

Evidence in Response to the Foreign Affairs Committee Inquiry into Global Health Security (GHS0002)

Submitted by the Centre for Global Security Challenges (CGSC) and Centre for Global Development (CGD) in the School of Politics and International Studies at the University of Leeds, UK. The CGSC possesses world-leading, multi-method expertise in international security and hosts the *European Journal of International Security*. CGD is an interdisciplinary network addressing the transformation of human societies in response to critical global development challenges.

We represent one of the biggest hubs of Political Science and International Relations scholars working on global health security in the UK, and one of the largest globally. Our researchers have worked with the WHO, UNDP, Drugs for Neglected Diseases initiative (DNDi), Nuffield Trust, P4Health, regional health communities and national governments to inform political solutions for global health security.

We are submitting evidence because of our collective expertise related to global health, health security, health governance and diplomacy, health systems and financing, and international health collaboration and trust (see Annex A for biographies).

Executive Summary and Recommendations

1. COVID-19 has underlined that **there can be no genuine and resilient global health security without essential capacities and resources present at all levels of global society**, from the multilateral to the local. Meaningful global health security requires equitable access to health services and technologies.
2. Our understanding of the UK's role in future global health security recognises the **inherently political nature of these global challenges**. Politics is key to building the capacities, resources and resilience in health needed to address global health insecurities.
3. This submission distils evidence regarding the **vulnerabilities of pre-existing arrangements governing global health security** (paragraphs 21-27, 37-42, 64), the most pressing **fault lines exposed by COVID-19** (paragraphs 25-28, 38-40) and **areas of best practice and success** from which new international efforts toward health security should proceed (paragraphs 29-35).
4. It is necessary to **develop robust global institutions** (paragraphs 21-24, 44, 49, 51, 57); **invest diplomatically and financially in building trust and cooperation** (paragraphs 27-28, 39, 42, 48-50, 56); and for the UK **to promote and assist in developing mutually assured capacities, resources and resilience for global health security** (paragraphs 29, 32-36, 38-41, 43-48, 52-66). The need for increased collective global capacities and resources to respond to health threats and challenges reflect the interdependent and currently under-financed nature of global health security.

Our key findings:

5. **Global health security requires effective global leadership**. Global health institutions are under-subscribed and under-invested in. Institutional weakness has led to breakdowns in trust and collaboration during COVID-19. Weak and inconsistent political leadership decreases the international trust (between institutions of governance) and public trust

(between governments and society) needed for effective, coordinated action (paragraphs 42, 49-50, 56).

6. **UK global health policy has tended to be reactive**, targeting exceptional cases of acute health emergency and then losing focus. This has produced short-term, siloed responses that tend to target specific health problems without the wider health system improvements necessary for long-term solutions (paragraphs 36-38).
7. **For the UK to play a proactive leadership role in global health requires financial investment** (resisting downward pressures on its international aid commitments) **and a coordinated strategy to address the trust and legitimacy problems** apparent in global health security regimes and institutions.
8. **The UK has undermined its own security by its short-term approach to COVID-19 with the use of avoidable lockdowns and countermeasures with extended social and economic costs, while vaccines are discovered, tested, approved, manufactured and distributed.** Although vaccines are a necessary part of health security, vaccine programs alone remain insufficient (paragraph 38). Genuine health security must target the social, political, commercial and environmental determinants of health and respond to the upstream drivers of ill health and pandemic threats (paragraphs 42-44).
9. **A strong, well-resourced global health system is critical to the UK's national interest.** The system is only as strong as its weakest link: without investment in the weakest health systems, in surveillance, diagnostics, and reporting capacities, there will be no genuine global health security. Delays in diagnostics, reporting and data sharing hampered effective national and international response to COVID-19. Investment is crucial and will yield long-term cost savings to government given the costs of past inaction and neglect (paragraphs 49, 53-54, 57, 60).
10. **The resourcing of health technologies and vaccine development and delivery must be reformed.** Stable global systems of COVID-19 vaccine production and supply must be developed. New platforms for allocating and sharing pandemic response technologies are required, with equity, evidence and the logic of common goods for health as key guiding principles (paragraphs 58-61, 63). Demonstrating fairness of process and outcome is crucial to build the trust necessary for cooperation and coordination.

We recommend:

11. **The FCDO must assume a proactive leadership role in global health and should work to enable UK leadership in resourcing global health institutions and health systems strengthening.** More specifically:
12. **The UK can use its position in multilateral forums, including the United Nations Security Council and its upcoming presidency of the G7 to set a new global health agenda.** The G7 in particular is underutilised despite a history of launching meaningful health initiatives.
13. **The UK should support the WHO to become a more efficient coordinating and oversight body, strengthening WHO legitimacy as a global leader through commitment, financing and authoritative jurisdiction.** This is necessary to address governance fragmentation due to parallel and partial initiatives and institutions in global health governance.

14. **The UK should provide diplomatic and financial support to the WHO Health Systems for Health Security Framework** to close gaps in health systems and strengthen preparedness.¹
15. **The UK should work to reform and strengthen the International Health Regulations (IHRs) at all levels, with independent monitoring and evaluation processes.** Failures in IHR compliance directly threaten UK health security as it makes global monitoring, diagnostics, reporting and coordination less likely and consistent. Commitments to the IHRs require appropriate financing and compliance mechanisms. The IHRs are not a long-term solution but necessary until other recommendations outlined in this document are pursued.
16. **The FCDO should encourage and support collaboration among multiple sectors for better health outcomes.** This can be based on the WHO One Health approach that recognises the interconnected and indirect impacts policy decisions have on animals, humans and the environment. This requires:
 - i) Financial and technical assistance, particularly in low resource settings.
 - ii) Multilevel policy interlinking local, national, and international regulations.
 - iii) Training healthcare professionals and policymakers.
 - iv) Heterogeneity of expertise and input from all sectors of society to ensure broad understanding, contextual appropriateness, and buy-in.
17. **The UK can exhibit and support global intellectual leadership in health, namely:**
 - i) Learning from best practice where countries effectively tackled COVID-19 including through early testing capacities, controlling infection and mortality rates, economic support schemes and collaborating with scientists (e.g. Germany and South Korea).
 - ii) Focusing training of health diplomats on building long-term equitable professional relationships.
 - iii) Identifying the health security outcomes of enhanced health systems capacities and resilience in particular countries.
 - iv) Encouraging UK government leadership on strategic investment in collaborative, international global health research integrating social and physical sciences, centring an understanding of the inherently political nature of global health challenges. Academic expertise should be routinely involved in FCDO activities and practice.
 - v) Promoting greater transparency and consistency in the awarding and use of resources for combating health crises, drawing on the lessons learned from Ebola and COVID-19 responses.
18. **Strengthening national health systems and other regional and global mechanisms needs to be re-framed as long-term investment.** Prioritising investments in core health system functions is fundamental to protecting and promoting health and well-being (Common Goods for Health)² and would strengthen pandemic prevention and preparedness. Given the 19.5 trillion USD in COVID-19 stimulus packages to date³ and lost global GDP estimated at \$5.8 to \$8.8 trillion,⁴ there are convincing political and fiscal arguments for investment.
19. **Reforms are also needed in how Development Assistance for Health (DAH) is conceptualised and delivered.** DAH suffers from underfinancing and short-termism. The FCDO should also ensure that an adequate amount of DAH is being allocated to the reduction of infectious diseases.⁵ Relatively minor investments in health system strengthening could reap significant improvements in global health security. By investing in health systems strengthening, the UK will also send a 'costly signal' - a significant and substantial action to communicate trusting intent – that can also foster international trust and reciprocity.

20. **The Committee should encourage the UK government to support international initiatives to strengthen the process of developing new medical technologies (including vaccines) and to lead on coordinating distribution and access.** The UK should not only support present product development and financing platforms but also lead in developing joint initiatives where medical R&D and the technologies are treated as a common good for health.

EVIDENCE

Q.1 What lessons has the COVID-19 pandemic taught us about the importance of international collaboration in securing global preparedness and resilience against biosecurity threats?

21. **COVID-19 has demonstrated that current global health policies on pandemic control are insufficient and lack appropriate collaboration and multilateral buy-in.** For example, the 2005 International Health Regulations (IHRs)⁶ - meant 'to help the international community and governments prevent and respond to acute public health risks that have the potential to cross borders and threaten people worldwide' - were not fully implemented by the 2015 deadline, with only 35% of signatories in compliance.⁷ A lack of global preparedness and coordination had severe implications for the UK's national response. Global level reforms and authoritative sites of governance are required to minimise future pandemic threats.
22. **COVID-19 has also exposed the highly fragmented nature of global health governance.** Health and health security suffer from a plethora of new and old actors with often competing or conflicting goals, orientations and financing capacities. For example, there are over 3500 registered international health organisations delivering health services, excluding UN associated and state-based agencies (such as the FCDO). This has led to coordination gaps in the maintenance and delivery of global health security, which undermines preparedness and resilience.⁸ Coordination and clearer remits are therefore vital, as are equity concerns with regard to representation and accountability. Greater cooperation within and across these platforms requires clearly identifiable institutional mandates and lines of authority and expertise.⁹
23. **Health governance is inadequately financed at the multilateral level, the WHO in particular is subject to unpredictable financing and budget cuts, contributing to a decline in WHO authority.**¹⁰ To better coordinate health security under a legitimate multilateral science and technical body, new and more imaginative forms of financing for the WHO are required alongside greater state contributions. WHO member states might consider pooling some core functions in the agency with solidarity financing weighted by country income status, this being made available to resource poor states by means of a democratic and accountable structure embedded in the WHO. Solidarity taxes could also be an appropriate means of funding the WHO more widely, giving it a stable and independent revenue stream. Ramped up health security budgeting should not be at the expense of counter-productive cuts to other programmatic or agencies areas which feed into genuine health security.
24. **Many global institutions remain either inert or unused. These include:**
- i) **Pandemic Emergency Financing Facility (PEF)** (now disbanded): Designed to provide countries with up to 500 million USD in funding within 72 hours to help prevent epidemics from becoming pandemics, it sat idle during COVID-19. Although COVID-19 originated in a HIC (China, who didn't qualify for PEF), threats like Ebola, Zika and other emerging pathogens generally originate in low-income settings where

poverty acts as a compounder. A suitable health emergency financial mechanism can help prevent future epidemics.

ii) Global Health Security Agenda (GHSA): The G7 response to the failures to combat Ebola - remains undersubscribed with only 69 member states. It suffers from narrow focus, an unambitious framework, inadequate funding and lack of leadership and political will.

iii) One Health approach: Designed to combat the emergence of new zoonotic diseases like COVID-19, it is underfunded, without multilateral commitment, and not appropriately integrated into most national health strategies. Moreover, it does not adequately focus on other threats beyond zoonotic pathogens, largely undervaluing the role of soil and water in the emergence of health security threats such as Antimicrobial Resistance, which is estimated to kill 10 million people a year by 2050.¹¹

25. **Even mature systems in high income countries have struggled to effectively meet the demands of COVID-19** due to existing gaps in preparedness and lack of ability to absorb system shocks. For example, many countries which report the highest number of cases and deaths are also those that score high on the IHR capacities index, including the UK, which is ranked number 2 in terms of preparedness, but has drastically underperformed in relation to lower ranked states.¹² This suggests the index requires reform because it does not adequately capture capacity and preparedness. The index exercise was also viewed by many governments as a 'tick-box' exercise without proper integration into national health strategies and system preparedness. One existing tool for improvement is better use of the WHO Joint External Evaluation (JEE) by governments, which can have positive results for health emergency preparedness.
26. **Poor underlying population health and underinvestment in health systems in high income countries has also exacerbated risk and health inequalities.**¹³ The pandemic has also demonstrated that prolonged policies of austerity and a managerial focus on pursuing technical efficiencies to fill shrinking capacities has rendered systems like the NHS unable to easily redeploy resources or to handle even limited increases in caseload frequency.¹⁴ Adequate national preparedness requires political commitment, proper evaluation tools, regulation integration, investment and built-in system elasticity able to withstand acute shocks.
27. **The failures of COVID-19 detection, reporting and response has exposed how a lack of trust can also hinder cooperation.**¹⁵ Responding to complex global health challenges necessitates cooperation, and trust is crucial at every level, from the individual to the international.¹⁶ Work on previous pandemics has shown that trust can decline over time if not maintained and that breached/eroded trust is harder to re-establish. Trust repair must focus on both the cognitive and affective bases of trustworthiness in actors, re-establishing mutual perceptions of competence, integrity and benevolence between parties.¹⁷
28. **The interconnection of trust and power matter for international collaboration.** Global actors, states and local actors possess multiple, interconnected forms of power, which undergird the vulnerabilities and competencies that matter for trust. The FCDO must go beyond a trust-building agenda that focuses on trust as transparency and accountability¹⁸ to an acknowledgement of how a lack of power —not a lack of desire—may undermine trust. Even if a state wants to comply with the UK Prime Minister's five-point plan, they cannot deliver without sufficient institutional power and resources. Actors with good intentions may lack the capacities to achieve outcomes. More nuanced views of power-trust linkages

have transformative potential and could lead actors to explore effective collaboration across sectors and societal levels to enhance health security.¹⁹

Q.2 Which countries have provided good lessons in how to combat COVID-19? What have embassies been asked to do to collect best practice?

29. **There are several ‘best practice’ countries that could provide suitable lessons for the United Kingdom and other countries.** In terms of limiting initial infection rates and controlling mortality rates New Zealand, Taiwan and Uruguay provide important lessons about early-stage testing, pandemic preparedness and collaboration between politicians and scientists. Thailand, Vietnam, Norway, Denmark, Finland, and many African countries also offer unique lessons in tackling the pandemic effectively.
30. **Although lessons can be learned via country level comparisons, many contextual and system level factors will limit the usefulness of comparisons since controlling for these moderators will be difficult.** The COVID-19 outbreak displayed a non-linear spread of SARS-CoV-2 and variability in disease behavior (COVID-19) in which contextual and baseline determinants played a major role. As a result, key factors such as median age of the population, general population health and multiple/co-morbidities, population lifestyles, population density, environmental factors, and socio-economic conditions, help to explain the extreme heterogeneity between countries and individuals.²⁰ In addition, health system strength and core capacities such as rapid diagnostic capabilities make like-for-like comparisons challenging. This needs to be factored into any methodologically robust analysis.
31. **Germany provides one useful comparison as it shares similar economic, social and baseline health characteristics with the UK.** Germany has weathered the first wave of the COVID-19 pandemic relatively well and continues to boast one of the lowest mortality rates per 100,000 people.²¹ A combination of factors significantly contributed to this success, building and maintaining trust across multiple levels of German society throughout the pandemic:
32. **Long-term investment in the country’s public health system:** With consistent long-term investment into its public health system (including intensive care beds and ventilators), the German health system could cope with the pandemic much better than the NHS.²²
- i) Early establishment of testing capacities:** The Charité Berlin, a leading university hospital, announced the world’s first COVID-19 test on 16 January 2020, ten days before the first COVID-19 case in Germany. This test was adopted by WHO, and Germany established itself as a leader in testing in Europe.²³ Germany was able to scale up its testing capacities rapidly due to the existing domestic manufacturing capacities of its public and private laboratories.²⁴
 - ii) German scientists and public health experts:** Germany’s leading public health institute (the Robert Koch Institute), along with other local public health institutes, informed the political decision-making process from early on. Leading virologists have advised the federal government and shaped the public discourse, contributing to the society-wide debate on how to confront the pandemic and convincing the German public of the political decisions made.
 - iii) Political leadership:** Germany’s political decision-making process was informed by joint decision-making at federal, state and local level. The high degree of autonomy enjoyed by local political actors and public health authorities allowed a decentralised approach where national guidelines and recommendations issued by the federal level were adapted by state and local authorities to local needs.

iv) Economic support scheme: Germany established a job retention scheme (Kurzarbeitsmodell). Rolled out until the end of 2021, employees are entitled to a compensation of up to 80 per cent (up to 87 per cent with children) of their net salary.²⁵

33. **South Korea provides an example of learning from past failures.** The response to Middle East Respiratory Syndrome (MERS) in 2015 was widely seen as a failure due to health system privatisation, poor communications and state management. This experience led to emergency reforms focusing on capacity building and resilience.²⁶
34. **The Korean Centre for Disease Control (KCDC) was given absolute authority in epidemic response,** with resources for staff secondment at national and local levels.²⁷ The government established an Emergency Operations Centre with an Immediate Response Team to investigate disease outbreaks. South Korea overhauled hospital capacity, funding new isolation wards, laboratories and surge capacity isolation facilities around the country, with a new national medical centre to steer the first response.²⁸
35. **Money and tax breaks were devoted to R&D for vaccines, biotechnology R&D and other technologies, and to encourage the stockpiling of PPE.**²⁹ The state also had emergency powers in place with regard to population surveillance, as with the use of mobile phone data. With the outbreak of COVID-19 these capacities were quickly activated, leading to low cost and quickly available COVID test kits and PPE.³⁰ The state harnessed capacities in a single plan, with science backed by politicians and supported by government interventions, to secure industrial and technological responses to the epidemic. This was a coordinated, funded and planned response that can be emulated by other countries.

Q.3 How effective is the UK's current approach to global health security?

36. **The UK's global health security agenda needs to have greater political ambition because genuine health security must target the social, political, commercial and environmental determinants of health.**³¹ Infectious disease outbreaks are 'long-wave events' that require a long-term political vision and commitment.³² Rather than imposing emergency measures, UK prevention and preparedness should be part of a routine political process.³³
37. **UK global health policy has tended to be reactive, targeting exceptional cases of acute health emergency and then quickly losing focus.** This has produced short-term and siloed responses that tend to target specific health problems (vertical responses) without wider system improvements necessary to provide long-term and sustainable solutions (horizontal responses). Moreover, policy has tended to chase symptoms once a disease has taken hold versus also targeting **upstream measures to prevent key determinants associated with acute health emergencies.**³⁴
38. **The UK's approach to COVID-19 has been limited by this reactive policy** and is heavily reliant on a vaccine paradigm, which promotes a model that each pathogen has a single cure delivered via vaccine discovery and mass inoculation.³⁵ This model requires the use of avoidable and detrimental lockdowns and countermeasures with extended social and economic costs, while vaccines are discovered, tested, approved, manufactured and distributed. Although vaccines are a necessary part of health security, vaccine programs alone remain insufficient. There is also no guarantee that vaccines will be discovered for every new pathogen, as is the case with HIV. Threats such as Antimicrobial Resistance create elevated risks as disease become harder to treat and prevent through the use of

pharmaceuticals. Preventative strategies against emerging viral pathogens and antimicrobials are necessary alongside vaccines.³⁶

39. **The UK has undermined its own security interests by failing to adequately fulfil obligations to the 18 IHR benchmarks**, while also failing to fully implement the IHR capacities in its overseas territories.³⁷ Under-preparedness, especially in overseas territories, allows the UK to be a country of pathogenic origin, threatening domestic and global populations. Compliance and proper integration of the IHRs would have better ‘stress tested’ the system to expose weaknesses in supply chains, diagnostic capacities and coordination between key departments. In addition, there is evidence to suggest that the UK explicitly violated its IHR obligations during the pandemic, specifically Article 43 on travel restrictions and WHO reporting and justifications. Better coordination and reporting associated with Article 43 would have increased countermeasure compatibility with other countries, allowing for more effective cross-border disease control. The UK needs to get its own house in order before representing itself as a global health leader. Failure to do so will undermine legitimacy and trust, which are key motivator and compliance factors domestically and multilaterally.
40. **The UK’s health security approach has failed to account for economic precarity and socio-economic inequalities.**³⁸ With COVID-19, poverty is associated with underlying conditions and disproportionate non-communicable disease burdens interacting aggressively with the respiratory and multi-organ/multi-system sequelae. Dependency on precarious work and conditions of homelessness (other housing precarity) are proven vectors for transmission.³⁹ Linkages between pandemic mitigation and social and welfare support systems have become evident. Social support systems are needed to preserve human dignity, social stability and build resilience for longer term economic recovery.
41. **The UK needs a more sustainable approach to global health security that recognises the nexus between health, environmental degradation and food production.**⁴⁰ Every major pandemic of the last twenty years has environmental roots. The accelerating loss of ecosystems and other natural habitats, the degradation of the environment, the exploitation of farm animals combined explain the increasing jumps of animal viruses (such as coronaviruses) to humans. The One Health approach is meant to address this nexus, but it remains underfunded without large scale political commitment and integration in national policies. Connections to climate change are evident, with increasing pressure on diverse land and marine ecosystems, climate change acts as a multiplier to disruptions in the food system, through climate-driven extreme weather events, salination, drought and ecosystem losses.
42. **The UK’s reliance on emergency measures** (including restrictions on people’s movements) **can erode trust and confidence in public authorities.** Sustaining high levels of public trust (trust between the wider population and institutions of governance) is vital to health security. Rebuilding public trust will prove even more important in fostering public confidence in a vaccine.⁴¹ Where this is lacking, it can heavily circumscribe the efficacy of responses to health crises by augmenting legitimacy fault lines⁴² between public authorities and their wider population. Symptoms of such fault lines include:
 - i) Multiple competing sources of public health information, including the intended and unintended proliferation of ‘disinformation’, ‘fake news’ and message-contamination that can undermine health crisis response. This can lead to government messages being ignored, promote misinformation and give rise to conspiracy theories.⁴³ In contexts of political polarisation, parallel communities of public trust can emerge with publics starkly divided in their response to health crises

on the basis of pre-existing political loyalties. In such contexts, even the seemingly banal wearing of PPE can become a defining marker of political identity, obstructing coordinated efforts to combat health crises.

ii) The rise of disputed notions of whose interests are being served in health crisis response. This was evident in the UK and elsewhere, where serious questions were raised about the network between the governing party and private providers who were rapidly awarded lucrative contracts but who failed to deliver expected outcomes.⁴⁴ Perception of fairness and consistency of treatment are key drivers of public trust.⁴⁵ Individuals are increasingly willing to take negative consequences of noncompliant action if perceived rules are deemed unfair.

43. **The UK must acknowledge global health security's critical dependence on robust health systems.** COVID presents the opportunity to galvanise renewed commitment to long-term Health Systems Strengthening (HSS) as a driver of health security. There are vital interfaces between health systems and health security, in addition to capacities such as surveillance, diagnostic facilities, and other systems associated with health security capabilities narrowly defined.⁴⁶ There has been commitment to building more resilient health systems from the WHO, international donors and NGOs and this should be encouraged and financially supported by means of multilateral, bilateral and philanthropic donors under a common and agreed template for HSS financing for state capacities.⁴⁷ Crucially, such assistance should be negotiated in tandem with recipient countries and health worker bodies, requiring commitments for greater government spending on non-exclusionary national health systems than is presently the case in many countries.⁴⁸
44. **It will be equally important to maintain funding for the research and development process of these diseases once the COVID-19 pandemic has been contained.** A major limitation of global pandemic preparedness is the fact that once an infectious disease outbreak is contained, the political attention of governments moves on. This was the case after the containment of the SARS pandemic in 2002/03 when funding for vaccine development for SARS-CoV-1 and other coronaviruses was either withdrawn or reduced, thus halting the global research and development process. The continued funding of such research after 2003 would have been vital to tackling COVID-19 more effectively. Specific actions to consider include **supporting global networks which specifically focus on neglected and emerging infectious diseases**, such as the Drugs for Neglected Diseases initiative (DNDi), the Coalition for Epidemic Preparedness Innovations (CEPI) or the global network on animal influenza (OFFLU).⁴⁹

Q.4 What role should the FCDO play in bringing about a resolution to the COVID-19 pandemic and preventing future pandemics?

45. **It is in the UK's interest for the FCDO to continue to play a global role in strengthening national health systems in Low Income Countries (LICs),** particularly those highly dependent on development assistance for health (DAH). Their weakness and vulnerability have implications for the UK, which is part of a network of global health security that is only as strong as its weakest link. Weak health systems face severe resource limitations and lack capacities to comply with the IHRs and to access vaccines, with global as well as national consequences for health security. Migration patterns reflect and exacerbate this. The FCDO has a responsibility as well as an interest to act in countries where UK foreign policy and DAH has played a role in health policy and health systems in the past, with both positive and unintended negative consequences.

46. **Stable DAH should be targeted at country specific needs for publicly provided and accessible health systems coverage for genuine health security in LICs.** Reliance on volatile DAH has had unintended consequences including fragmentation, dysfunction, erosion of rural health systems and limiting national planning capacity.⁵⁰ This noted, there is a need for national governments to move away from mimicking institutional structures that are evident in the G7 nations.⁵¹
47. **The FCDO must recognise and mitigate the unintended consequences of pandemic preparedness and resilience programmes,** especially in African countries with weak health systems, where it threatens to shift limited financial and human resources away from other essential service areas.⁵² Siloing infectious disease control leads to the neglect of other health issues (including non-communicable diseases and neglected tropical diseases) and broader health system strengthening.⁵³
48. **The FCDO can improve trust in governments through building more inclusive and socially just national health systems.** It is crucial to tackle the roots of endemically weak health systems rather than simply improve short-term resilience to health crises. This includes sustained redistribution of global wealth to underpin expansionary state programmes for the sectors fundamental to health, in particular higher education and health infrastructure; measures to decrease the ‘brain drain’ of skilled medical staff from weak health systems; ending user fees for medical services and medicines;⁵⁴ and attention to the gender aspects where women’s unpaid labour in the care economy fills gaps in provision and takes on much of the burden of care during outbreaks.⁵⁵
49. **Strengthening national health systems is also crucial for the political trust necessary for public cooperation with health directives.** The state is the focus of trust on health issues, with research showing correlation between trust in government and compliance with health directives.⁵⁶ The state needs to be built up as a trustworthy actor. Local authorities are essential in strengthening public trust as trust in public services builds trust in government. Donors and International NGOs can facilitate this through partnerships, coordination, supporting states and local consultation.
50. **The FCDO should strengthen health diplomacy with national governments and NGOs.** This entails building long-term equitable professional relationships especially where these local actors are fundamental to ensuring legitimacy and to delivering outcomes.⁵⁷
51. **The FCDO should support the WHO as a global leader and champion better integration of existing global institutions** [see paragraphs 21-24]. It should encourage and support national health plans and healthcare systems to adopt One Health and comply with the WHO framework. It should adopt and promote the new WHO Health Systems for Health Security framework, which addresses many of the concerns outlined in this document.
52. **The FCDO should ensure that an adequate amount of DAH is being allocated to the reduction of infectious diseases.**⁵⁸ The UK ranks sixth out of 29 countries in the Principled Aid Index 2020 (a key measurement being how much Overseas Development Assistance (ODA) is allocated to the reduction of infectious diseases). To align with the government’s commitment to be at the forefront in the battle against COVID-19 globally, the UK should aim to rank first on this index. Though ODA spending is being reduced, if the UK is going to

rank higher it is imperative that money is specifically earmarked for infectious diseases alongside the wider investment in health systems strengthening called for in this submission.

53. **The problems of market failure in private health in COVID-19 signal the need for serious FCDO consideration of public spending on health in LMICs** and particularly on public health, primary care and tertiary capacities lying in the public sector.⁵⁹ Hospitals in the private sector across LMICs have closed, furloughed staff, or resorted to charging inflated prices to COVID-19 infected patients and governments.⁶⁰ National health systems are dependent on these private capacities for up to 80% of all health services in some national contexts.⁶¹ The route to genuinely accessible healthcare and health security capacities in national systems requires a new governance settlement with private providers of health and adjustment to the public-private mix in the partnership model that has dominated health policy at the multilateral level for at least a decade.⁶²
54. **The FCDO should present the strengthening of national health systems and other regional and global mechanisms as long-term investments in Common Goods for Health.**⁶³ Relatively minor investments would reap significant dividends in future acute health emergencies and for global population health. DAH suffers underfinancing and short-termism. Given the 19.5 trillion USD in COVID-19 stimulus packages to date⁶⁴ and lost global GDP between 2021 and 2022, estimated at \$5.8 to \$8.8 trillion,⁶⁵ there are convincing political and fiscal arguments.

Q.5 Has the UK effectively used its position in multilateral organisations to promote international collaboration in response to COVID-19 and the global health security agenda?

55. **The UK can use its position in the multilateral forums, including the G7 and United Nations Security Council (UNSC) more effectively to promote international collaboration** in response to COVID-19. The UK is in a good position to lead and a new US administration offers renewed possibilities for multilateralism. One possibility is to work to strengthen the GHSA and One Health approaches [see paragraph 24]. Another approach would be to further the UNSC incorporation of non-traditional security threats such as pandemic response.⁶⁶ A key focus, however, should be on working to strengthen the capacity, legitimacy and authority of the WHO, whose large membership, capacity and comprehensive mandate make it a crucial part of global health security and any health governance framework.
56. **The UK can use its upcoming presidency of the G7 to set a new global health agenda.**⁶⁷ The G7 has a good track record in global health. For example, in 2000, the then G8 agreed a USD 10 billion commitment to create the Global Fund and GAVI Alliance, which have had a significant impact on global health. Inward looking domestic politics within major G7 countries, however, has reduced commitments to these multilateral policies. By committing to invest in global security health, the UK can send a 'costly signal' - a significant and substantial action to communicate trusting intent – that can foster trust and reciprocity. In a context of mistrust and uncertainty among G7 countries, calls for trust and cooperation must be supported by clear and costly signals to avoid being dismissed as mere rhetoric.⁶⁸
57. **The UK should champion the new WHO Health Systems for Health Security framework.** This goes beyond the WHO Benchmarks for IHR capacities recommendations to encompass foundational health system functions and contributions from other sectors. The purpose of this framework is to help countries, partners and WHO better manage public health events

by closing the gaps in health systems, leading to improved health security preparedness. Its main objectives are: i) Solidify a common understanding of what health systems for health security entails and how it contributes to better emergency preparedness to prevent, detect and respond to threats and events, and ii) Identify all capacities that are required for health security, including capacities from the WHO benchmarks for IHR, health systems and other sectors. Given WHO state membership, this could represent a viable alternative to the GHSA or provide a suitable focus for a reformed and better integrated GHSA.

Q.6 What should the FCDO be doing to support research and distribution of a COVID-19 vaccine?

58. **In the short term, the FCDO can support immediate action in several ways:** Investing in large scale cold-chain storage distribution, funding regional distribution hubs with international partners such as UNICEF, harnessing private sector capacities in cold-chain storage and distribution, and launching training programmes for distribution and mass-community driven programmes of inoculation using models developed in polio and smallpox programmes. Vaccine distribution and logistics, the governance of the programme and conditions of access and distribution will be the single biggest global health governance challenge of the next twenty years. Despite signalling from China that it would act as a global hub for LMICs, this area is being neglected and the UK has the opportunity to provide leadership here.
59. **The UK can support coordinated and publicly funded international programmes of government and government-university research** to remove vaccine development from the structural drivers of market-driven R&D investments. The pandemic has exposed a key market failure in the vaccine sector that has become embedded in recent decades. Innovator firms have largely withdrawn from vaccine markets, either because of the high rates of candidate attrition and high risks associated with R&D investments, or the problem of missing markets and lack of effective economic demand associated with emerging and re-emerging diseases.⁶⁹ Governments should consider new forms of attracting vaccine (and other biomedical innovations) R&D such as prize funds, Health Impact Funds, and advanced market commitments. While welcome, interventions in the market by coordinating and financing bodies such as CEPI are only partial, dependent on donor largesse, and driven by the priority setting of actors who are outside the high-burden countries.⁷⁰ In addition, problems persist with CEPI's, COVAX, and other PDP commitments to guaranteeing access to products that are not subject to inequitable pricing or patent rights.⁷¹
60. **Financing and governing innovation for Emergent and Re-Emergent Infectious Disease (ERID) needs transformational reform under a new coordinating body for innovation as a global public good.** Although a promising early model, The Access to COVID-19 Tools (ACT)-Accelerator is not designed for a sustainable response to innovation needs, and, crucially, has had little financial or political purchase to attract private sector involvement.⁷² A new body should have the capacity to direct resources to areas of priority need, evaluate advances, and coordinate private and public engagement in the product pipeline, while determining benefit sharing in an open, transparent and equitable manner.
61. **Greater international effort could also be made to develop regional plant capacity to cater for epidemic and pandemic needs.** This would ameliorate the problems of vaccine plant capacity and stretched and under-invested vaccine supply chains. A greater spread of plant capacity would ease current challenges of trade-offs between COVID-19 candidate manufacturing capacity and the ongoing need for other vaccines.

Q.7 What role can the FCDO play in persuading countries to remove tariffs on COVID-critical products and how can the FCDO encourage further information sharing between countries?

62. **The FCDO could lead in developing a list of essential medical technologies for pandemic response by convening a meeting through the auspices of the WHO List for Essential Medicines and ACT-Accelerator** with key partners in the governance of access to health technologies (such as the G7, G20, WTO, WIPO and OECD). Such a body could generate concrete recommendations on COVID-19 (or other ERID) technology selection for a global priority list, with pathways identified as how to expedite the speedy removal any tariff barriers from national and regional schedules. The advantage of such a forum over present ad hoc arrangements would be the potential for centrally negotiated licensing arrangements to facilitate local manufacturing. Negotiated compensations for innovator firms could also be secured in terms of a pooled agreement, rather than by means of country-by-country and firm-by-firm negotiations. Such an initiative could be supported by a COVID technology access and benefit pooled fund to secure remuneration for licensed products, with this pooling conferring greater buyer or monopsony power with regard to licensed product compensations.

Q.8 What role can the FCDO play in ensuring cooperation in vaccine distribution?

63. **The UK government should financially support all four pillars of the WHO's Access to COVID-19 Tools Accelerator** (diagnostics, therapeutics, vaccines and health systems). To guarantee the equitable distribution of COVID-19 vaccines across the world, the UK should particularly support the vaccine pillar COVAX and the Gavi Alliance as the lead agency of COVAX. If this is not done, there is a possibility that we will see a return to the 2000's HIV crisis where people lost their lives needlessly. The UK government should also continue to cooperate with its European partners and the EU, which recently announced the creation of an integrated European approach to pandemic preparedness through the establishment of a European Health Union.

Q.9 What should a 'global pandemic early warning system' look like? What role should the UK Government play in its creation?

64. **In the short-term, the UK could assure that existing IHR surveillance and reporting benchmarks and procedures are supported and met, with additional compliance mechanisms put in place.** The IHRs have been proven to be ineffective as both a pandemic warning system and a response system.⁷³ Core competencies in IHRs are not being met and in the case of COVID-19 were explicitly violated (particularly Article 3, 6 and 43) by high-, middle- and low-income countries, including the United States, China, France and the UK. This hampered monitoring, diagnostics, reporting, data sharing, coordination, cooperation and collective response. It resulted in delayed national and international response efforts, evidence confusion, geopolitical finger pointing and grandstanding, with ongoing social, human and economic costs.

65. **An appropriate early warning system would be one embedded within a wider prevention, preparedness and response framework.** One of the most compelling points of intervention

for health security and resilience lies in state health systems capacities.⁷⁴ A focus on early warning systems that rely on surveillance and local containment will remain inadequate in preventing and responding to emerging epidemics/pandemics. Traditional surveillance 'warning' systems are symptom oriented and lack appropriate preventative measures aimed at upstream determinants of health and socio-economic vulnerabilities to infection. By the time the alarm is raised the pathogen has already become a security threat across borders.

66. **The FCDO should question how DAH inhibits or enables competence to comply with the IHRs and support capacity-building of state health systems.**⁷⁵ They have the responsibility to do so given UK capacity and the legacy of its role in Health Systems Strengthening in LICs (with its mixed outcomes - see paragraph 46). This is important because even if a state wants to comply with the pandemic early warning system, they cannot deliver without sufficient capacity.

Annex A – Biographies of Contributors

Dr Emma-Louise Anderson is Co-Director of CGD. She is an expert on global health, health security/insecurity and the political, social, and environmental determinants of infectious disease outbreaks, their impacts and responses to them. She has worked on the politics of development assistance for health, local responses to global health initiatives, health system and health diplomacy challenges, particularly in Africa. Her work on gender and structural inequalities in health has directly influenced the Malawi Government's policy. She is Co-I on GCRF-AFRICAP and her work on the politics of resilience informs capacity building with the Malawian government.

Dr Laura Considine is Co-Director of CGSC. She is an expert on international collaboration, cooperation and trust in international politics. Her work has investigated trust and legitimacy and how power relations shape understandings of the possible in international politics. She collaborates with Anderson on work on trust and cooperation in global health and health diplomacy. She has shared her research on trust and cooperation at the United Nations, FCDO and the ICRC.

Prof Garrett Wallace Brown is Chair in Global Health Policy and Co-Lead of the University of Leeds Global Health Research Unit. He is an expert in global health financing, health security, global health governance and diplomacy, G7 and G20 health initiatives, and health systems strengthening, particularly in African contexts. He has led several large international collaborations evaluating performance-based financing and strategic purchasing programs for health system reform in low resource settings. He is working with the WHO on their new Health Systems for Health Security framework. He has worked with the UK Cabinet Office, Eastern Central and Southern African Health Community (ECSH) representing 12 African ministries, and the Ministries of Health Zimbabwe, Mozambique, Zambia and South Africa.

Dr Owain Williams is an expert on access to medicines; pharmaceutical and generic sectors; and the global legal and institutional regimes governing R&D, drug production and pricing. He studies the political economy of contemporary global health, including work on partnerships and philanthropic foundations in health and Universal Health Coverage. He has conducted a series of studies on community-based testing programmes for blood borne viruses; tiered pricing for access to drugs in Africa; and the political economy of global health and health security. He convenes the Pacific Health Governance Research Network and edits a website of social sciences COVID-19 analysis of COVID-19.

Dr Markus Fraundorfer is a lecturer in global governance. He is an expert on the architecture of global governance and the global system's approaches to the global challenges of infectious diseases, climate change, environmental protection and global food production. He has looked at Brazil's role in global health governance and neglected tropical infectious diseases in South America. He has researched several global health institutions (UNITAID and the Drugs for Neglected Diseases initiative). He is familiar with Germany's public health system and approach to COVID-19.

Dr Alexander Beresford is Associate Professor in African Politics. He is an expert on corruption and understanding the power structures that enable rent-seeking behaviour. His work has explored governance and power in Africa. He has collaborated with Anderson on the political determinants of the Ebola outbreak in Sierra Leone and the need to build more inclusive and socially just health systems. He has been invited to share his expertise at the FCDO and with Oxfam International.

Dr Lisa Thorley is an experienced development consultant and academic with research, policy and advocacy experience in women and girls' rights, development, sexual and reproductive health and HIV in Sub Saharan Africa, the Middle East and South Asia. She has conducted and led multi-country evaluations and provided technical expertise for the World Bank, DFID, Frontline Aids, UNICEF and UNESCO. She has written the Ethics in Research and Evaluation guidelines for DFID and is part of the UN's Gender and COVID-19 Collaborative health research agenda setting group.

¹ WHO Health Systems for Health Security. Available: <https://extranet.who.int/sph/health-systems-for-health-security>

² WHO Common Goods for Global Health. Available: <https://www.who.int/westernpacific/health-topics/common-goods-for-health>

³ Ziady, H. (17 November 2020). The global economic bailout is running at \$19.5 trillion. It will go higher. *CNN Business*. Available: <https://edition.cnn.com/2020/11/17/economy/global-economy-coronavirus-bailout-imf-annual-report/index.html>

⁴ The World Bank (8 June 2020). The Global Economic Outlook During the COVID-19 Pandemic: A Changed World. Available: <https://www.worldbank.org/en/news/feature/2020/06/08/the-global-economic-outlook-during-the-covid-19-pandemic-a-changed-world>

⁵ Gulranjani, N. & Silcock, S. (2020). Principled Aid in divided times: Harnessing values and interests in donor pandemic response. *ODI Working Paper*, 596.

⁶ International Health Regulations (IHRs). Available: <https://www.who.int/publications/i/item/9789241580496>

⁷ Solomon, D. (2019). Brexit and health security: Why we need to protect our global networks. *Journal of Public Health Policy*, 40(1), 1–4.

⁸ Brown, G.W. & Held, D. (2017). Gridlock and Beyond in Global Health. In: Gridlock B, Hale T, Held D, eds. *Global health: New leadership for devastating challenges*. Cambridge: Polity Press: 162–83; Frenk, J & Moon, S. (2013). Governance challenges in global health. *The New England Journal of Medicine*, 368, 936–42; Swanson, R.C., Atun, R., Best, A. et al. (2015). Strengthening health systems in low-income countries by enhancing organizational capacities and improving institutions. *Global Health*, 11(5).

⁹ Brown & Held. Gridlock and Beyond.

¹⁰ Sridhar, D. & Gostin, L.O. (2011). Reforming the World Health Organization. *JAMA*, 305(15), 85–6; Brown & Held. Gridlock and Beyond.

¹¹ Essack, S.Y. (2018). Environment: The neglected component of the one health triad. *Lancet Planet Health*, 2, 238–239.

¹² 2019 Global Health Security Index. Available: <https://www.ghsindex.org/>

¹³ De Laroche Lambert, Q., Marc, A., Antero, J., Le Bourg, E. & Toussaint, J-F. (2020). Covid-19 mortality: A matter of vulnerability among nations facing limited margins of adaptation. *Frontiers in Public Health*, 8: 604339; Williamson, E.J., Walker, A.J., Bhaskaran, K. et al. (2020) Factors associated with COVID-19-related death using OpenSAFELY. *Nature*, 584, 430–436.

¹⁴ Eurostat. 2020. Healthcare resource statistics - beds [Internet]. Available: https://ec.europa.eu/eurostat/statistics-explained/index.php/Healthcare_resource_statistics_-_beds

¹⁵ Davies, S. (2020). The coronavirus and trust in the process of international cooperation, *Ethics and International Affairs*. Available: <https://www.ethicsandinternationalaffairs.org/2020/the-coronavirus-and-trust-in-the-process-of-international-cooperation-a-system-under-pressure>; Vinck, P. et al. (2019). Institutional trust and misinformation in the response to the 2018–19 Ebola outbreak in North Kivu, DR Congo, *The Lancet Infectious Diseases*, 19(5), pp.529-536; Blair, R.A., Morse, B.S. & Tsai, L.L., (2017). Public health and public trust: Survey evidence from the Ebola Virus Disease epidemic in Liberia. *Social Science & Medicine*, 172, 89-97. Gerlach, K & Kang, R., (2020). COVID-19 and Trust in International Cooperation, Policy Brief, Centre on International Cooperation. Available: <https://cic.nyu.edu/publications/covid-19-and-trust-international-cooperation>

- ¹⁶ Davies. The coronavirus and trust; McInnes, C. & Lee K. (2006). Health, security and foreign policy. *Review of International Studies*, 32(1) 5-23; Bollyky, T.J., Crosby, S. & Kiernan, S. (2020). Fighting a pandemic requires trust: Governments have to earn it. *Foreign Affairs*. Available: <https://www.foreignaffairs.com/articles/usa/2020-10-23/coronavirus-fighting-requires-trust>; Davies S., Kamradt-Scott A. & Rushton S. (2015). *Disease Diplomacy: International Norms and Global Health Security*. Baltimore, MD: Johns Hopkins University Press; Davies, S. (2019). *Containing Contagion: The Politics of Disease Outbreaks in Southeast Asia* Baltimore, MD: Johns Hopkins University Press; Anderson, E., Patterson, A. & Considine, L. (forthcoming). The power-trust cycle: Lessons on cooperation from global health diplomacy in Malawi and Zambia.
- ¹⁷ Mayer, R., Davis, J., & Schoorman, F. (1995). An Integrative Model of Organizational Trust. *The Academy of Management Review*, 20(3), 709-734; Erundu, N. A., Martin, J., Marten, R., Ooms, G., Yates, R., & Heymann, D. L. (2018). Building the case for embedding global health security into universal health coverage: a proposal for a unified health system that includes public health. *The Lancet*, 392, 1482-1486.
- ¹⁸ Keating, V.C. & Thrandardottir, E. (2017). NGOs, trust, and the accountability agenda. *The British Journal of Politics and International Relations*, 19(1), 134-151.
- ¹⁹ For work relating to DfID see Anderson et al. The power-trust cycle.
- ²⁰ Paul, E., Brown, G.W., Kalk, A., Van Damme, W., Ridde, V. & Sturmberg, J. (2020). "When my information changes, I alter my conclusions": What can we learn from the failures to adaptively respond to the SARS-Cov-2 pandemic and the under preparedness of health systems to manage COVID-19? *International Journal of Health Policy Management*. Available: https://www.ijhpm.com/article_3972.html.
- ²¹ Johns Hopkins University & Medicine (2020). Mortality Analyses, <https://coronavirus.jhu.edu/data/mortality>
- ²² Bittner, J. (2020). Germany has more than enough ventilators: It should share them, 17 March, *New York Times*. <https://www.nytimes.com/2020/03/17/opinion/coronavirus-europe-germany.html>; Statistisches Bundesamt (2020). High hospital bed density in Germany compared with other countries, 2 April, https://www.destatis.de/EN/Press/2020/04/PE20_119_231.html;jsessionid=987F3125BDDCF4CE157FE60AF8EECD3B.internet8712
- ²³ Charité Universitätsmedizin (2020). Researchers develop first diagnostic test for novel coronavirus in China. Available: https://www.charite.de/en/service/press_reports/artikel/detail/researchers_develop_first_diagnostic_test_for_novel_coronavirus_in_china/; Deutsche Welle (2020). Coronavirus in Germany: 100 days later, 06 May. Available: <https://www.dw.com/en/coronavirus-in-germany-100-days-later/a-53341745>
- ²⁴ Loh, T. & Kresge, N. (2020). Private labs helped Germany test 1 million for COVID-19 virus, 2 April, *Bloomberg*. Available: <https://www.bloomberg.com/news/articles/2020-04-02/private-labs-helped-germany-test-1-million-for-covid-19-virus>
- ²⁵ IMF (2020). Kurzarbeit: Germany's Short-Time Work Benefit, 15 June. Available: <https://www.imf.org/en/News/Articles/2020/06/11/na061120-kurzarbeit-germanys-short-time-work-benefit>
- ²⁶ Lim, S. H., and Sziarto, K., (2020). When the Illiberal and the Neoliberal Meet around Infectious Diseases: An Examination of the MERS Response in South Korea. *Territory, Politics, Governance*, 8(1). 60-76.
- ²⁷ Korean Ministry of Health and Welfare. (2015). Press Release: [9.1] Measures to Reform National Infection Prevention and Control System for the Purpose of Immediate Response to Emerging Infectious Disease. Available: http://www.mohw.go.kr/eng/nw/nw0101vw.jsp?PAR_MENU_ID=1007&MENU_ID=100701&page=1&CONT_SEQ=326060.
- ²⁸ Kim, T-H. (2020). COVID-19 Resurgence Threatens South Korea's Success Story. *The Diplomat*. Available: <https://thediplomat.com/2020/06/covid-19-resurgence-threatens-south-koreas-success-story/>.
- ²⁹ Ministry of Trade, Industry and Energy, Ministry of Health and Welfare, Ministry of Science and ICT, Ministry of Education, Ministry of Agriculture, Food and Rural Affairs, Ministry of Environment, Ministry of Oceans and Fisheries, and Ministry of Food and Drug Safety. 2017. 바이오경제 혁신으로: 혁신성장·미래 일자리·국민 건강 이끈다 [Innovative Growth, Future Employment and National Health Will Be Improved by BioEconomy Innovation]. Available: <http://www.korea.kr/common/download.do?fileId=185702118&tblKey=GMN>.
- ³⁰ Seo, E-N. (2020). "홀대받던 진단기업 재평가... 성능·품질, 시스템 '호평' [Reassessment of a Diagnosis Company That Was Neglected... Performance, Quality, and System 'Praised']" *The Bell*. Available: <http://www.thebell.co.kr/free/Content/ArticleView.asp?key=202003180735459860107635>.
- ³¹ Kickbusch, I., Allen, L. & Franz, C. (2016). The commercial determinants of health. *The Lancet Global Health*, 4(12), e895-e896; Bircher, J. & Kuruvilla, S. (2014). Defining health by addressing individual, social, and environmental determinants: new opportunities for health care and public health. *Journal of Public Health Policy*, 35(3), 363-386; Marmot, M., & Wilkinson, R. Eds. (2005). *Social Determinants of Health*. Oxford University Press, Oxford. Kickbusch, I. (2015). The political determinants of health—10 years on. *BMJ: British*

Medical Journal, 350, H81.

³² Barnett, T. (2006). A long-wave event. HIV/AIDS, politics, governance and 'security': sundering the intergenerational bond? *International Affairs*, 82(2), 297-313.

³³ Elbe, S. (2006). Should HIV/AIDS be securitized? The ethical dilemmas of linking HIV/AIDS and security. *International Studies Quarterly*, 50, 119-144; Seckinelgin, H. (2012). The global governance of success in HIV/AIDS policy: Emergency action, everyday lives and Sen's capabilities. *Health & Place*, 18(3), 453-460.

³⁴ Paul et al. "When my information changes"; Paul, E., Brown, G.W. & Ridde, V. *IJHPM* (2020); COVID-19: time for paradigm shift in the nexus between local, national and global health. *BMJ Global Health*.

³⁵ Roemer-Mahler, A. & Elbe, S. (2016). The race for Ebola drugs: Pharmaceuticals, security and global health governance. *Third World Quarterly*, 37(3), 487-506; Elbe. (2018). *Pandemics, pills, and politics: Governing global health security*. JHU Press.

³⁶ Paul et al., COVID-19.

³⁷ Kluge, H., Martin-Moreno, J. M., Emiroglu, N., Rodier, G., Kelley, E., Vujnovic, M., & Permanand, G. (2018). Strengthening global health security by embedding the International Health Regulations requirements into national health systems. *BMJ Glob Health*, 3, e000656.

³⁸ Patel, J. A., Nielsen, F. B. H., Badiani, A. A., Assi, S., Unadkat, V. A., Patel, B., Ravindrane, R. & Wardle, H. (2020). Poverty, inequality and COVID-19: The forgotten vulnerable. *Public Health*, 183, 110; Wenham, C., Smith, J., Davies, S. E., Feng, H., Grépin, K. A., Harman, S., Herten-Crabb, A. & Morgan, R. (2020). Women are most affected by pandemic: Lessons from past outbreaks; Anderson, E. L., & Beresford, A. (2016). Infectious injustice: The political foundations of the Ebola crisis in Sierra Leone. *Third World Quarterly*, 37(3), 468-486; Anderson, E.L. (2015). *Gender, HIV and Risk*, Springer: Basingstoke; Whiteside, A. (2002). Poverty and HIV/AIDS in Africa. *Third World Quarterly*, 23(2), 313-332.

³⁹ Banerjee, D., & Bhattacharya, P. (2020). Editorial: The hidden vulnerability of homelessness in the COVID-19 pandemic: Perspectives from India. *International Journal of Social Psychiatry*.

⁴⁰ Lang, T., Barling, D., & Caraher, M. (2009). *Food policy: integrating health, environment and society*. OUP Oxford. On the gendered nature of land and food in HIV risk see Anderson. *Gender, HIV and Risk*.

⁴¹ Hrynick, T., Ripoll, S., and Schmidt-Sane, M. (2020). *Rapid Review: Vaccine Hesitancy and Building Confidence in COVID-19 Vaccination*, Briefing, Brighton: Social Science in Humanitarian Action (SSHAP).

⁴² Ralph, J., & Gallagher, A. (2015). Legitimacy faultlines in international society. The Responsibility to Protect and Prosecute after Libya. *Review of International Studies*, 41(3), 553-573.

⁴³ Anderson & Beresford. Infectious injustice; Wilkinson, A., & Leach, M. (2015). Briefing: Ebola—myths, realities, and structural violence. *African Affairs*, 114(454), 136-148.

⁴⁴ Anderson & Beresford. Infectious injustice.

⁴⁵ OECD. (2007). Trust and Public Policy: How Better Governance Can Help Rebuild Public Trust, *OECD Public Governance Reviews*, OECD Publishing, Paris. Available: <http://dx.doi.org/10.1787/9789264268920-en>; See, K.E., (2009). Reactions to decisions with uncertain consequences: Reliance on perceived fairness versus predicted outcomes depends on knowledge, *Journal of Personality and Social Psychology*, 96(1) 104-18.

⁴⁶ Kluge, H., Martin-Moreno, J. M., Emiroglu, N., Rodier, G., Kelley, E., Vujnovic, M., & Permanand, G. (2018). Strengthening global health security by embedding the International Health Regulations requirements into national health systems. *BMJ Glob Health*, 3 (suppl 1); Heymann, D., Chen, L., Takemi, K., Fidler, D., Tappero, J., Thomas, M., Kenyon, T., Frieden, T., Yach, D., Nishtar, S., Kalache, A., Olliaro, P., Horby, P., Torreele, E., Gostin, L., Ndomondo-Sigonda, M., Carpenter, D., Rushton, S., Lillywhite, L., & Devk. (2015) Global health security: The wider lessons from the West African Ebola virus disease epidemic. *The Lancet (Public Policy)*, 385 (9980), 1884-1901; Ayanore, M. A., Amuna, N., Aviisah, M., Awolu, A., Kipo-Sunyehzi, D. D., Mogre, V., Ofori-Asenso, R., Gmanyami, J. M., Kugbey, N., & Gyapong, M. (2019). Towards Resilient Health Systems in Sub-Saharan Africa: A Systematic Review of the English Language Literature on Health Workforce, Surveillance, and Health Governance Issues for Health Systems Strengthening. *Annals of Global Health*, 85(1), 113

⁴⁷ Anderson & Beresford. Infectious Justice; Kim, J.Y. (24 Mar 2015). What Ebola Taught the World: One Year Later, *Time Magazine*. Kieny, M-P. (2014). Ebola and health systems: Now is the time for change. <https://www.who.int/mediacentre/commentaries/health-systems-ebola/en/>

⁴⁸ Erondy, N. A., Martin, J., Marten, R., Ooms, G., Yates, R., & Heymann, D. L. (2018). Building the case for embedding global health security into universal health coverage: a proposal for a unified health system that includes public health. *The Lancet*, (Health Policy) 392(10156), 1482-1486.

⁴⁹ Plotkin, S. A. (2017). Vaccines for Epidemic Infections and the Role of CEPI. *Human Vaccines & Immunotherapeutics* 13(12), 2755-2762.

⁵⁰ Anderson, E. L. (2018). African health diplomacy. *International Relations*, 32(2), 194-217; Dionne K.Y.,

- Gerland, P. and Watkins, S. (2013). AIDS exceptionalism, *AIDS Behaviour*, 17, 825-831; Dionne. (2012). Local demand for a global intervention: Policy priorities in the time of AIDS. *World Development*, 40(12), 2468-2477; Pfeiffer, J., Johnson, W., Fort, M., Shakow, A., Hagopian, A., Gloyd, S., & Gimbel-Sherr, K. (2008). Strengthening health systems in poor countries. *American Journal of Public Health*, 98(12), 2134-2140.
- ⁵¹ Andrews, M. Pritchett, L. & Woolcock, M. (2013). Escaping Capability Traps Through Problem Driven Iterative Adaptation (PDIA). *World Development*. 51(C), 234-244.
- ⁵² Global Fund (17 June 2020) 'Global Fund Survey: Majority of HIV, TB and Malaria Programs Face Disruptions as a Result of COVID-19', <https://www.theglobalfund.org/en/covid-19/news/2020-06-17-global-fund-survey-majority-of-hiv-tb-and-malaria-programs-face-disruptions-as-a-result-of-covid-19/>
- ⁵³ Smith, J., & Taylor, E. M. (2016). What is next for NTDs in the era of the sustainable development goals? *PLOS Neglected Tropical Diseases*, 10(7), e0004719; Biesma, R. G., Brugha, R., Harmer, A., Walsh, A., Spicer, N., & Walt, G. (2009). The effects of global health initiatives on country health systems: a review of the evidence from HIV/AIDS control. *Health Policy and Planning*. 24(4), 239-252
- ⁵⁴ Anderson & Beresford. *Infectious Justice*.
- ⁵⁵ Wenham, C., Smith, J., & Morgan, R. (2020). COVID-19: the gendered impacts of the outbreak. *The Lancet*, 395(10227), 846-848; Harman, S. (2016). Ebola, gender and conspicuously invisible women in global health governance. *Third World Quarterly*, 37(3), 524-541; Anderson. *Gender, HIV and Risk*.
- ⁵⁶ Blair, R.A., Morse, B.S. & Tsai, L.L. (2017). Public health and public trust: Survey evidence from the Ebola Virus Disease epidemic in Liberia. *Social Science & Medicine*, 172, 89-97. Vinck, P., Pham, P.N., Bindu, K.K., Bedford, J. & Nilles, E.J. (2019). Institutional trust and misinformation in the response to the 2018–19 Ebola outbreak in North Kivu, DR Congo: a population-based survey. *Lancet Infectious Disease*, 19, 529–536; Chanley V.A., Rudolph, T.J. & Rahn, W.M. (2000). The Origins and Consequences of Public Trust in Government. *Public Opinion Quarterly*, (64), 239–256.
- ⁵⁷ Pfeiffer, J. (2003). International NGOs and primary health care in Mozambique: The need for a new model of collaboration. *Social Science & Medicine*, 56(4), 725-738.
- ⁵⁸ Gulranjani, N. & Silcock, S. (2020) Principled Aid in divided times: Harnessing values and interests in donor pandemic response. ODI Working Paper 596.
- ⁵⁹ Williams, O.D. (2020). COVID-19 and Private Health: Market and Governance Failure." *Development* November 17: 1-10.
- ⁶⁰ Hellowell, M., Myburgh, A., Sjoblom, M., Gurazada, S & Clarke, D., (2020). Covid-19 and the collapse of the private health sector: a threat to countries' response efforts and the future of health systems strengthening? Available: <https://ghpu.sps.ed.ac.uk/covid-19-and-the-collapse-of-the-private-health-sector-a-threat-to-countries-response-efforts-and-the-future-of-health-systems-strengthening/>
- ⁶¹ WHO. (2016). Role and contribution of the private sector in moving towards universal health coverage / World Health Organization. Regional Office for the Eastern Mediterranean.
- ⁶² pandemic response. ODI Working Paper 596.
- ⁶² Williams. (2020). COVID-19 and Private Health.
- ⁶³ WHO Common Goods for Health <https://www.who.int/westernpacific/health-topics/common-goods-for-health>
- ⁶⁴ Ziady, H. (17 November 2020). The global economic bailout is running at \$19.5 trillion. It will go higher. *CNN Business* <https://edition.cnn.com/2020/11/17/economy/global-economy-coronavirus-bailout-imf-annual-report/index.html>
- ⁶⁵ The World Bank (8 June 2020). The Global Economic Outlook During the COVID-19 Pandemic: A Changed World. <https://www.worldbank.org/en/news/feature/2020/06/08/the-global-economic-outlook-during-the-covid-19-pandemic-a-changed-world>
- ⁶⁶ International Crisis Group (4 August 2020). Salvaging the Security Council's Coronavirus Response. <https://www.crisisgroup.org/global/salvaging-security-councils-coronavirus-response>
- ⁶⁷ Brown, G.W. (2015). The 2015 G7 summit: A missed opportunity for global health leadership. *Global Policy*. Available: <https://www.globalpolicyjournal.com/sites/default/files/inline-files/Brown%20-%20The%202015%20G7%20summit,%20A%20missed%20opportunity%20for%20global%20health%20leadership.pdf>
- ⁶⁸ Kydd, A. (2005). *Trust and Mistrust in International Relations*. Princeton, NJ: Princeton University Press; Kydd. (2002). Trust, reassurance, and cooperation. *International Organization*, 54(2), 325-357.
- ⁶⁹ WHO (2016) An R and D Blueprint for Action to Prevent Epidemics – Plan of Action, available: http://www.who.int/blueprint/about/r_d_blueprint_plan_of_action.pdf?ua=1

⁷⁰ Williams, O.D. (2012). Access to Medicines, Market Failure and Market Intervention: A Tale of Two Regimes. *Global Public Health*, 7(sup2), S127-S143.

⁷¹ Tellez, V.M. (5 October 2020). Action at the WTO is Needed to Accelerate Research, Development, Manufacturing and Supply of Medical Products to Combat Covid-19: Proposal from India and South Africa. *The South Centre*, SouthNews 34.

⁷² Phelan, A.L., Eccleston-Turner, M., Rourke, M., Maleche, A. & Wang, C. (2020). Legal Agreements: Barriers and Enablers to Global Equitable COVID-19 Vaccine Access. *The Lancet* 396(10254), 800-802.

⁷³ Kandel, N., Chungong, S., Omaar, A., & Xing, J. (2020). Health security capacities in the context of COVID-19 outbreak: an analysis of International Health Regulations annual report data from 182 countries. *The Lancet*, 395(10229), 1047-1053.

⁷⁴ Kluge, H. et al., *Strengthening global health security*; Heymann, D., et al., *Global health security: the wider lessons*; Ayanore, M. A., et al. *Towards Resilient Health Systems in Sub-Saharan Africa*; Loignon, C., Nouvet, E., Couturier, F., Benhadj, L., Adhikari, N.K.J., Murthy, S., et al. (2018). Barriers to supportive care during the Ebola virus disease outbreak in West Africa: Results of a qualitative study. *PLoS ONE* 13(9), e0201091.; Rai, N. K., Rim, K. I., Wulandari, E. W., Subrata, F., Sugihantono, A., & Sitohang, V. (2020). Strengthening emergency preparedness and response systems: experience from Indonesia. *WHO South East Asia Journal of Public Health*, 9, 26-31.

⁷⁵ Anderson et al. The power-trust cycle.

December 2020