response in Cape Town, South Africa. Int J Health Policy Manag. 2022;1:11(1):5–8.

65 Loewenson R, Colvin CJ, Szabzon F, Das S, Khanna R, Coelho VSP, et al. Beyond command and control: A rapid review of meaningful community-engaged responses to COVID-19. Glob Public Health. 2021;16(8–9):1439–1453.

66 Siekmans K, Sohani S, Boima T, Koffa F, Basil L, Laaziz S. Community-based health care is an essential component of a resilient health system: evidence from Ebola outbreak in Liberia. BMC Public Health. 2017; 17(1):84.

67 Barker KM, Ling EJ, Fallah M, VanDeBogert B, Kodl Y, Macauley RJ, et al. Community engagement for health system resilience: evidence from Liberia's Ebola epidemic. Health Policy Plan. 2020;1:35(4):416–423.

68 Kavanagh, et al. The global landscape of national civil society laws and their association with 95-95-95 AIDS targets. Working paper.

69 Kavanagh MM, Graeden E, Pillinger M, Singh R, Eaneff S, Bendaud V, et al., Understanding and comparing HIV-related law and policy environments: cross-national data and accountability for the global AIDS response. BMJ Glob Health. 2020;5(9):e003695.

70 AIDS, crisis and the power to transform. UNAIDS global AIDS update 2025. Geneva: UNAIDS; 2025.

71 Beyrer C, Kamarulzaman A, Isbell M, Amon J, Baral S, Bassett MT, et al. Under threat: the International AIDS Society–Lancet Commission on health and human rights. The Lancet. 2024;403(10434):1374–1418.

72 United Nations Human Rights Council. Human rights in the context of HIV and AIDS. Fifty-sixth session, 18 June–12 July 2024. A/HRC/RES/56/20. Geneva: United Nations; 2024.

73 Moore S, Hill EM, Dyson L, Tildesley MJ, Keeling MJ. Retrospectively modeling the effects of increased global vaccine sharing on the COVID-19 pandemic. Nature Med. 2022;28(11):2416–23.

74 Ye Y, Zhang Q, Wei X, Cao Z, Yuan HY, Zeng DD. Equitable access to COVID-19 vaccines makes a life-saving difference to all countries. Nature Human Behav. 2022;6(2):207–16.

75 What financial support is needed for low-income countries to recover from the pandemic? Cologny: World Economic Forum; 2021 (https://www.weforum.org/stories/2021/04/imf-the-financial-support-that-low-income-countries-need-to-recover-from-covid-19-explained/).

76 Hill R, Kim YS, Brunckhorst B. Protecting the most vulnerable: lessons from the fiscal response to the COVID-19 pandemic. World Bank blog. Washington, DC: World Bank; 2023 (https://blogs.worldbank.org/en/developmenttalk/protecting-most-vulnerable-lessons-fiscal-response-covid-19-pandemic).

77 Low-income country debt rises to record $860 billion in 2020. Press release: 11 October 2021. Washington, DC: World Bank; 2021 (https://www.worldbank.org/en/news/press-release/2021/10/11/low-income-country-debt-rises-to-record-860-billion-in-2020).

78 Debt sustainability analysis. Washington, DC: World Bank; 2025 (https://www.worldbank.org/en/programs/debt-toolkit/dsa).

79 Mawejje J. Fiscal vulnerabilities in low-income countries. Evolution, drivers, and policies. Washington, DC: World Bank; 2025 (https://www.worldbank.org/en/research/publication/fiscal-vulnerabilities).

80 Debt crisis threatens progress in the response to AIDS. Geneva: UNAIDS; 2025 (https://www.unaids.org/en/resources/presscentre/featurestories/2025/march/20250320_debt-crisis).

81 Cuts in official development assistance: OECD projections for 2025 and the near term, OECD Policy Briefs. No. 26, Paris: Organisation for Economic Co-operation and Development; 2025 (https://doi.org/10.1787/8c530629-en).

82 Assefa Y, Gilks CF, Reid S, van de Pas R, Gete DG, Van Damme W. Analysis of the COVID-19 pandemic: lessons towards a more effective response to public health emergencies. Global Health. 2022;4:18(1):10.

83 Lal A, Erondu NA, Heymann DL, Gitahi G, Yates R. Fragmented health systems in COVID-19: rectifying the misalignment between global health security and universal health coverage. The Lancet. 2021;2:397(10268):61–67.

84 Haldane V, De Foo C, Abdalla SM, Jung AS, Tan M, Wu S, et al. Health systems resilience in managing the COVID-19 pandemic: lessons from 28 countries. Nature Med. 2021;27(6):964–80.

85 Armocida B, Formenti B, Palestra F, Ussai S, Missoni E. COVID-19: universal health coverage now more than ever. J Global Health. 2020;2;10(1):010350.

86 Barennes H, Frichittavong A, Gripenberg M, Koffi P. Evidence of high out of pocket spending for HIV care leading to catastrophic expenditure for affected patients in Lao People's Democratic Republic. PLoS One. 2015;1;10(9):e0136664.

87 Haakenstad A, Bintz C, Knight M, Bienhoff K, Chacon-Torrico H, Curioso WH, Catastrophic health expenditure during the COVID-19 pandemic in five countries: a time-series analysis. The Lancet Global Health. 2023;1;11(10):e1629-39.

88 Galvani AP, Parpia AS, Pandey A, Sah P, Colón K, Friedman G, et al. Universal healthcare as pandemic preparedness: the lives and costs that could have been saved during the COVID-19 pandemic. Proc Natl Acad Sci USA. 2022;21;119(25):e2200536119.

89 Mangal TD, Mohan S, Colbourn T, Collins JH, Graham M, Jahn A, et al. Assessing the effect of health system resources on HIV and tuberculosis programmes in Malawi: a modelling study. The Lancet Global Health. 2024;1;12(10):e1638-48.

90 Kentikelenis A, Stubbs T. A thousand cuts: social protection in the age of austerity. Oxford: Oxford University Press; 2023.

91 Stiglitz J. Austerity has been an utter disaster for the eurozone. The Guardian. 2014;1:2014.

92 Nosrati E, Dowd JB, Marmot M, King LP. Structural adjustment programmes and infectious disease mortality. PLoS One. 2022;17(7):e0270344.

93 Stuckler D, King LP, Basu S. International Monetary Fund programs and tuberculosis outcomes in post-communist countries. PLoS Med. 2008;5(7):e143.

94 Kentikelenis A, King L, McKee M, Stuckler D. The International Monetary Fund and the Ebola outbreak. The Lancet Global Health. 2015;3(2):e69-70.

95 Poku NK. Poverty, debt and Africa's HIV/AIDS crisis. Int Affairs. 2002;78(3):531-46.

96 Rowden R. Blocking progress: the IMF and HIV/AIDS. Global Social Policy. 2008;8(1):19-24.

97 Soener M. How austerity is worsening coronavirus. Books & Ideas, College de France. 2020;4.

98 Forster T, Kentikelenis AE, Reinsberg B, Stubbs TH, King LP. How structural adjustment programs affect inequality: a disaggregated analysis of IMF conditionality, 1980–2014. Soc Sci Res. 2019;80:83-113.

99 Agnello L, Sousa RM. How does fiscal consolidation impact on income inequality? Rev Income Wealth. 2014;60(4):702-26.

100 Ball L, Furceri D, Leigh D, Loungani P. The distributional effects of fiscal austerity. ST/ESA/2013/DWP/129. New York: United Nations; 2013 (https://www.un.org/pl/desa/distributional-effects-fiscal-austerity).

101 Furceri D, Loungani P, Ostry JD, Pizzuto P. The rise in inequality after pandemics: can fiscal support play a mitigating role? IMF Working Paper. 20:26. Washington, DC: IMF; 2021.

102 Schellekens P. COVID-19 vaccine distribution relative to global needs. Pandem-IC. New York: Center for Global Development, UNDP; 2021 (https://pandem-ic.com/vaccine-distribution-relative-to-global-needs/; cited 1 July 2021).

103 COVID vaccine hoarding might have cost more than a million lives. Nature. 2 November 2022. doi: https://doi.org/10.1038/d41586-022-03529-3.

104 Stiglitz JE, COVID has made global inequality much worse. Sci Am. 1 March 2022 (https://www.scientificamerican.com/article/covid-has-made-global-inequality-much-worse/).

105 The state of food security and nutrition in the world 2021. Rome: Food and Agriculture Organization of the United Nations; 2024 (https://www.fao.org/interactive/state-of-food-security-nutrition/2021/en/; cited 30 September 2024).

106 Billionaires' wealth rises to $10.2 trillion amid Covid crisis. The Guardian. 7 October 2020.

107 The impact of COVID-19 on global inequality and poverty. Washington, DC: World Bank; 2022 (https://openknowledge.worldbank.org/entities/publication/54fae299-8800-585f-9f18-a42514f8d83b; cited 19 February 2025).

108 Aspachs O, Durante J García Montalvo R, Graziano A, Mestres J, Reynal-Querol M. Real-time inequality and the welfare state in motion: evidence from COVID-19 in Spain. CEPR Discussion Paper No. 15118. Paris: Centre for Economic Policy Research; 2020.

109 Crossley TF, Fisher P, Low H. The heterogeneous and regressive consequences of COVID-19: evidence from high quality panel data. J Public Econ 2020;104334.

110 Nketiah-Amponsah E, Abubakari M, Baffour PT. Effect of HIV/AIDS on economic growth in sub-Saharan Africa: recent evidence. Int Adv Econ Res. 2019;25:469-480. https://doi.org/10.1007/s11294-019-09754-3.

111 Sekwat A. The impact of HIV/AIDS on economic development in sub-Saharan Africa: policy implications. In Handbook of Development Studies. Gedeon M, Mudacumura M, Shamsul Haque editors. New York: Marcel Dekker; 2014. Chapter 15, pp.281-295.

112 Dixon S, McDonald S, Roberts J. The impact of HIV and AIDS on Africa's economic development. BMJ. 2002;324:232. doi:10.1136/bmj.324.7331.232.

113 Furceri D, Loungani P, Ostry JD, Pizzuto P. Will COVID-19 have long-lasting effects on inequality? Evidence from past pandemics. IMF Working Paper. Washington, DC: IMF; 2021.

114 Furceri D, Loungani P, Ostry JD, Pizzuto P. The rise in inequality after pandemics: can fiscal support play a mitigating role? IMF Working Paper. 20:26. Washington, DC: IMF; 2021.

115 Global AIDS Update 2025. AIDS, crisis and the power to transform. Geneva: UNAIDS; 2025.

116 The Jubilee Report. A blueprint for tackling the debt and development crises and creating the financial foundations for a sustainable people-centered global economy. Commissioned by Pope Francis. Vatican City: The Pontifical Academy of Social Sciences; 2025.

117 Summers LH. Economists' declaration on universal health coverage. The Lancet. 2015;21:386(10008):2112-3.

118 World report on social determinants of health equity. Geneva: WHO; 2025.

119 Marmot M, Allen J, Boyce T, Goldblatt P, Morrison J. Health equity in England: The Marmot Review 10 years on. London: University College London-Institute of Health Equity; 2020.

120 Goldblatt P, Castedo A, Allen J , Lionello L, Bell R, Marmot M. Rapid review of inequalities in health and wellbeing in Norway since 2014. London: University College London-Institute of Health Equity; 2023.

121 Carneiro P, Cattan S, Conti G, Crawford C, Farquharson C, Ridpath N. The short- and medium-term effects of Sure Start on children's outcomes. London: Institute for Fiscal Studies; 2025 (https://ifs.org.uk/publications/short-and-medium-term-effects-sure-start-childrens-outcomes).

122 Ahmad K, Erqou S, Shah N, Nazir U, Morrison AR, Choudhary G, et al. Association of poor housing conditions with COVID-19 incidence and mortality across US counties. PloS One. 2020;2;15(11):e0241327.

123 Antunes JL, Waldman EA. The impact of AIDS, immigration and housing overcrowding on tuberculosis deaths in São Paulo, Brazil, 1994–1998. Soc Sci Med. 2001;52(7):1071-80.

124 Kavanagh MM, Srivatsan V, Anam FR, Bok L, Abinader LG, Sharma A, et al. Global legal environment for LGBTQ+ sexuality and public health. J Law Med Ethics. 2025;53(1):115-33.

125 Evidence review: inequalities, pandemics and the role of social protection. Working paper.

126 Gelo D, Dikgang J. Implications of COVID-19 labour market shock for child and household hungers in South Africa: Do social protection programs protect? PLoS One. 2022;17(7):e0269848 (https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0269848; cited 3 October 2024).

127 Fastenau A. Integrating community engagement in zero leprosy efforts: a pathway to sustainable early detection, control and elimination. Trop Med Infect Dis. 2024;9(12): 296.

128 Nery JS, et al. Effect of the Brazilian conditional cash transfer and primary health care programs on the new case detection rate of leprosy. PLoS Negl Trop Dis. 2014;8(11):e3357.

129 Jesus GS, et al. Effects of conditional cash transfers on tuberculosis incidence and mortality according to race, ethnicity and socioeconomic factors in the 100 million Brazilian cohort. Nature Med. 2025;31(2):653–662.

130 Rasella D, et al. Effect of a conditional cash transfer programme on childhood mortality: a nationwide analysis of Brazilian municipalities. The Lancet. 2013;382:9886:57–64.

131 Silva AF, Dourado I, Lua I, Jesus GS, Guimarães NS, Morais GAS, et al. Income determines the impact of cash transfers on HIV/AIDS: cohort study of 22.7 million Brazilians. Nat Commun. 2024;15(1):1307 (https://www.nature.com/articles/s41467-024-44975-z; cited 2 October 2024).

132 Kavanagh M, Abinader L, Hassan N, Friedman E. Law and global governance of infectious disease: access to medicines on COVID-19, AIDS, and beyond. J Law Med Ethics. 2025.

133 MSF Access Campaign. Untangling the web of antiretroviral price reductions (15th edition). Geneva: Médecins Sans Frontières; 2012 (http://www.msfaccess.org/content/untangling-web-antiretroviral-price-reductions-15th-edition).

134 2024 Global AIDS report: the urgency of now: AIDS at a crossroads. Geneva: UNAIDS, 2024 (https://www.unaids.org/en/resources/documents/2024/global-aids-update-2024).

135 Stiglitz JE. Economic foundations of intellectual property rights.Duke Law J. 2007;57:1693.

136 Ayala G, Sprague L, van der Merwe LL, Thomas RM, Chang J, Arreola S, et al. Peer- and community-led responses to HIV: a scoping review. PLoS One. 2021;16(12):e0260555.

137 Collins C, Isbell MT, Karim QA, Sohn AH, Beyrer C, Maleche A. Leveraging the HIV response to strengthen pandemic preparedness. PLoS Glob Public Health. 2023;24;3(1):e0001511.

138 Global Council on Inequality, AIDS and Pandemics. The role of community-led responses during the COVID-19 pandemic: a preliminary literature review. Background paper. Geneva: UNAIDS; 2025.

139 Byanyima W, Lauterbach K, Kavanagh MM. Community pandemic response: the importance of action led by communities and the public sector. Lancet. 2023;28;401(10373):253–255.

140 Mahlangu P, Goudge J, Vearey J. Towards a framework for multisector and multilevel collaboration: case of HIV and AIDS governance in South Africa. Glob Health Action. 2019;12(1):1617393.

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UNAIDS
Joint United Nations
Programme on HIV/AIDS

20 Avenue Appia
1211 Geneva 27
Switzerland

+41 22 595 59 92

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