

Ending the Pandemic: Enhancing Global Security for People and Planet

A Framework for the Future

A collaborative initiative advanced by the InterAction Council *May 2022*

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Foreword:

The COVID-19 pandemic is having a profound effect on development gains, hampering progress in the achievement of the Sustainable Development Goals (SDGs). The pandemic has reversed gains in poor countries, pushing 120 million people back into extreme poverty and widening global inequalities.

Our post-COVID-19 world combined with increasing global challenges such as food and water security may lead to further unrest and disruption. We must recognize that long-term security in most countries can only be achieved by assuring sustainable and equitable socio-economic development.

This report builds upon a series of High-Level Expert Meetings on global health challenges that were initially convened in response to the Ebola crisis and progressed in 2017 to InterAction Council members endorsing the Dublin Charter for One Health. The links between human health and that of animals, the environment and our planet have become increasingly evident as we strive to address challenges ranging from pandemics to the climate emergency.

This report is more than an analysis of the problems that we face. It provides practical solutions for how we can potentially end this pandemic as well as prevent further pandemics in the future. Moreover, it provides an initial framework for designing our global security systems to address our increasingly complex and interrelated challenges.

Council members met virtually in December 2021 to identify solutions and next steps in response to the pandemic, and made the following recommendations:

- Ending vaccine inequality;
- Instituting an international mechanism to help prevent and mitigate future pandemics;
- Coordinating a global strategic response that targets risks, maximizes effective public health measures and multi-sector support to ensure an equitable end to this pandemic;
- Investing in and modernizing of public health systems to prevent, prepare for, avert risk, build resilience, respond, and recover from current and future health threats; and
- Strengthening of multilateral global security architecture to prevent pandemics and address health threats.

To advance these recommendations, the InterAction Council is committed to further engagement with interested leaders, partners, and experts to find solutions that will make ours a safer and healthier world.

Following further discussions and meetings on how to advance the recommendations, we propose an international taskforce with the aim of enhancing Global Governance for Global Health Security. Such a taskforce would seek solutions to enhance the preparedness of the UN and other transnational systems and make meaningful contributions to strengthening the global capability for responding to current and future health emergencies. The taskforce needs to 'Think Global and Act Local' while scaling up accessible public health systems through digital platforms to promote global health security.

We have reached a critical time in our history that calls for re-designing our global security systems on a foundation of healthy resilience that strengthens links between human and planetary security to prevent conflicts and promote peace. Let's seize this opportunity to build the future that we dream of, with a safe, fair, green, healthy, and prosperous recovery that enables sustainable development for all, and assures a flourishing and vibrant future.

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Bertie Ahern Co-chair, InterAction Council Prime Minister of Ireland 1997-2008

Purpose:

To advance collaborative and strategic action for a safe end to the pandemic with strengthened public health systems to prevent future health threats, reinforced by a framework for future Global Security for People and Planet.

Rationale and Key Messages:

- Impact—the Pandemic and Global Security: The COVID-19 pandemic has cost millions of lives as well as had a devastating impact on the global economy, for 2020-21 estimated at US\$10 trillion or 4.3% in lost GDP, which threatens global security with the collapse of nation states.
- **Response—Vaccine Nationalism vs Health as a Global Good:** Threats create panic and fear, enhance nationalism to the detriment of collaboration reframing health as a global good and valuing the health of all is critical if we are to navigate our way through our fragmented response.
- **Risks—of our current trajectory:** COVID-19 is predicted to take more than 10 years to become endemic assuming no further new variants; the more endemic it becomes, the more new variants will emerge some may be milder, and some could be worse, with risks of rolling pandemics for years ahead.
- **Options—A Coordinated Global Pandemic Strategy:** We can raise our ambition with targeted and collaborative action, combined with tailoring steps from mitigation, suppression, protection, prevention to elimination, to enable a pathway towards a safe, healthy, just, green, and prosperous recovery.
- **Delivery—Strengthening Public Health Systems:** Key to our pathway out of this pandemic, and in preventing the scale and impact of future pandemics; chronic underfunding and a lack of preparedness has contributed to the rapid and continued spread of the COVID-19 pandemic.
- Security—Ensuring Global Security for People and Planet: We can shape our international architecture so that it is fit for purpose, and establish a Security Council committee for Health Threats, including planetary health; with powers to mitigate risks, enhance preparedness, instigate rapid alerts and coordinate global responses—enabled by digital transformation for a modern global health system and representative leadership.



Steps Towards a Pandemic Exit Strategy & Recovery Plan

Based on the main components of the above diagram, this briefing provides an overview of the steps required to advance a pandemic exit strategy, including an adaptable framework to enhance global security for people and planet.

Steps Towards a Pandemic Exit Strategy and Recovery Plan—Summary:

The diagram and text outlines from left to right the main components required for advancing "Steps towards a Pandemic Exit Strategy and Recovery Plan" and draws upon a combination of successful mechanisms and public health principles.

Endemic Scenarios: Many countries have progressed policies of mitigation and suppression, with the risk of rolling pandemics and endemic scenarios; a successful exit strategy will require a coordinated multilateral, multi-component response.

Risks: New variants tend to emerge in populations with high rates of COVID-19 and represent a risk for the rest of the world, requiring horizon scanning of pandemic surges with genomic testing, systems analysis, and enhanced public health measures.

Components of a Global Pandemic Strategy:

MITIGATE—Lockdowns and Treatment: Required to limit extensive community spread and to provide the best chance of survival for those infected by ensuring that health services do not become overwhelmed with patients.

SUPPRESS—Reduce exposure by Cleaning, Space, Ventilation and Masks: Recommendations for wearing masks, regular cleaning of hands and touch surfaces, social distancing of 1-2 metres, ventilation and interacting in outdoor spaces, act to reduce the spread and dilute the virus in the environment and thereby suppress the overall severity and rates.

PROTECT—Shield and Vaccinate: Protecting vulnerable populations, including our elders and people with disabilities or enhanced risk, by shielding and targeted vaccination programmes, acts to reduce deaths and severity of illness by limiting exposure and enhancing immunity.

PREVENT—Detect and Contain: Include public health measures of regular testing and syndromic identification of positive cases, proactive detection of contacts, supported containment and quarantine, as well as restricted travel and border control measures; have been shown to be successful measures to manage outbreaks and prevent onward transmission, and are key components of an effective elimination and exit strategy.

ELIMINATE—A Global Strategy: In 2003, we managed to eliminate SARS through basic public health measures and a number of countries have successfully pursued an elimination strategy with COVID-19 even after extensive spread; building upon successful responses, a coordinated global exit strategy is a potential option for COVID-19 and minimises overall harm, even if not fully achieved.

EXIT—Global Security for People and Planet: A pandemic exit strategy will require a coordinated multi-sector systems response that builds upon and adapts existing multilateral global security measures to prevent and respond to pandemics; similar measures can be applied to our planetary emergency.

RECOVERY—A Pathway to Well–Being: With a safe, healthy, just, and green recovery process as a healthy transition for a prosperous world, to ensure the well-being of our future generations.

Taking Steps Towards a Pandemic Exit Strategy

Going forward, if we are to achieve a successful and sustainable route out of this pandemic, we will need to collaborate and coordinate strategic, multi-sector, multi-component international responses. This pandemic has revealed many challenges in our ability to deal effectively with global emergencies and exposed our vulnerability as a human species.

Our global and national leaders have had to deal with chaos, uncertainty, fear and extremely stressed services and people, which in some settings have resulted in denial, slow responses, and reactive decision-making. These responses are not surprising, and reflect our human nature in dealing with stressful emergency situations. However, this is not inevitable, and some settings have managed to respond quickly and effectively to the pandemic. These countries tended to have been well-prepared, responded swiftly to risks and prioritised their populations' safety, communicated clearly and coordinated national responses.

Decision-making reflected the tensions between securing the rights as individuals and nation states, with that of responsibilities towards others in our community and wider world. Pandemics generate fear and panic, which frequently results in an emphasis on individual rights, protectionism, and increased nationalism, as shown by the challenges in achieving vaccine equity. However, going forward, decision makers need to balance the desire to protect ourselves, our families, and countries, with the need to take responsibility to protect others in our increasingly global and interconnected community. Ultimately, the challenge presented by pandemics requires us to appreciate how our health is deeply interconnected with each other including the animals and health of our environment.

In a pandemic, no one is safe until we are all safe.



The diagram outlines the range of pandemic responses that reflect the balance of rights and responsibilities and builds upon the InterAction Council's Universal Declaration of Human Responsibilities. If we are to achieve a successful pathway out of this pandemic, we will need to place a greater emphasis on our responsibilities to each other around the world, and to appreciate that it is in our self-interest to do so.

Guiding Principles: Emergencies such as the COVID-19 pandemic present multiple uncertainties and at times an absence of clear evidence or solutions in a rapidly moving and complex environment. Drawing upon learning from the current pandemic and previous global health emergencies, including the series of High-Level Expert meetings convened by the InterAction Council, the application of ethical values to decision making is recommended.

It is often a political decision that determines the level of human sacrifice that a country is prepared to take, and decision makers that have prioritised the value of human lives have also minimised harm to education, society, and the economy. The guiding principles below are proposed to assist leaders and policy makers to navigate and overcome complex challenges, during this pandemic and can potentially be applied at community, country and global levels.

Guiding Principles to navigate a Pathway out of the Pandemic:

- **Prevention, Precaution and Preparedness**—Emphasise preventive efforts that minimise overall harm to health, human rights, social and economic well-being; apply the precautionary principle to risks and inform planning and preparedness.
- Evidence, Expertise and Evaluation—Draw upon and apply existing evidence and expertise in public health and emergency responses; evaluate and develop evidence to address strategic gaps in understanding, for now and for future prevention; ensure accountable decisions are informed by evidence or expertise, with transparent communications to enhance trust.

- Seek Sustainable Solutions—Pandemics can create fear, chaos, and a culture of blame; objectively learn lessons and actively seek solutions to address current challenges and develop sustainable processes and governance systems to enhance global health security for the future.
- Value, Respect and Trust—Value and respect the lives of all people from all communities and countries as a basis for engaging partners to build trusting and open relationships that enable sustainable solutions.
- **Balance Rights with Responsibilities**—Minimise harm to individual rights, including the right to life and health, protect those who are at greater risk, balanced with community and country responsibility to minimise harms.
- Health Security, a Global Good—Global Health Security requires collaborative and courageous leadership, to enable every country to work together and recognise that *everyone's health is valuable, and that health is a global good*.

This document aims to provide a range of options and a flexible framework to enable multilateral responses, countries and communities to develop exit strategies appropriate to their populations and situation. This approach draws upon successful responses to pandemics and applies wider learning to enhance the future infrastructure of global security to effectively address the increasingly complex challenges that face our world.

Although this exit strategy is presented as a series of steps, it is not anticipated that these will be taken sequentially. We have seen considerable variation in the unfolding of this pandemic, with backward steps and leaps to a more stable situation. Therefore, the below structure provides an outline for the key components to consider and adapt, according to the geographical and human context required for a particular setting.

Endemic Scenarios – Rolling Pandemics

In the first year of the pandemic, a number of countries decided to take an elimination strategy from the outset, while other countries have managed to move from extensive community spread to a situation where economic and social activity has been able to resume.

Initial perspectives in many countries have tended to favour a mitigation and suppression response with the view that we will need to learn to live with COVID-19 — in essence that it will become endemic within our communities. This has seemed like a reasonable approach looking back in history, where the natural evolution of a new virus or pandemic is for them to gradually—sometimes over hundreds of years— become endemic as herd immunity builds up across populations. However, aiming for an endemic state contains significant risks going forward.

Aiming for an Endemic State — The more it spreads the greater the risks Estimated to take 5-10 years in the UK. This assumes no new variants.*

*UK SAGE/ SPI-M-O Consensus Statement on COVID-19 November 2021 (prior to Omicron)

Medium to Longer-Term Trends for the COVID-19 Pandemic

Achieving a steady state might take a decade or more depending upon vaccination levels and travel patterns. Three main factors will affect the future patterns of the COVID-19 pandemic waves, of which the emergence of new variants represents the most uncertainty:

Emergence of new variants—There is currently no evidence to suggest that future variants will be intrinsically less severe; there is also the potential for co-circulation of multiple variants.

Waning immunity – from vaccines and natural immunity – this will especially affect older populations and those with weaker immune systems.

Seasonal patterns—as with other respiratory infections, over time future epidemic waves are likely to occur in the autumn and winter seasons. There are likely to be interactions with influenza and other respiratory infections.

The interactions between these three factors means that the next few years will be highly uncertain, and future outbreaks and waves will likely be noisy as things settle down, and it may be many years away before a steady, predictable pattern emerges.

Conclusion: To enable preparation for and early identification of such a wave, monitoring and surveillance, such as community testing, will need to be maintained to support future decision-making.

SPI-M-O Consensus statement for medium-to longer-term epidemiological patterns of SARS-CoV-2; January 2022

Examining the evolution of viruses, it is not inevitable that they become less severe as they become endemic, and there are many examples of infectious diseases that are endemic with significant impacts on death, disease and disability. The more that the COVID-19 virus is allowed to spread the more opportunities there are for it to develop further mutations. This presents a very real risk of a new variant emerging that can evade our immune systems and the protection offered by vaccines; (Katzourakis A, 2022).

Additionally, the impacts of Long COVID are still not fully understood, with many people, including those of working age, already being affected by long-term disability from what appears to be a multi-system condition. The UK Office of National Statistics estimates 2% of the population continue to experience symptoms lasting for more than a month, of which 40% report symptoms for over a year and two-thirds reported symptoms that interfered with their daily activities; (ONS 2022).

Our increasingly densely populated and interconnected world, combined with the evolution and rapid spread of new variants, has led to a situation of rolling pandemic waves with their subsequent devastating impacts.

This calls into question the inevitability of settling for an endemic scenario with rolling pandemics, chaotic surges and reactive lockdowns and the subsequent toll on peoples' lives. Additionally, the economic gap between countries that have followed an elimination path, compared to those that followed a mitigation route, will continue to widen global inequalities. Evidence is now accumulating that those countries that took an elimination strategy or have managed to prevent community spread, have enjoyed greater economic growth, social interaction and civil freedoms compared to those following a mitigation path.

Moving forward, learning from successful responses, we do not need to consider the endemic era as inevitable. Raising our level of ambition towards a global exit strategy will inevitably require considerable political will and leadership, and although total elimination may not be entirely feasible, aiming for this goal will at least create a safer and more secure world where all can flourish. To achieve this goal, we will need to strengthen our international cooperation and coordination, combined with targeted and strategic responses to address risks and support countries and regions with collaborative public health systems.



Risks to Global Security

As this pandemic has unfolded, we have witnessed significant risks to global security with the collapse of economic growth not seen since the World Wars. Going forward, the impact of rolling pandemic waves is likely to continue to undermine advances made in social and economic development. Moreover, the abuses to human rights especially for older, disabled, and disadvantaged communities has been profound, and is likely to create long lasting and deep divisions affecting equity and social capital.

In many parts of the world, we have seen escalating civil unrest in response to high death tolls related to the pandemic as well as infringements of civil liberties due to lockdowns and public health measures. In some countries this has affected elections, de-stabilised democracies and governments, and with the continued devastating impacts of the pandemic, has the potential to fuel wider inter-country conflicts.

Moving forward there are considerable risks to health and global security from the emergence and rapid spread of new variants, which require the application of the precautionary principle. Viruses naturally mutate as part of their evolution and are more likely to emerge in situations of extensive and prolonged spread.

Although initial research indicates that the current vaccines minimise harm to health and lessen transmission, going forward new variants may be able to escape our immune response and create another pandemic wave. Relying on vaccines, making analogies with influenza and aiming for longer-term endemic status, presents significant risks to unvaccinated populations. Moreover, there is considerable risk of new variants evolving several steps faster than new vaccines can be developed and rolled out globally. Aside from vaccine nationalism reducing availability, the widespread influence of misinformation promoting an anti-vaccination sentiment, risks population vaccination coverage being insufficient to provide adequate herd immunity, especially as the virus has become more transmissible with the Delta variant.

The InterAction Council highlighted the health risks to global security following Ebola and made substantial recommendations for enhancing multi-sector systems, strengthened governance and courageous leadership in the <u>"Dublin Charter for One Health"</u> (IAC 2017), to reduce further risk and enhance global security.

The World Economic Forum annual global risks report has highlighted the risks of infectious diseases and pandemics over the last few years, and the 2021 report places infectious diseases and climate change inaction at the top of the global risks scale.

The Global Preparedness Monitoring Board, chaired by Gro Harlem Brundtland and Elhadj As Sy, emphasised the risks of a pandemic and the lack of preparedness of national health systems and multilateral coordination in their 2019 report. In their 2020 report, "A World in Disorder," they call for enhanced investment and leadership by heads of government and leaders of international organisations, with stronger global governance, enabled by agile national and global systems for global health security.

For future preparedness, the OECD emphasise that global challenges such as this pandemic require complex adaptive systems analysis to fully appreciate the multiple interactions, risks for escalation and factors that reinforce protection and resilience.

As this pandemic continues to evolve, with continuous risks from new variants developing over time, it will become increasingly important to establish comprehensive multi-sector operations to horizon scan for emerging risks around the world and to strategically coordinate global systems responses.

In the future, risks from further pandemics are likely to increase in frequency, as the human population continues to expand, with high levels of urban density and international travel combined with encroachment of the environment and proximity to animals, enhancing the risk of new viruses crossing over to infect humans and potentially emerge as new pandemics.

A Summary of Successful responses to the COVID-19 Pandemic

Drawing on successful responses to the COVID-19 pandemic from around the world, in 2020, an overarching flexible Emergency Framework was developed by the InterAction Council to enable global, community and country responses. This multi-sector framework builds on core public health measures that build upon good practice case studies from a range of settings and is endorsed by a number of international and professional organisations.



An Emergency Framework for Countries and Communities – for COVID-19:

This framework provides a visual summary that captures key aspects of successful responses in containing the spread of COVID-19 from a variety of case studies in a range of different settings, summarised below:

Act Swiftly: Convene Emergency Committees to oversee strategic plans and exit strategies.

Communicate and Coordinate: Ensure clear lines of co-ordination between sectors and geographical levels, and establish daily communications supported by social media.

Stop the Spread: prevent transmission with **enhanced testing and isolation of infected cases and their contacts**, and public health measures:

- Social Distancing of two metres plus
- **Constant Cleaning** hands and touch surfaces
- Maintain Masks indoors and for crowded spaces
- Reduce Social Mixing between households and communities
- Restrict Travel plus test and quarantine at borders
- Interact outdoors or online for work and education
- Stay at Home and shield vulnerable groups

Vaccinate at Speed and Scale: Especially targeting high risk populations, share and expand supplies and organise vaccination campaigns through existing mechanisms including community health services, local governments, volunteer networks and the military.

Enable Health Services to Save Lives: With surge capacity of the health sector, triage systems, re-deploy staff and buildings supplied with protective equipment, beds, respirators, and medical treatments, including oxygen supplies; regularly test and vaccinate frontline workers to ensure their safety and maintain a sufficient workforce.

Enhance community resilience, security, and stability: Target and protect vulnerable populations; stabilise economic impacts, ensure essential services and wider security.

Research, Recover and Reflect: Fast track research, establish recovery committees for long-term planning; evaluate and reflect to improve emergency responses in the future.

This framework was designed as a flexible tool to enable comprehensive country and community responses to the pandemic. It has been further adapted as an analytical tool to assess the COVID-19 Health Systems response, to enable learning for future pandemics and health emergencies, (Rispel LC et al, 2021).

Components of a Global Exit Strategy

Working towards the goal of a global exit strategy has the potential to galvanise collaborative action with targeted and strategic responses that results in minimising overall harm from the pandemic, even if it is not possible to eliminate COVID-19 completely. To do so will require a combination of public health components that are applied to settings according to their situation. The below section outlines the variety of components required for a successful exit strategy, as illustrated in the diagram, "Steps towards a Pandemic Exit Strategy and Recovery Plan."

The steps of Mitigate, Suppress, Protect, Prevent and Eliminate are all based on established public health measures that have been shown to successfully combat infectious diseases and contain pandemics. According to the situation, timing and resources, these steps can be adapted and applied in a variety of combinations to enhance their cumulative impact, and although they are based on public health operations, they require multi-sector leadership, coordination, and cooperation to be successful.



Steps Towards a Pandemic Exit Strategy & Recovery Plan

Mitigate – Lockdowns and Treatment

Mitigation measures of lockdowns and health care treatment are necessary when there is extensive community spread that has not been controlled adequately by other public health measures. Lockdowns have tended to be applied when the pandemic rapidly accelerates in its rate of spread, with the risk of overwhelming health services and causing widespread social chaos. The criteria for lockdowns vary considerably according to different settings and to some extent has depended on how acceptable lockdown restrictions are within different political and cultural environments.

Lockdowns have been shown to be successful in containing the spread of the pandemic, essentially by reducing the opportunities for human interactions and continued transmission of the virus. They also reinforce the protection of vulnerable populations at particular risk becoming unwell and dying.

Lockdowns have been shown to slow the rate of community transmission, which in turn has enabled health care settings to cope with the surge in patients and therefore to avoid unnecessary illness and deaths related to COVID-19 infection. However, many countries have limited access to Universal Health Coverage or to adequate treatment or health care facilities, which results in existing health systems easily becoming overwhelmed. Additionally, where there has been high demand on limited services, priorities have tended to focus upon those most able to respond to treatment or even their ability to pay. These scenarios have exaggerated social and economic inequalities and led to considerable community distress with potentially avoidable deaths. Sharing experiences, targeting vaccination programmes, and the application of research evidence has fortunately enhanced effective health care treatments, the management of vulnerable populations, and has reduced the risks of severe illness and mortality.

If successfully applied, lockdowns prevent health care services becoming overwhelmed and enable community rates to come down to levels that are controlled by a combination of the other public health measures. However, a lockdown is perceived as an infringement of human rights and in many settings has created substantial social and economic negative impacts. Initial analysis has shown that those settings that have acted swiftly, have been able to control the situation quickly and require a shorter lockdown, which has also been less damaging to social and economic life. In general, it is advisable to utilise lockdowns as a last resort, avoid repeated lockdowns, minimise the impact upon civil liberties and to focus on the principle of minimising human interactions, especially within indoor spaces. However, lockdowns are an important component to apply if community spread starts to escalate, in which case it is advisable to act swiftly to contain the situation as rapidly as possible and allow time to enhance the below measures.

Suppress – Reduce: Clean – Space – Ventilate & Masks

The long-standing public health measures of regular cleaning of hands and surfaces, maintaining social distance and ensuring good ventilation of indoor spaces, along with wearing masks, all act to reduce the virus from spreading. In essence, they reduce the virus in the environment, diluting the exposure to the virus and thus the potential viral load received. Increasing evidence has highlighted the benefits of ventilation and the dilution of exposure to the virus in outdoor settings. Appreciating the importance of reducing and diluting the virus in the environment underpins basic hygiene measures in much of the COVID-19 public health guidance. Understanding these principles also facilitates the correct application of these basic public health hygiene measures to maximise their beneficial impact, as well as the effective management of high-risk environmental settings and occupations.

Although these measures do not entirely prevent exposure of a virus such as COVID-19, they do act to dilute the virus, reduce exposure, and minimise viral load. This potentially means that even if exposed to the virus, there is a greater chance that an individual's immune system can tackle the virus, and less risk of becoming symptomatic or seriously ill. However, if an individual has compromised immunity and vulnerable health, even a minimal exposure may lead to infection with serious illness. In contrast, Personal Protective Equipment – PPE, as utilised in health care and higher risk settings – afford a much greater degree of protection to both the wearer and the patient. Therefore, PPE is generally recommended to protect individuals in environments with high viral load and when interacting with highly vulnerable patients.

From a population perspective, these public health measures of cleaning, social distance, ventilation and wearing masks reduce risk, but are rarely sufficient on their own to entirely prevent or eliminate the spread of an infection such as COVID-19. Although they constitute important components of an overall exit strategy, in combination with other public health measures, on their own these measures will only tend to suppress or reduce the overall level of epidemic spread.

Protect - Shield & Vaccinate

The main principle behind this component is to protect individuals (the host) from the risk of infection. This can be done by protecting vulnerable populations from exposure – for example, by shielding them from the risk of coming into contact with the virus. This approach has been successfully applied to people at risk due to lower immune responses – either due to advancing age, disabilities, certain chronic illnesses or medical treatments. However, to be effective, it requires organised social support so that

vulnerable people can keep themselves protected within their homes. Additionally, it requires wearing of PPE for caregivers if vulnerable individuals require physical care. Although this approach has been successfully applied for many months, it becomes less tenable for a long period of time and risks social isolation, distress, and mental health problems.

The other main public health measure that protects individuals and the wider population is to strengthen immunity, which can be done through vaccination. Early evidence from the roll out of COVID-19 vaccination programmes indicates the development of antibodies that protect the individual against developing symptoms and less severe forms of the illness. Importantly, early research has shown that hospitalisation and deaths from COVID-19 are less after vaccination, and that the vaccines also appear to lower the risk of viral transmission, although this appears to be less so for the Delta variant. Where vaccine supplies are limited, it is advisable to target high-risk professions such as health and care workers, along with protecting vulnerable populations at most risk of illness and dying from COVID-19.

Going forward, vaccinations are likely to be a key part of a pandemic exit strategy. However, relying solely upon vaccinations as a solution to the pandemic contains potential risks. Although the current vaccines seem to provide protection against existing new variants, we do not know how much protection they will provide in the future. Presently, only a small proportion of the world's countries (mostly high income), have been vaccinated at levels that provide herd immunity, with considerable variation and inequalities between countries. This current approach potentially relies on maintaining regular booster jabs like the yearly influenza vaccination programmes, which could be problematic to achieve given the reported disruption in routine vaccination programmes due to COVID-19.

Vaccine Equity and Vaccine Nationalism: All countries have a duty to protect their populations—however, no country is safe until all are safe

WHO Global Targets for COVID Vaccination:

- **10% by the end of September 2021** 6 billion doses given globally, however 56 countries missed this target, with less than 5% of African countries fully vaccinated, and half of African countries only have 2% of their population fully vaccinated
- **40% of the population of every country by the end of 2021** a supply of 12 billion doses is estimated to have been produced by the end of 2021
- **70% of the population of every country by the middle of 2022** requires 11 billion doses; production should reach 12 billion doses by Dec 2021

Low rates of vaccination within LIC are related to:

- **Supply of vaccines to other countries** at the end of September 2021, China had exported 1.1 billion doses, Europe 850 million doses, the USA 178 million doses and India 66 million doses
- **Stockpiling of vaccines supplies** as of Sept 2021, 360 million doses are stockpiled, with only 15% of pledges delivered by the G7 countries to COVAX;
- The Delta variant in India as a key supplier for COVAX, exports and donations were put on hold to vaccinate their own population

- The ACT Accelerator Strategic Review, (Oct 2021) identified vaccine nationalism, stockpiling and inadequate regional and national health and delivery systems; and recommends greater representation from LMIC with clearer communication, coordination and transparency tailored to needs
- Vaccine misinformation historic and cultural attitudes vary towards vaccination programmes, with anti-vaccination social media messages feeding on natural fears, which is further driven by political agendas and advertising companies to reach their target audiences
- **Conflict and unstable states** have low vaccination rates due to the difficulties in delivering doses safely with poor governance and health systems

Risks and Impacts of Vaccine Nationalism:

- Vaccine coverage for herd immunity is estimated to be in the range of 70-85% of the total population, and due to waning immunity after 5-6 months, booster doses are required with the Delta variant
- New variants are continually emerging vaccines provide some protection against the Delta variant, going forward there is a risk that a new variant emerges that evades previous immunity or that from current by vaccines
- The economic impact of vaccine nationalism are estimated to cost HIC up to US\$4.5 Trillion, and the global economy up to US\$9.2 Trillion if LMIC economies do not have adequate access to COVID-19 vaccines
- Impact on travel, trade and GDP even if one country has good vaccine coverage, it experiences a sluggish recovery if trading partners are not vaccinate with an estimated loss of 3.9% GDP in HIC economies

Contributory Challenges to Vaccine Nationalism:

- Multiple and fragmented development, supply, and licensing with an estimated 200 COVID-19 vaccines in trials or in use, and many countries having separate licensing arrangements, with variable recognition of vaccine status between countries which impedes international travel
- **Profit driven pharmaceutical development and supply** many of the HIC have a commercial model for their pharmaceutical industries, which also provide global supplies, and has resulted in significant investment in cancers and inflammatory diseases which require expensive and regular medication
- **Pharmaceutical profits compared to investments** are estimated to be 3-37 times compared to other innovation industries; this model relies on 85% of its investment to come from government sources and from charities, and spends twice the investment on marketing compared to innovation
- National investment versus private profit in order to promote rapid development and supply for COVID-19 vaccines, an estimated US\$22 billion of taxpayer money was invested by the US government to the pharmaceutical industry; estimated profits in 2021 from the COVID-19 vaccine by Pfizer are US\$27 billion, and by Moderna are US\$18 billion

Public Health Interventions are a Global Good

• Long standing underinvestment of public health medicines and vaccines in contrast, since the 1980s there is underinvestment in non-profitable areas that provide a short course of medicine or vaccination, such as antibiotics or vaccines – this can be seen as a form of market failure

- National Generic Pharmaceutical Models already exist in order to provide low cost medications, vaccines and treatment for their populations, according to need
- The case for investment in global and regional public health goods potentially a globally coordinated and funded pharmaceutical organisation could be created to address market failures that present significant risks to public health threats; such an organisation could have a model based upon collaborative governance and quality standards, investment, research and development streams, with international trials and licencing processes; combined with regional supply hubs to ensure a low cost, flexible and equitable delivery system

To achieve global vaccination, an estimated investment of US\$60 billion is required over the next two years, of which funding could largely be shared between High Income Countries and distributed through the COVAX ACT Accelerator. The feasibility and costs of rolling out an annual COVID-19 vaccination campaign in a timely manner, every year around the globe, and keeping ahead of emerging variants, is as yet unclear. In the future, a global exit strategy has the potential to target, coordinate and support mass vaccination within populations with wide community spread – in order to reduce deaths and the risk of further new variants developing.

Prevent - Detect & Contain

Learning from countries that have been successful in preventing and minimising widespread community outbreaks and even eliminating COVID-19 from within their populations, has shown that having a comprehensive detection and containment system is key to an ambition of achieving elimination. Detection and containment are pivotal public health measures in preventing forward transmission of the virus, and therefore form an essential component of a successful exit strategy. The additional measure employed by countries with the goal of elimination, has been the combination of forward tracing with backward tracing, sometimes referred to as enhanced tracing, and this approach can easily be incorporated within COVID-19 App functions. Bidirectional tracing (i.e. forwards and backwards), is especially useful at identifying super-spreaders and settings, and provides an essential tool to stamp out new outbreaks and to contain clusters before they spread further. This approach appears to be especially successful, as an estimated 80% of cases do not pass it onto others, while an estimated 20% of infected people spread it onto two or more people.

Countries that were able to establish rapid testing programmes, combined with proactive identification and isolation of cases and contacts, have been especially successful in keeping their economies and society open and functioning with low levels of COVID-19. Many of these countries were able to react quickly after having strengthened their public health laboratories, services and capacity following previous outbreaks such as SARs, MERs or Ebola. In other settings, having a comprehensive community based public health system has been applied successfully, for example, by utilising existing environmental and public health professionals for contact tracing. Other countries have successfully applied proactive measures, for example by employing detectives, developing digital tracking systems or by utilising the role of community workers. This has often been successfully combined with restricted travel,

border controls and quarantine programmes, with or without testing, including at ports and entry points to the country. To successfully break forward transmission, it is important to provide community support to those required to isolate – for example, in the form of income support and food deliveries.

Even without high-tech solutions, including confirmation from laboratory tests, learning can be drawn from past epidemics where outbreaks have been managed and successfully controlled through 'syndromic' detection. Essentially, this involves detecting cases by signs such as raised temperatures, or through symptoms that are characteristic to the infection. Although this will minimise capturing asymptomatic cases with COVID-19, this approach combined with isolation of household members and contacts can still reduce overall community transmission. Additionally, digital innovation has developed solutions that can screen for and identify symptoms, make recommendations, and trigger health and social care support.

In summary, the prevention of forward transmission through detection and containment measures is an essential component of being able to control and potentially eliminate COVID-19, as part of a comprehensive public health system. However, this will require a combination of reinforcing public health responses, including social measures and income support. Looking to the future, to ensure a successful elimination strategy and to prevent future pandemics, comprehensive public health systems need to be strengthened with increased investment.

Eliminate – A Global Strategy

An essential aspect of a global strategy will be political commitment, investment, and the strategic application of public health operations as part of a coordinated global public health system. Due to the global nature of this pandemic, a global response will be required, ideally with the goal of elimination, or as near to elimination as possible.

The alternative options risk the development of an endemic state with rolling pandemics occurring with their subsequent disruption, as new variants emerge. Although complete elimination may never be possible, this level of ambition is likely to provide a successful outcome that is compatible with a reopening up of economies and civil liberties. This has been achieved to varying degrees of success with a number of infectious diseases, ranging from complete elimination with smallpox, minimal residual cases of polio, to a significant reduction of endemic areas, disruption and deaths from measles and malaria.

Successful global campaigns have all required a combination of public health operations as part of a coordinated system that creates a comprehensive public health system reaching from community to national, regional, and global levels. To be effective a global strategy will require a strong coalition of leaders from across the UN and global community, combined with a range of representative member States, who have considerable ambition and commitment to bring this pandemic to an end. A global strategy will require clear goals and objectives that combine and apply to different settings, a range of successful measures outlined in the steps: Mitigate – Lockdowns and Treatment Suppress – Reduce: Clean – Space – Ventilate & Masks Protect – Shield & Vaccinate Prevent – Detect & Contain

This ideally will build upon existing initiatives such as COVAX, with an ambitious strategy that draws upon successful measures from around the world. A global strategy will require strong engagement with member states and the global community, and be enabled by a robust governance and coordination mechanism in order to establish priorities, focus on risks, set and monitor clear targets, delivery and operational processes. Ideally, the governance structure will include world leaders and heads of government to ensure adequate resources are available and be supported by a high-level advisory committee that identifies solutions to overcome emerging challenges. Utilisation of existing international mechanisms, including the UN General Assembly, the UN Security Council and international community, supported by the World Health Organization, would enable coordination of collaborative and strategic action, with an accountable reporting system.

EXIT – Enhancing Global Security for People and Planet

To achieve a successful pandemic exit strategy will require significant global coordination and leadership, including high-level public health, political and financial commitment, however, the cost of this will be significantly less, financially and to human lives, than risking an endemic situation with rolling pandemics. The pandemic, and in many respects, our planetary emergency can be seen to be symptomatic of our multiple and interconnected global challenges, which going forward, require a strengthened global architecture and governance systems to effectively prevent, reduce risks, prepare, respond to and to ensure a healthy pandemic and planetary recovery.

The G7 meeting in June 2021 made commitments to End the COVID-19 Pandemic in 2022, including convening a Special Session on Pandemic Preparedness to explore the value of a Global Treaty. Key components of a modern global health security system were announced, including a Global Hub and Network for Pandemic and Epidemic Intelligence, (Germany) and a new Centre for Pandemic Preparedness (the UK/ USA). Commitments of supplying 2 billion doses of vaccines were made via COVAX, and require further escalation to meet international targets. These commitments were further reinforced at the 2021 World Health Assembly and the UN General Assembly. Lessons from the Pandemic are starting to filter into forward responses, with WHA Resolution 74.7 recommending the establishment of a working group and regional consultation to consider findings in the independent reviews, as outlined in the box to follow.

Summary of Pandemic Independent Reviews:



Recommendations from the independent reviews include strengthening of global governance mechanisms, with the Independent Panel for Pandemic Preparedness and Response calling for 'A Global Health Threats Council' – with analogies to the proposal set out later in this paper on advancing a framework for global security for people and planet. While the WHO and review bodies with a strong focus on health, have especially focused upon the importance of strengthening public health operations and systems, as described below.

Strengthening Public Health Systems – a key for Global Security

Previous health security emergencies, including SARS, have seen the renewal of many national public health bodies, and have driven the transformation of public health institutes during this pandemic, for example with the establishment of the new UK Health Security Agency. Many of the countries in Asia which were able to prevent widespread COVID-19 infection rates and pursue an elimination strategy, benefited from their renewed public health services after SARS. However, many Public Health services are fragmented and have been chronically under-funded over many decades prior to the pandemic – and this is likely to have been a significant contributory factor. For example, only 2-8% of the total health sector budget was estimated to have been allocated to Public Health services across European countries (WHO Euro, 2014).

Aside from investment, the independence of public health leaders to voice concerns and risks to the public's health is an important element in successful responses, and requires qualified senior public health leadership that is able to influence high level political decision making to be successful. During this pandemic, many countries have experienced the side-lining of their public health leaders, with political agendas driving decision-making. Going forward, strengthening the independence of public health bodies and incorporating public health leaders into high government and the civil service, will help to ensure decisions and protective measures are based upon risks and evidence, whilst balancing the wider needs of the country. In May 2021, the World Health Organisation passed a resolution on Strengthening WHO Preparedness and Response to Health Emergencies (WHA Res: 74.7) that recommended enhancing public health systems. Key areas are summarised below:

- Strengthen public health systems and capacity for health security
- Develop strong resilient health systems and UHC as a foundation for health protection services
- Enhance IHR implementation, laboratory networks and genomic sequencing
- Adopt an All–Hazards multi-sector, One Health approach
- Strengthen cooperation, coordination and communication mechanisms
- Interoperable digital platform to share knowledge and tackle misinformation
- Address wider determinants, inequalities, and other health conditions
- Enhance sustainable financing, legal frameworks, tools and research solutions
- Enable trade and travel, sustainable development, and the global economy
- Promote multilateral responses for future pandemics and public health emergencies
- Strengthen WHO capacity to prepare for, respond, communicate, and coordinate member States

There are many opportunities to draw upon existing expertise within international and United Nations organisations, environmental and public health professional and institutional bodies, such as the International Association of National Public Health Institutes and the International Federation of Environmental Health. For example, the World Federation of Public Health Associations (WFPHA) has advanced a "Global Charter for the Public's Health," which has been integrated into a health systems framework to modernise public health services, enable sustainable delivery, and scale up professional capacity (Commonwealth, 2016; WFPHA, 2021).

Going forward, public health will require further transformation to prevent and respond to pandemics and enhance global security for people and the planet. Ultimately, as we have seen with the emergence of new variants, we are only as strong as our weakest link, and strengthening global, country and community public health systems and capacity will therefore be a key part of the infrastructure required. However, this investment is minimal compared to the significant economic losses seen around the world. Additionally, by transforming and modernising public health systems to deal with our current and future challenges, can also act as an investment to underpin wider planetary health and sustainable development outcomes, including for prosperity, health, and well-being.

The diagram to follow illustrates a further adaption with a One Health perspective and conceptualised as "Universal Health Systems for Planet, Place and People" to enable a sustainable health sector response within the context of responding to the climate emergency (IAC 2019). This illustrates the importance of linking the strengthening of public health operations as part of the health system and Universal Health Coverage.

Universal Health Systems for Planet, Place and People: A Manifesto to Secure a Healthy Planet for All; InterAction Council, 2019



Strengthening Public Health Systems includes health protection services as a critical public health operation within Universal Health Coverage and is an essential component of global security. Going forward, health protection services require transformation to address our 21st century global security challenges, such as pandemics, other health emergencies and climate change. We can draw upon and improve existing service delivery models such as the below Commonwealth "Health Protection Toolkit" – an essential component of Global Security.

Health Protection Toolkit: An Essential Component of Global Security (Commonwealth, 2017)



Greater links need to be developed between human, environmental and animal health, in what has been described as a 'One Health' or 'Planetary Health' multi-sector systems approach which links the health of the environment, including animals, with that of humans. This is becoming increasingly important, given that an estimated 75% of new and emerging infections come from animal sources, and going forward the risk of cross over transmission will increase with increasing urban-environmental pressures and proximity. In doing so, we need to ensure comprehensive and joined up multi-sector

services and systems, that coordinate and enhance agile responses between community, regional, national and international levels. For example, the World Bank report on "COVID-19 and Climate-Smart Health Care" (Dorey S et al, 2021) outlines significant opportunities to reshape and strengthen health protection operations and public health systems that combine climate smart initiatives with the multi-billion-dollar investments leveraged by the Bank for the COVID-19 response.

Climate smart initiatives have the potential to contribute to climate resilience across the different phases of the pandemic, ranging from preparedness, response, recovery and rehabilitation. Interventions include measures such as sustainable procurement, waste management, renewable energy, efficient cooling for vaccine cold chains, and disaster management—for example with nature-based solutions such as targeted tree planting to reduce the impact of flooding and heatwaves. In particular, a greater focus on multi-sector, one health approaches to prevention is recommended to reduce and avoid significant costs, resources and energy and to enhance resilient systems. As part of the recovery process, links are made for preventing non-communicable diseases with climate smart initiatives such as safe travel routes to increase physical activity and the promotion of healthy food systems and consumption.

The utilisation of digital technology also presents opportunities for energy and cost effective solutions, which can be applied and scaled across public health operations. Additionally, Digital Health Solutions provide a significant opportunity to enhance equity, and to enable and scale up a transformed public health system, at scale and speed. Applying and enhancing digital solutions to strengthen the delivery of global health security represents a cost-effective response that can be provided as a common good to all countries and regions around the world. The diagram below provides an overview of potential digital solutions across the public health system, with a particular focus on enabling the delivery of health protection functions as a core component of global health security.

Digital Health Solutions to enable a Global Health Security: (Platform for Planet, Place and People, <u>http://p4ppp.cwcdh.org</u>)



Transforming Global Health Security for the Future

Global Health Security is a relatively new and evolving concept, with no clear globally agreed definition. For example, definitions from the CDC, USA emphasises strong public health systems that prevent, detect and respond to infectious diseases around the world; while the <u>Global Health Security Agenda</u>, a coalition of 70 countries—focus is on collaborative international efforts, including the International Health Regulations, to create a safe and secure world from infectious disease threats. In contrast, the WHO in 2019 widened threats to global health, and aside from infectious diseases and Antimicrobial Resistance identified environmental health, climate change, fragile settings and non-communicable diseases.

Following the Ebola global crisis, the InterAction Council convened a number of highlevel expert group meetings to identify solutions to strengthening health security as an intrinsic aspect of global security. In 2017, at the InterAction Council plenary session hosted by Bertie Ahern in Dublin, members endorsed the Charter for One Health, which outlines the following key actions required to transform global security against health threats.

The InterAction Council Dublin Charter for One Health, 2017

Action for One Health

1. Co-ordinated local, national, multilateral, and global solutions are required to tackle poverty, global environmental change, peace and justice, access to clean water, and responsible production and consumption.

2. Increased resilience is needed to respond to emerging threats and to tackle the driving forces of environmental change in order to enhance the integrity of the natural systems on which humanity depends.

3. Environmental health should be integrated into health budgeting with a preventive approach. There is an obligation to expand trans-disciplinary research to address gaps in knowledge through defining the links between health and environmental change, and to develop potential adaption strategies for populations subject to environmental change.

4. There is an imperative that governance, accountability, monitoring and independent evaluation be improved and policy, legislative and regulatory changes will be necessary in all sectors related to health – social, economic and environmental determinants and patterns of international commerce, trade, finance, advertising, culture and communications.

5. Fearless leadership is needed, as well as whole societal engagement, recognizing that governments acting alone will not be able to deliver One Health and will require broader leadership from civil society, the scientific community, academia, local government and the private sector supported by a global learning network.

6. Establish an independent accountability mechanism to ensure monitoring and review of the aforementioned Actions for One Health.

https://www.interactioncouncil.org/publications/dublin-charter-one-health

An increasing recognition of the contribution that Health Security makes to the wider perspectives of Global Security will be instrumental in shaping our global security architecture and delivery systems on the ground. For example, Heads of Government consider challenges such as **climate change**, **conflict**, **migration**, **human rights**, **political and economic instability**, as key drivers for global security. In recent years, the InterAction Council has placed increasing emphasis on the role that health plays as a key component of global security, and this document represents much of this thinking. For the purposes of this report, Global Health Security is described as:

Principles and Components for advancing Global Health Security

Health Security is critical for Global Security, and Health Threats range from pandemics caused by infectious diseases and non-communicable diseases to challenges affecting the determinants of health and human existence, including climate change, conflict, migration, human rights, political and economic instability. To ensure Global Health Security requires the application of the following **principles and components:**

- **Right to Health and Health as a Global Good:** Recognises that every citizen on this planet has a right to health and that the health of all affects our global security; with investment to ensure access to universal public health systems to protect health as a global good
- **Prevention and the Precautionary Principle:** Actively identifies risks and takes proactive strategic multi-country and multi-sector responses to prevent pandemics and threats to health, while promoting resilient and healthy environments, animals, people and the planet
- A Transformed Global Health System: Strengthens and invests in Public Health Systems that coordinate global, regional, national and community operations that prevent, identify risks, build resilience, prepare, create early warning and response systems to health threats and ensure comprehensive recovery
- Health as a core component for Global Security: Through the application of multi-country public health initiatives and soft diplomacy with a shared vision that creates common goods, cooperation and enhances peace with resilient, safe, green and healthy communities
- Leadership for Global Health Security: With the establishment of a governance mechanism, that ensures accountability and builds on the existing UN Security Council architecture, with representative political and world leaders, informed by independent global health experts and health diplomats

The Planetary Emergency - Modernising Global Security for People and Planet

The Climate COP26, 2021

The COP26 outcome is a compromise, reflecting the interests, contradictions and state of political will in the world today. It is an important step, but it's not enough. It's time to go into emergency mode. The climate battle is the fight of our lives and that fight must be won.

UNSG, Antonio Guterres, Twitter 13-11-21

Looking to the future, modernising the global infrastructure required to respond to, and prevent pandemics, can also be potentially applied to our other significant global health challenges, and be adapted to strengthen effective action to address our climate crisis and planetary emergency. As the origins of pandemics are frequently linked to the interaction of humans with animal and environmental health, there are significant and multiple benefits in linking these agendas together as part of a global 'One Planet Health' response, that will become increasingly important over the next decade.



A Global Security Framework for People and Planet

This next section outlines a potential framework for key components and steps to enhance global security for People and Planet as part of a pandemic exit strategy.

Aim: To enhance Global Security for the future well-being of the Planet and all its People.



Towards a Global Security Framework for People and Planet:

Purpose: To coordinate a Global Pandemic Exit Strategy and prevent the risks and impacts of future Pandemics and our Planetary Emergency.

This framework provides a visual structure and outline to advance next steps required to strengthen Multilateral and Multi-sector Governance as a key to a Global Pandemic Exit Strategy and to avert future pandemics and the planetary emergency. The framework is based upon the following **core components:**

- 1. Create a Vision and Values
- 2. Ensure Coordination and Communication
- 3. Invest in Prevention and Public Health
- 4. Establish a Security Council for People and Planet
- 5. Advance a Resilient, Green Recovery for a Healthy Planet for All
- 6. Implement 'One Planet Health' multi-sector Systems at all levels
- 7. Scale swift responses through the Digital Transformation
- 8. Empower Courageous Leadership for People and Planet

Steps towards enhancing Global Security for People and Planet:

1. VISION and VALUES:

Identify a joint Vision, enabled by Common Values of Freedom, Justice and Solidarity for People and Planet – with an emphasis on equity and protection for all, the application of sustainable and scientific responses, the precautionary principle and of doing no harm, transparency and accountability; in order to strengthen political and multilateral responsibilities and to enhance trust and rapid decision-making, especially where uncertainty exists in addressing challenges during a pandemic and for the planetary emergency.

2. COORDINATION and COMMUNICATION:

Through a Joint Platform to enable coordination and communication – provide a politically and financially neutral and transparent governance infrastructure, where risk assessment, decision-making, communications and coordination for emergency responses are based on objective multilateral leadership mechanisms, informed by scientific evidence and risk analysis, supported by the creation of a comprehensive and flexible strategic framework for global security for people and planet, that builds on existing tools to build capacity at all levels:

- A Strategic Framework for Global Security for People and Planet based on ethical principles, coordinated with, and linked to, adaptable multi-sector emergency prevention, preparedness, and response plans – including the management of worse case scenarios, combined with recovery and exit strategies, which build upon existing frameworks, tools, organisations, partnerships, and resources.
- Collate and Create Governance Tools to enhance Just Systems for People and Planet building upon existing resources, enhance legislation, policies, financing, and accountability mechanisms to strengthen and modernise governance systems at all levels; where gaps exist, co-create tools to enable governance mechanisms and systems strengthening.

3. PREVENTION:

- Invest in Public Health essential operations for "People and Planet" to ensure a resilient planet with healthy people to reduce the risk of future pandemics, to support and scale health protection measures and to address emerging planetary health risks, to be enabled by a global public health framework developed by public health partners that develops comprehensive and adaptable Public Health Systems. Components of a Public Health Framework for People and Planet would include strengthening workforce capacity, modernize health protection, prevention, and promotion services for "People and Planet" supported by governance, knowledge, advocacy, and capacity functions.
- Ensure robust Health Protection Services to ensure implementation of the International Health Regulations, and consisting of Communicable Disease Control, Emergency Preparedness, with strengthened frontline Environmental Health functions to enable community contact tracing and containment measures, as well as a cross-cutting response to climate change and sustainable development.
- Integrate Public Health Functions into Health Systems by investing in Universal Health Coverage with accessible and cost–effective community based

and primary health care services, trained in basic public health measures to enable surge capacity to respond to future pandemics and emergencies.

• Create "One Planet Health" Preventative Services building upon and modernising existing public, environmental and animal health services, resources and organisations, to create and enable robust multi-sector systems with enhanced coordination, infrastructure and capacity, across communities, local authorities, countries, regions and global levels.

4. ESTABLISH a GLOBAL EMERGENCY COUNCIL for PEOPLE and PLANET:

Establish a Global Emergency Council for People and Planet to address Global Health Threats - facilitate multilateral leadership with heads of government and a neutral panel of global leaders, to enable coordinated and strategic responses, globally and that enable national responses, with an emphasis on averting emergencies through the following functions:

- **RESILIENCE and RISK** assessment analysis to maintain oversight of emerging and early risks, including strengthening monitoring and surveillance systems for pandemic risks and for potential tipping points for the planetary emergency. Build resilience at individual, family, community, national and environmental levels that link to wider prevention initiatives and include Public Health leaders at all levels of risk, resilience, and emergency forums. Apply systems approaches to risk analysis for pandemics and planetary health risks, and mainstream within financial risk planning.
- **PREPAREDNESS** monitor and enhance capacity of comprehensive preparedness plans, based upon worst case scenarios including impacts and responsibilities across all sectors, including public health and the environment, with clarity of governance, decision-making mechanisms, coordination and communications. Test, evaluate and ensure preparedness systems are robust at all levels.
- EARLY ALERTS develop graded systems with accessible communications, that trigger rapid appropriate multilateral and multi-sector action through the UN, countries, and partner organisations to intervene early to risks and evolving emergencies, including for potential pandemics and risks from tipping points related to the Planetary Emergency, to garner political support, resources, and multilateral leadership to respond at speed and scale.
- **RESPONSE** enable strategic multilateral and multi-sector leadership responses to enhance swift action at scale to global emergencies for people and planet, with United Nations and the international community, heads of government, donors, the private sector, civil society, and professional bodies, supported by transparent decision-making, coordination, and communications mechanisms.

Pandemic and Planetary Emergency Costs versus Investment in Preparedness

- GDP loss for an influenza pandemic is estimated at 2.2-4.8%
- The IMF threshold for major economic disaster is 0.5% GDP loss
- Planetary threats are estimated to cost 0.2-2.0% GDP from climate change and 0.3-0.5% GDP from natural disasters
- The West African Ebola outbreak loss from social and economic impact cost an estimated US\$45-55 billion from 2014-2016
- COVID-19 estimated response costs at least US\$11 trillion
- COVID-19 has resulted in over US\$10 trillion lost in earnings a loss of 4.3% GDP
- It would take 500 years to spend as much on investing in pandemic preparedness as the world is losing due to COVID-19
- Pandemic preparedness is estimated to cost an additional US\$5 per person annually and will require sustainable finance mechanisms
- Strengthen One Health Systems a yearly investment of US\$1.9-3.4 billion to strengthen animal and human health systems would give a return of investment of 10 to 1 or higher.
- An estimated 1% of global GDP is required to finance a renewable energy transition, whilst shifting to a green economy creates an estimated fourfold return on investment
- Climate Adaptation from 2020-2030 with an estimated investment in early warning systems and climate resilience of US\$1.8 trillion, creates an estimated return in financial benefits of US\$7.1 trillion

Global Preparedness Monitoring Board (GPMB, 2019 and 2020) UN Financing Climate Action, (2021)

5. RECOVERY:

The impacts from Long COVID are still unknown, including the recovery trajectory and the potential for long-term disability. Although initial evidence suggests that vaccines reduce long COVID symptoms, there is a potential risk of an increasing proportion of the working age population experiencing long-term disability with repeated exposure to infections from new COVID-19 variants. The in-direct health impacts from COVID-19 have led to a surge in both infectious and non-communicable diseases, and are reflected by significant reductions in life expectancy. Addressing the longer-term health effects of COVID-19 will require enhancing the resilience of health systems, including recovery services. Additionally, the recovery process will need to take account of the wider social and economic impacts of COVID-19, as well as to address the increasing threats from our climate and planetary emergency.

• Health Impacts from Long-COVID-19 - infection with COVID-19 appears to include a range of systemic conditions, which may explain the wide spectrum of longer-term symptoms described. Population level studies have found that 2% of the population experience 'long COVID' symptoms, of which an estimated 64% report that symptoms adversely affect day-to-day activities. Common symptoms include fatigue, loss of smell, shortness of breath and difficulty concentrating, and appears to be more frequent in 35-69 year old females with high exposure from COVID with roles in education, health and social care, (ONS UK, 2022).

- Enhance Health Systems Resilience and Recovery Services the increased prevalence of long-COVID is driving demand for longer-term multi-disciplinary recovery services. Additionally, many countries are experiencing a surge in vaccine preventable infectious diseases and under diagnosed and under treated non-communicable diseases, including both physical and mental health. This appears to be a consequence of re-orientating health services to respond to COVID, as well as hesitancy in coming forward for investigations and treatments. This is reflected in a drop in life expectancy of 1 to 1.5 years in most OECD countries during 2020-2021. Reduced life expectancy is in part due to the direct effects of COVID, as well as from in-direct effects from an increase in non-COVID-19 diseases, including Non-Communicable Diseases; (BMJ, 2021).
- Advance a Resilient, Green Recovery for a Healthy Planet for All reframe the environment and health as public goods requiring a global commons perspective to enable recovery from the pandemic and planetary emergency; focus on recovering earth systems that have a high risk of tipping points escalating the climate crisis, including oceans and water, air, land and food systems, with scientific, nature-based solutions; apply multi-sector "One Health" responses to strengthen mental and physical health and resilience in humans, animals and plants to minimise risks of future pandemics.
- Invest in Skills and a Just and Green Transition to secure Sustainable Development with equitable trade systems to promote peace, strategic investment in renewable energy and incentives to co-create the transition for long-term net zero carbon emissions economies as a basis for green prosperity; adopt indicators that address multiple challenges including our climate and planetary crisis and future pandemic prevention; align education, skills, professional and workforce development investment with those needed to deliver the Sustainable Development Goals, respond to emergencies and secure a healthy planet for a prosperous and peaceful future for all.

A Pathway to a Safe, Healthy, Just, Green and Prosperous Recovery

- *Aim* To create a healthy transition as a foundation for Sustainable Development, with a safe, just, and green world, to ensure a prosperous pathway for the well-being of our future generations
- **Safe:** Ensure a secure world based upon safe and resilient communities and countries, by strengthening global security governance for people and planet, combined with the active promotion of peace
- **Healthy:** Modernise health and social care systems to recover from the pandemic and long Covid, with multidisciplinary services that promote physical and mental health and well-being
- Just: Empower disadvantaged countries and communities through governance mechanisms, funding and policies that reduce historic and institutional inequalities and create just systems for the future
- **Green:** Invest in a green recovery including a global renewable energy transition and green skills to enhance innovative solutions to enable the transition to a sustainable green economy, at speed and scale

- **Prosperous:** Transform economic and financial values, indicators and operations to enable sustainable development that places people and the planet at the foundation of prosperity and well-being
- 6. "ONE PLANET HEALTH SYSTEMS"
- Design multi-sector "One Planet Health" Systems for People and Planet –as part of Universal Health Coverage to strengthen security, resilience and sustainable well-being at community, country, and global levels; building upon and modernising existing initiatives, resources, and organisations, to create and enable robust multi-sector systems with enhanced coordination, infrastructure, leadership and workforce capacity.
- Empower Local Governments' resilience for "People and Planet" to prevent and respond to pandemics, climate emergencies and environmental risks, plan and manage rapid urbanization, rehabilitate cities and settlements for sustainable, healthy, and safe settlements with flourishing communities, based upon naturebased solutions, and enable local government to develop cross cutting urban and territorial planning strategies.
- Empower and enable Healthy, Sustainable Communities as the frontline in coordinating multi-sector action at local and regional levels for the planetary emergency and responding to pandemics; with wider responsibilities of ensuring sustainable and healthy communities through community engagement and decision making, to shape relevant and integrated services that enable the delivery of the Sustainable Development Goals, in order to ensure a healthy planet for the well-being of future generations.

Public Health Leadership Coalition Statement, Dec 2021 – A Summary: https://www.wfpha.org/public-health-leadership-coalition-a-call-to-action/

Global public health leaders, working within the framework of the World Federation of Public Health Associations, have **called for actions to promote equity, public health leadership and global coordination** to address pressing global health challenges, including the COVID-19 pandemic and other health threats....

We invite all who believe that public health values could be the guide to living in a more just world to share our vision, and join forces to:

1. Ensure appropriate support and training for the public health workforce, and for public health leadership across all sectors; and ensure healthcare preparedness based on timely, quality information and lessons learned from evidence;

2. Sustain global cooperation and multilateralism, by strengthening bridges of knowledge, trust, and solidarity between communities, civil society, academia, and decision makers and by building health/digital and media literacy and vaccine confidence, including through appropriate health/digital/media communication;

3.Prioritise actions to promote equity and reduce injustices, ensuring fair, fast and equitable access to health and healthcare services, goods, equipment and innovation and prioritizing the needs of those disproportionately affected, including women, Indigenous people, people with disabilities and the elderly

Together we can build the new future!

Going forward, drawing upon existing public health operations and functions, will require redesigning operations to form a multi-sector systems Planetary and One Health response for our current and future global health challenges. This approach will enable greater links between environmental, animal, and human health, to reduce risks from emerging pandemics and to reframe the health of the planet as essential for human health, sustainable development, and well-being. The diagram below, 'One Planet Health' Systems for People and Planet, aims to enable such a transition, whilst building upon the Sustainable Development Goals in relationship to the key operations contained in the World Federation of Public Health Association's Global Charter for One Health.



• **Planet = Pivotal** - ensuring the health of the planet is essential as the foundation for our existence, sustainable development, and our well-being, including creating healthy air, water, food and land ecosystems as a basis for responding to the planetary emergency, combined with a central focus on the planet as a pivot for decision making and systems transformation to promote a healthy planet for all

Primary Links to Sustainable Development Goals for the Planet: water (6); climate change (13); oceans (14); ecosystems (15);

• **People = Prevention** – collaborative action on the wider social and environmental determinants that reduce risks to health, through people centred health and social care services with an emphasis on cost effective interventions that benefit the planet, with educational knowledge and skills mainstreamed for healthy humans, environments and the planet across education and the wider workforce

Primary Links to Sustainable Development Goals for People: poverty (1); hunger (2); health (3); education (4)

• **Peace = Protection** – modernising health protection services as an essential component of global security, including International Health Regulations,

Communicable Disease Control, Emergency Preparedness, Environmental and Animal Health, Climate Change, and sustainability; with greater links to social and environmental justice, safety, violence prevention, with individual, community and country resilience for the promotion of peace *Primary Links to Sustainable Development Goals for Peace: gender (5); equity* (10); justice (16)

• **Prosperity = Promotion** – empowering health and well-being, to enable sustainable prosperity as part of a healthy and green transition by creating healthy environments, cities, workplaces, schools, hospitals, organisations and settings, that promote caring, productive and innovative communities for everyone

Primary Links to Sustainable Development Goals for Prosperity: energy (7); employment (8); infrastructure (9); cities (11); trade (12)

• Governance, Knowledge, Advocacy and Capacity = Systems Enablers that ensure effective delivery through robust governance and transparent knowledge systems, strengthened advocacy and leadership, with a modernised workforce, scaled by collaborative action through partnerships (*SDG 17*)

7. DIGITAL TRANSFORMATION

- Scale Collaborative Action through Digital Transformation with platforms that create digital systems and tools for 'One Planet Health' to enhance risk awareness and response and rapid communications to multi-sector audiences; empower communities and countries with accessible, reliable information and digital tools; enable collaborative partnerships and promote innovative solutions for Global Security challenges for Planet and People.
- Enhance Education, Workforce Capacity and Professional Development enabled by open access online learning, shared learning, networks, and forums; align education, skills and workforce development with the ability to implement multi-sector services for resilient and healthy communities, that are prepared to prevent, respond and recovery from emergencies and deliver the Sustainable Development Goals.

Digital Solutions to Strengthen Global Security for People and Planet

Short-Term:

- Extend COVID-19 Apps approximately half of all countries have a COVID-19 App to support their pandemic response support could be given to extend this for all countries
- Interoperability enhance interoperable COVID digital apps to enable safe travel between countries
- Ending the Pandemic incorporate Bidirectional Contact Tracing as a key measure to lower prevalence and bring the pandemic to an end countries that have done so have been able to pursue an elimination strategy

Medium-Term:

- Surveillance utilise digital analytics applied for rapid Early Warning and Alert Systems
- Digital Tools for tests, diagnostics, self-care and recovery
- Digital Knowledge sharing Data, Research, Monitoring, Evaluation
- Enhance Coordination for rapid pandemic prevention and response
- **Global App for Pandemic Security (GAPS)** create an interoperable and adaptable digital platform that allows for rapid development of apps for pandemics and future global health threats

Long- Term:

- Strengthen Digital Governance and Partnerships for Global Health Security, enable greater coordination, accountability and rapid response at scale, and to tackle misinformation
- **Climate Change and Environmental Hazards** GIS Risk Mapping and Digital tools, eg air quality, flood risk, environmental security threats
- Workforce and Capacity training, networks, professional development, including public health leadership on pandemics and global health security
- **Transform Public Health Systems** application of digital health solutions to strengthen public health systems, with multi-sector tools to protect and promote the health of animals, the environment and the planet

https://sites.google.com/view/p4ppp/resources

Advancing Digital Solutions - The Platform for Planet, Place and People-P4PPP:



8. LEADERSHIP for PEOPLE and PLANET:

• Enhance Emergency Leadership skills and capacity at all levels – with ministerial and accountable representatives advised by Senior Officers for Public Health and the Planetary Emergency, who are capable of prevention and

understanding risks, prepared for, and able to respond to, and recover from, emergencies, with a focus on pandemics and the planetary emergency; supported by enhancing strategic, scientific and risk literacy, with skills for collaborative working and communications; the application of values-based decision making, priority setting, strategy development and delivery, enabled by robust governance mechanisms with transparent processes.

• Empower Courageous Leadership for "One Planet Health" Systems – develop leadership initiatives and systems to support young and diverse leaders from all levels and parts of the world, who are equipped with modern leadership skills to enhance governance placing the well-being of future generations at the heart of decision making and able to apply ecological and digital principles, that strengthen sustainable systems with integrated multi-sector delivery mechanisms for our complex challenges; empowered by values-driven leadership, with resilience, collaborative, social emotional abilities and positive leadership skills for the courage required for our future leaders.

RECOMMENDATIONS AND NEXT STEPS

Members of the InterAction Council <u>met for a special virtual session</u> on Wednesday (1st December 2021) to discuss the latest developments in the Covid-19 pandemic:

Bertie Ahern, chair of the meeting, highlighted the need for collaborative leadership and that "no one is safe until all are safe" and drew the meeting to a close with the following recommendations:

- Call on governments everywhere in the world to urgently ensure that vaccine inequality ends.
- Support the development of an international pandemic treaty to help prevent and mitigate future pandemics.
- Call for multilateral leadership to coordinate a global strategic response that targets risks, maximizes effective public health measures and multi-sector support to ensure an equitable end to this pandemic.
- Urge investment and modernization of public health systems to prevent, prepare for, avert risk, build resilience, respond, and recover from current and future health threats.
- Call for strengthening of our multilateral global security architecture to prevent pandemics and address health threats.

Proposed Next Steps for Collaborative Action:

The following collaborative actions are proposed to advance with willing partners, countries and international bodies:

- 1. Develop a Global Strategy to End the Pandemic
- 2. Establish a Security Council for People and Planet
- 3. Strengthen the Planet's Health Systems with Universal Health Coverage
- 4. Enhance Leadership Capacity
- 5. Scale Delivery with Digital Transformation

A Taskforce on Global Governance for Global Goods: These ambitions can be initially advanced through a Pandemic & Planetary Alliance to Collaborate for Transformation – consisting of a coordinating mechanism and a series of High Level implementation groups.

From Local to Global – and Global to Local: Going forward, to implement these actions will require reinforcing their interaction and utilising existing international infrastructure and local delivery processes in a coordinated way.

Fix Systems for our Future Security: Where gaps and barriers exist, key levers and partners will be identified, with systems solutions and resources proposed to ensure global security for our future well-being.

No one is safe until all are safe

Bibliography and key references:

Baker M et al, 'Elimination: the optimal strategy for COVID-19 and other emerging diseases?' Analysis, pp67-69; BMJ 16th January, 2021

BMJ (2021): Limb M. Covid-19: Pandemic reduced life expectancy in most developed countries, study finds *BMJ* 2021; 375 :n2750 doi:10.1136/bmj.n2750 https://www.bmj.com/content/375/bmj.n2750

Bradshaw, W.J., Alley, E.C., Huggins, J.H. *et al.* Bidirectional contact tracing could dramatically improve COVID-19 control. *Nat Commun* 12, 232 (2021). https://doi.org/10.1038/s41467-020-20325-7

Brown G 'Seven ways to change to the World – How to fix the most pressing problems we face' Simon and Schuster UK Ltd, 2021

Carbon Brief 'Analysis: Do COP26 promises keep global warming below 2C?' 10 Nov 2021 <u>https://www.carbonbrief.org/analysis-do-cop26-promises-keep-global-warming-below-2c</u>

Carney M 'Value(s) - Building a Better World for All' William Collins, 2021

Chew SK. 'SARS: how a global epidemic was stopped'. *Bull World Health Organ*. 2007;85(4):324. doi:10.2471/BLT.07.032763

Commonwealth, (2016) 'A Systems Framework for Healthy Policy – Advancing Global Health Security and Sustainable Well-Being for All' Implementation Tool for the 'Global Charter for the Public's Health'; The Commonwealth Secretariat, London, UK; <u>www.thecommonwealth-healthhub.net</u>

Commonwealth (2017) 'Health Protection Policy Toolkit: Health as an Essential Component of Global Security'; 2nd Edition; Public Health Wales and the Commonwealth Secretariat, 2017, <u>www.thecommonwealth-healthhub.net</u>

CWCDH (2019): Commonwealth Centre for Digital Health – Hub for Universal Health Systems for Planet, Place and People: <u>https://cwcdh.org/documents/CWCDH_Southampton_Hub_Brochure.pdf</u>

Dorey S (2021) 'Covid-19 and Climate-Smart Health Care – Health Sector Opportunities for a synergistic response to the COVID-19 and Climate Crises' The World Bank.

Drawdown, (2017) 'The most comprehensive plan ever proposed to reverse global warming' edited by Paul Hawken, Penguin: <u>http://www.drawdown.org</u>

Finance and Economics 'What is the economic cost of covid-19?' The Economist, Jan 7th, 2021: <u>https://www.economist.com/finance-and-economics/2021/01/09/what-is-the-economic-cost-of-covid-19</u>

Ghinea N, Lipworth W, Kerridge I. Propaganda or the cost of innovation? Challenging the high price of new drugs. BMJ 2016; 352 doi: <u>http://dx.doi.org/10.1136/bmj.i1284</u>; 11 March 2016

GPMB 2019: Global Preparedness Monitoring Board. A world at risk: annual report on global preparedness for health emergencies. Geneva: World Health Organization; 2019: https://apps.who.int/gpmb/assets/annual_report/GPMB_Annual_Report_English.pdf

GPMB 2020: A world in disorder: Global Preparedness Monitoring Board annual report, Geneva: World Health Organization, 2020: https://apps.who.int/gpmb/assets/annual_report/2020/GPMB_2020_AR_EN_WEB.pdf

GPMB 2021: From Worlds Apart – To a World Prepared: Global Preparedness Monitoring Board annual report, Geneva: World Health Organization 2021:

https://www.gpmb.org/docs/librariesprovider17/default-document-library/gpmb-annual-report-2021.pdf?sfvrsn=44d10dfa_9

ICC (2021) 'Summary for Policymakers of the Economic Case for Global Vaccination study' An Epidemiological Model with International Production Networks <u>https://iccwbo.org/publication/summary-for-policymakers-of-the-economic-case-for-global-vaccination-study/</u>

Independent Panel for Pandemic Preparedness & Response (2021) 'COVID-19: Make it the Last Pandemic' <u>https://theindependentpanel.org/wp-content/uploads/2021/05/COVID-19-Make-it-the-Last-Pandemic_final.pdf</u>

Ingrid T. Katz, M.D., M.H.S., Rebecca Weintraub, M.D., Linda-Gail Bekker, M.D., Ph.D., and Allan M. Brandt, Ph.D. 'From Vaccine Nationalism to Vaccine Equity- Finding a Path Forward' New England Journal of Medicine Perspective; 8 April 2021

IPCC (2018) 'Global Warming of I.5C' Intergovernmental Panel on Climate Change; https://www.ipcc.ch/site/assets/uploads/sites/2/2018/07/SR15_SPM_High_Res.pdf

Ives, M.C., Righetti, L., Schiele, J., De Meyer, K., Hubble-Rose, L., Teng, F., Kruitwagen, L., Tillmann-Morris, L. Wang, T., Way, R. & Hepburn, C. 2021. A new perspective on decarbonising the global energy system. Oxford: Smith School of Enterprise and the Environment, University of Oxford. Report No. 21-04. https://site.energychallenge.info/wp-content/uploads/2021/04/SSEE-New-perspective-report.pdf

Lee A, Thornley S, Morris A J, Sundborn G. Should countries aim for elimination in the covid-19 pandemic? *BMJ* 2020; 370 :m3410 doi:10.1136/bmj.m3410

Katzourakis A, 'COVID-19: endemic doesn't mean harmless' World View, 24th January 2022; *Nature* 601, 485 (2022); <u>https://www.nature.com/articles/d41586-022-00155-x</u>

Mahase E 'Covid-19: Where are we on vaccines and variants?' BMJ 2021;372:n597: https://doi.org/10.1136/bmj.n597

Mazzucato M 'Mission Economy - A Moonshot Guide to Changing Capitalism' Allen Lane, Penguin, 2021.

*Miquel Oliu-Barton, *Bary S R Pradelski, Philippe Aghion, Patrick Artus, Ilona Kickbusch, Jeffrey V Lazarus, Devi Sridhar, Samantha Vanderslott 'SARS-CoV-2 elimination, not mitigation, creates best outcomes for health, the economy, and civil liberties' www.thelancet.com Published online April 28, 2021 https://doi.org/10.1016/S0140-6736(21)00978-8;*

OECD 2020 'Systemic Thinking for Policy Making: The Potential of Systems Analysis for Addressing Global Policy Challenges in the 21st Century'; New Approaches to Economic Challenges; Edited by William Hynes, Martin Lees and Jan Marco Müller, <u>https://www.oecd-ilibrary.org/governance/systemic-thinking-for-policy-making_879c4f7a-en;</u> https://doi.org/10.1787/879c4f7a-en.

OECD Covid-19 policy responses and resources: https://www.oecd.org/coronavirus/en/#policy-responses

Oldstone M 'Viruses, Plagues and History – Past, Present and Future' Oxford University Press, 2020.

ONS, 2022: Prevalence of ongoing symptoms following coronavirus (COVID-19) infection in the UK; 6 January 2022:

https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/conditionsanddiseases/bulletins/pr evalenceofongoingsymptomsfollowingcoronaviruscovid19infectionintheuk/6january2022

Pan-European Commission on Health and Sustainable Development. "Rethink policy priorities in the light of pandemics" March 2021

https://www.euro.who.int/__data/assets/pdf_file/0010/495856/Pan-European-Commission-Call-to-action-eng.pdf

P4PPP: Platform for Planet Place and People: <u>http://weblk.info/p4ppp/</u> <u>https://sites.google.com/view/p4ppp/resources</u>

Rispel LC, Marshall C, Matiwane B, Tenza IS (2021) Innovations, contestations and fragilities of the health system response to COVID-19 in the Gauteng Province of South Africa. PLoS ONE16(12): e0261339. https://doi.org/10.1371/journal.pone.0261339

SDGs (2015) 'Sustainable Development Goals' United Nations https://sustainabledevelopment.un.org/sdgs

Sendai Framework for Disaster Risk Reduction 2015- 2030: https://www.unisdr.org/we/coordinate/sendai-framework

Sherman (2019) 'How can the Security Council engage on Climate Change, Peace and Security?' International Peace Institute, June 2019: <u>https://theglobalobservatory.org/2019/06/how-can-security-council-engage-on-climate-change-peace-security/</u>

United Nations COVID-19 Information and Resources: https://www.un.org/en/coronavirus

UNEP (2020) 'Global Emissions Gap Report 2020' United Nations Environment https://www.unep.org/emissions-gap-report-2020

UNEP (2021) 'Global Emissions Gap Report 2021' United Nations Environment <u>https://www.unep.org/resources/emissions-gap-report-2021</u>

UN Financing Climate Action, (2021): <u>https://www.un.org/en/climatechange/raising-ambition/climate-finance</u>

Whitmee S, Haines A, Beyrer C et al. 'Safeguarding human health in the Anthropocene epoch: report of The Rockefeller Foundation-Lancet Commission on planetary health' *Lancet*. 2015; 386: 1973-2028

World Bank (2018): 'Operational Framework for Strengthening Human, Animal, and Environmental Public Health Systems at their Interface' <u>http://documents1.worldbank.org/curated/en/703711517234402168/pdf/123023-REVISED-PUBLIC-</u> <u>World-Bank-One-Health-Framework-2018.pdf</u>

WEF (2021) 'The Global Risks Report' World Economic Forum: http://www3.weforum.org/docs/WEF The Global Risks Report 2021.pdf

WFPHA (2016): 'The Global Charter for the Public's Health' World Federation of Public Health Associations: <u>https://www.wfpha.org/wfpha-projects/14-projects/171-a-global-charter-for-the-public-s-health-3</u>

WHO (2014) 'The Case for Investing in Public Health' WHO Europe; http://www.euro.who.int/ data/assets/pdf_file/0009/278073/Case-Investing-Public-Health.pdf

WHO 2021 COVID-19 Information and Resources: <u>https://www.who.int/emergencies/diseases/novel-</u> <u>coronavirus-</u> <u>2019?adgroupsurvey=%7Badgroupsurvey%7D&gclid=EAIaIQobChMI9tG6y8rJ8AIVBIfVCh0brQFaEAAYASAA</u> EgKQ7 D BwE

Annex

About the InterAction Council

Established in 1983, the InterAction Council of Former Heads of State and Government is an international organization whose objective is to address long-term, global issues facing humankind. Co-chaired by the Honourable Bertie Ahern (Prime Minister of Ireland, 1997-2008) and H.E. Olusegun Obasanjo (President of Nigeria, 1999-2007), the Council's membership is comprised of more than forty former heads of state and government who volunteer their time to develop proposals for action and submit them directly to national and international decision-makers.

In its 37-year history, the InterAction Council has been at the forefront of many prominent issues, most notably the 1997 draft *Universal Declaration of Human Responsibilities*; the 2010 *Hiroshima Declaration*, a powerful plea for the abolishment of nuclear weapons; the 2012 report, *The Global Water Crisis: Addressing an Urgent Security Issue*; and most recently, the 2017 *Dublin Charter for One Health*.

This report also builds upon the recommendations in the below publications:

'A Pandemic Emergency Response to the Coronavirus – COVID 19, Global Responsibilities and an Emergency Framework for Communities and Countries' developed by the InterAction Council with endorsing partners, 2020.

<u>'Manifesto to Secure a Healthy Planet for All – A Call for Emergency Action'</u> a collaborative initiative by the InterAction Council and endorsing partners, 2019:

'The Dublin Charter for One Health' – recommendations from the InterAction Council 2017 Plenary to strengthen global health security following Ebola and planetary health threats

Risks and Solutions to Global Security: From the Pandemic to Future Health Threats

High Level Expert Meetings (held virtually) March and April 2022

LIST OF PARTICIPANTS

InterAction Council Members

1. The Hon Bertie Ahern, Co-chair (former Prime Minister), Ireland

Secretary-General

2. Dr Thomas S. **Axworthy**, Chair of Public Policy, Massey College, University of Toronto

Special Guests

- 3. Dr Fiona **Adshead**, Former Director, WHO; former DCMO, UK Government
- 4. Mr Peter **Archer**, Former President, International Federation of Environmental Health
- 5. Professor Bettina **Borisch**, MD, Executive Director, World Federation of Public Health Associations
- 6. HE Amb Dr Anwarul Karim **Chowdhury**, former Ambassador and Permanent Representative of Bangladesh to the UN; former UN Under-Secretary-General and High Representative; and former Senior Special Advisor to the UN General Assembly President
- 7. The Rt Hon Helen **Clark**, Former Co-chair, Independent Panel for Pandemic Preparedness and Response
- 8. Dr Tracey **Cooper**, Chief Executive, Public Health Wales, Representative for the International Association of National Institutes for Public Health (IANPHI)
- 9. Dr Mandeep Dhaliwal, Director HIV and Health Group, UNDP
- 10. Ms Judith **Diment**, Rotary Coordinator, Polio Eradication Advocacy Task Force; Rotary Representative at the Commonwealth of Nations
- 11. Prof Vajira **Dissanayake**, President, Commonwealth Centre for Digital Health; former President, Commonwealth Medical Association
- 12. Ms Sandrine Dixson-Decleve, Co-President, The Club of Rome
- 13. Dr Osahon **Enabulele**, President, Commonwealth Medical Association; President Elect, World Medical Association
- 14. HE Amb Maria Fernanda **Espinosa Garces**, President of the 73rd UN General Assembly, 2018-2019; Ecuador's Permanent Representative to the UN; former Minister of Foreign Affairs, and National Defense
- 15. Councillor Nicolas Fogg, Advisor, InterAction Council
- 16. Mr Garry Jacobs, President and CEO, World Academy of Art and Science
- 17. HE Winnie **Kiap**, High Commissioner, Papua New Guinea; former Chair, Governance Board, the Commonwealth Secretariat
- 18. Prof Dr Ilona **Kickbusch**, Board Member, The Global Preparedness Monitoring Board
- 19. The Hon Ricardo Lagos, Former President of Chile

- 20. Mr Arian Marti, Representative, Gordon Brown's Office
- 21. Professor Virginia **Murray**, Head of Global Disaster Risk Reduction, The UK Health Security Agency
- 22. Dr Joanna Nurse, Strategic Advisor, InterAction Council
- 23. HE Amb. Dr Josephine **Ojiambo**, former Deputy Secretary General, the Commonwealth; former Ambassador and Representative of Kenya to the UN including Chief of the Executive Board for the UN Population Fund
- 24. Dr Carol **Pandak** and Dr Ann Marie **Kimball**, Rotary International COVID-19 Taskforce
- 25. Mr Trevor **Peel,** Chair, European Forum, National Liberal Club; Chair, the National Liberal Club Commonwealth Forum, London
- 26. Dr Tamer **Rabie**, Dr Stephen **Dorey** and Sulzhan **Bali**, World Bank, Health, Nutrition, and Population (HNP) Global Practice
- 27. Dr Maggie Rae, President, UK Faculty of Public Health
- 28. Mr Kenneth Stokes, President, World Sustainability Forum
- 29. HE Senator Nelson Trad, Brazil
- 30. Mr Nicholas **Watts**, Co-Chair, Independent Forum of Commonwealth Organisations
- 31. Mr Rob **Yates,** Director Global Health Programme and Executive Director Centre for Universal Health, Chatham House
- 32. Dr Moneef **Zou'bi**, Scientific Advisor, InterAction Council; Trustee and Fellow of the World Academy of Art and Science; Founding Director of the World Sustainability Forum; Former Director General of the Islamic World Academy of Sciences
- 33. Mr Alberto **Zucconi**, Chair of the Board, World Academy of Art and Science, and Secretary General of the World University Consortium

Partner Statements and Endorsements:



Julie Barratt President Chartered Institute of Environmental Health





"Unless committed actions are taken to strengthen health systems and improve the health and wellbeing of all our citizens and our Human Resources for Health, the attainment of Universal Health Coverage remains a mirage and leaves the world at risk from further Pandemics"

Dr Osahon Enabulele, President, Commonwealth Medical Association; President Elect, World Medical Association.



The President of the International Federation of Environmental Health (IFEH), Susana Paixao, fully endorses the paper "Ending the Pandemic - Enhancing Global Security for People and Planet: A Framework for the Future."



John F. Germ, Chair, The Rotary Foundation, 2021-2022:

The Rotary Foundation of Rotary International fully endorses the clear and thoughtful strategy drafted by the InterAction Council to safely end the COVID-19 pandemic while enhancing global security to mitigate future health threats. The strategy adopts an all-of-society approach that calls upon the global community, from the political sphere to civil society to multilateral institutions, to coordinate action in new and unprecedented ways to protect people and planet. The most significant lesson that the Rotary Foundation has learned in its nearly 40-year effort to eradicate polio is that the collective focus of many and varied stakeholders is necessary to achieve historic public health goals. This lesson is well-reflected in the strategy and if applied with purpose will result in returning to a more healthy and secure world.



Club of Rome Statement: From the Pandemic to our Planetary Emergency

More than 50 years ago prominent economic and scientific experts predicted in the "Limits to Growth" report to The Club of Rome that humanity's search for continuous inequitable growth at the expense of natural ecosystems and resource use would create not one singular crisis, but a convergence of crises such as we are seeing today. COVID-19 has highlighted our collective fragility and the profound interdependent links between disease, ecosystems loss, climate and emissions, prosperity, equity and justice.

This is a critical decade for humanity. For 10,000 years, human civilisation has grown and thrived because of Earth's remarkable regenerative capacity that sustains climate stability and rich biological diversity. In the last 50 years, human activity has severely undermined this resilience. Our patterns of economic growth, development, production and consumption are pushing the Earth's life-support systems beyond their natural boundaries. The stability of these systems – our global commons on which we so fundamentally depend – is now at risk. Our actions in the coming decade will influence the trajectory of our planet and our future survival. It is not possible to bank on another 10,000 years of human development if we continue to destroy the ground upon which our civilisation has been built – a rich, diverse, functioning biosphere.

The stakes really are this high. However, this decade can be a turning point – the moment when the world bends the curve, averts impending disasters and opts instead for a transformative pathway by design, not by disaster. The opportunities not just to avert disaster, but to rebuild, improve and regenerate are readily available and will ensure greater global security for all species.

The <u>Planetary Emergency Plan</u> published by the Club of Rome and the Potsdam Institute for Climate (2019) called for the UN and governments to declare a Planetary Emergency and implement a plan of action to build a resilient future. The plan lays out 10 key commitments to protect the global commons - from forests; to the arctic; to ocean habitats. It also puts forward 10 specific actions focusing on ensuring just and equitable societies through the creation of well being indicators and greater empowerment of women; youth and indigenous people; shifting out of fossil energy towards renewables and energy efficiency and creating circular and regenerative economies.

Declaring a Planetary Emergency and adopting this plan of action provides a new compass for nations and injects the essential urgency into decision-making. It will ensure that all action henceforth will be taken to guarantee the stability of Earth's life-support systems and be underpinned by the social and economic transformations needed to secure the long-term health and well-being of people and planet.

By putting resilience, prevention and preparedness at the centre, this report offers a valuable framework for people and planet and it complements the messaging of the Limits to Growth, the Planetary Emergency and the newest Earth4All modelling. We must seize this moment and design our world systems to ensure they meet our current and future security challenges for both people and the planet.

By Sandrine Dixson-Declève, Co-President, Club of Rome



Further information:

This report has been shaped by InterAction Council reports and recommendations and feedback from experts and collaborative organisations. Additionally, this report has been used to inform the InterAction Council meeting in December 2021 and the High-Level Expert Meetings in March and April 2022 on: "Risks and Solutions to Global Security: From the Pandemic to Future Health Threats."

Please contact Dr Joanna Nurse (drjonurse@gmail.com), Strategic Advisor for the InterAction Council for further information and details on collaborative action.