ENVIRONMENTAL
HEALTH AUSTRALIA

Environmental Health Australia
Submission on the Role and Functions of an Australian Centre for Disease Control
9 December 2022

Environmental Health Australia (EHA) is the premier environmental health professional organisation in Australia which advocates for environmental health issues and represents the professional interests of all environmental health practitioners. EHA provides leadership for the profession and supports further education through continuing professional development. EHA's overarching role is to enhance environmental health and safety in the community through the work of its members. EHA members are employed in a diverse range of settings including local, state and territory government authorities; in the academic, research and private sectors; and the defence force.

EHA has been in existence since 1936 and has undergone several name changes over time to reflect the changing nature of the organisation and its membership. It is a founding member of the International Federation of Environmental Health (IFEH) which includes 45 environmental health associations around the world.

Our Vision is to be leaders in Environmental Health to create and sustain healthy communities.

Our Mission is to achieve our vision by:

- Providing leadership and support to Environmental Health Professionals nationally
- Partnering and collaborating with state, national and international stakeholders to create and sustain healthy communities
- Communicating and educating to raise the public profile and understanding of environmental health
- Advocating and advancing public policies, initiatives and services in the pursuit of improved health and wellbeing

Acknowledgement
We acknowledge the traditional custodians of the lands on which we live and work. We pay respect to Aboriginal and Torres Strait Islander elders past, present and emerging and extend that respect to all other Aboriginal and Torres Strait Islander people.

INTRODUCTION

EHA welcomes the opportunity to provide input to the consultation process on the *Roles and Functions of an Australian CDC*. In this submission, we recommend that environmental health be intrinsically included in the CDC mission, scope and discussions on disease control and prevention.

Environmental health, although intuitive to many in that we expect to drink safe water, eat safe food, breath clean air, and not be exposed to environmental contaminants, is poorly understood but a critically important part of the preventative health framework already existing in Australia at the local level. Undertaking health protection and promoting a preventive agenda aimed at protecting the health of communities throughout Australia is an essential component of environmental health.

The environmental health profession's applied health science foundation allows for a vigilance to health threats and provides a scientific approach to risk, which makes it by far the largest order of magnitude of importance, to human health and the biggest community health sector contributor to disease control and prevention of all causes of morbidity and mortality.

Environmental health needs to be included explicitly in the mission statement of the CDC, and more broadly, included in every aspect of the CDCs decision making on all hazards. EHA is strongly of the view that a CDC should oversee the monitoring and best scientific advice of all disease within communities and not just acute or focal situations that may arise from a specific outbreak from time to time. At a glimpse, and in no order of priority of focus, environment health assists with controls in all environments from something as basic as the temperature control and chain of custody of vaccines, the air quality within buildings and emissions from industry, safe and quality food from paddock to plate, safe and quality drinking and recreational water, safe waste disposal including biomedical waste, infection control in hospital and health care settings, safety of mass gatherings, vector borne disease control, all of which have the capacity to impact on disease conditions which affect the Australian population.

A recent example of an emerging human health risk reported in the media is the first ever detection of microplastics in human breast milk. This would no doubt be on the horizon for a future CDC and highlights this relationship between the environment and human health, but also raises an immediate environmental health related discussion around how a contaminant entered the body and the environmental health implications and controls.

The list of environmental health risks and controls is long and the subject of volumes of research and a myriad of legislation, regulation and guidance notes at every level of government and industry. Environmental disease control and prevention activities are population based in nature and pertain to the public health outcomes in urban environment, rural, regional and international settings alike.

There is no setting where environmental health has no reach, no controls and an absence to the discussion of disease control or the prevention agenda. By explicitly stating environmental health as a fundamental pillar of the CDCs design, work and mission, it firmly sets the focus on effective disease control and prevention.

EHA urges the explicit addition of environmental health into the Mission Statement as it presents an opportunity from the CDC's inception to include the largest contributor to population health outcomes and close off any potential 'chasm' between the public health system and the environment by making it absolutely clear the level of importance of environmental health controls to disease control and prevention.

Further on the proposed CDC Mission Statement, it is important that the statement makes reference to the inclusion of local government as a key stakeholder. The CDC Design Principles includes "Success through co-design and consultation". This needs to include reference to Local Government as an essential partner in the design of the CDC and could be adjusted to read "The CDC will work closely with other Australian local, state and territory agencies…" Under the Australian constitution, health is a state responsibility. In most states this responsibility is devolved to local government and therefore local government should be included as a key stakeholder and referenced in the CDC Mission Statement.

Functions of the CDC

1. What decision-making responsibilities, if any, should the CDC have?

The CDC should provide a coordinating and advisory function for disease control and prevention across Australia. Cognisant of the issues associated with the federated nature of Australia, the recent pandemic has highlighted a need for better National coordination, through a highly respected institution, to better manage responses in emergency situations that will assist in uniformity in action, based on the best possible science. It is also imperative that the numerous efforts across the country to prevent and control disease are acknowledged and that the CDC coordinating role, assist to better manage research, prevention programmes and perhaps advise in the allocation of scarce resources to such efforts.

EHA agrees with the concept for the CDCs role in decision-making responsibilities pertaining to the draft functions outlined in the consultation papers "in-scope" and "possibly in scope" and foresees that these combined to providing avenues of coordination of State and Territory public and environmental health assets will predominantly result in an entity that is advisory and expert in nature.

Decision making powers could be established by the transfer of those of the existing relevant Commonwealth organisational frameworks which would enable the CDC to quickly assume those as part of its mission and work. Although a central public and environmental health legislative framework or consistent legislation between the States and Territories would be ideal for the CDCs enabling environment, it is unrealistic that the States and Territories will devolve public and environmental health powers to the CDC, irrespective of any constitutional implications. Counterintuitively, this also presents an opportunity for the CDC, to coordinate a national approach and the resulting inconsistencies to the response to COVID-19 across jurisdictions, was largely found to be due to contested expert knowledge. [1]

EHA agrees with the consultation paper in that current State and Territory health protection mechanisms including public and environmental health are well established and CDC would gain limited benefit in any aspect being duplicated. EHA agrees that the CDC needs a clear purpose as the National authority on disease control and prevention and that this be agreed to by the States and Territories, enabling it to provide leadership on scientific advice to

policy responses for control and prevention of 'all hazards'. The CDC would act as an 'early warning system' and as the key body advising the Australian Health Protection Principal Committee (AHPPC) and could include aspects such as providing model public and environmental health legislation for consideration of the States and Territories, promote interoperability of existing arrangements, and overtime work to improve the CDCs overall enabling environment to better support its mission.

Should the CDC directly take on any existing responsibilities, or provide a coordinating and/or advisory function only?

As a Commonwealth entity, it would be intuitive that the CDC during its inception would take on the work of the myriad of current Commonwealth responsibilities in frameworks and plans both domestic and international which align with its mission. During the course of its evolution, EHA would foresee that it would restructure, streamline and sunset aspects of this work as required. The AHPPC, it's sub committees (including enHealth) and the National Cabinet would still be the mechanism to enable the Federated model to remain inclusive, with the new CDC establishing itself as the representative of a Commonwealth seat on those committees acting as the peak National health advisory service for the areas outlined in its scope and mission.

And if so, would that be sufficient for responding to health emergencies?

Yes, aspects that are paramount to its success in responding to health emergencies could include:

· A world class 'all hazards' health intelligence agency and publicly accessible dashboard (Akin to a BOM for public and environmental health threats);

· Build strong partnerships across government and non-government sectors including environmental health and it's related scientific community organisations to leverage existing capabilities which support the mission and the prevention agenda of the CDC;

· A mechanism for scaling of the CDC's involvement and role from surveillance, providing hazard and epidemic intelligence, providing 'all hazards' training through to undertaking a coordinating role in 'declared' domestic health emergency response for disease outbreaks, epidemics, exposures of chemical, biological or radiological agents and collaborate and support international responses which are in Australia's national interest including Public Health Emergencies of International Concern (PHEIC) better ensuring these are delivered with a world class evidence base and responded to with operational excellence. Environmental health specialists would be an integral part of achieving holistic and effective coordination and leadership within all aspects of the CDCs response to health emergencies.

2. What functions should be in and out of scope of the CDC?

EHA agrees with the broad concept for the CDCs role pertaining to the draft functions outlined in the consultation papers in-scope and possibly in-scope with the additional inclusion of providing advice on 'model' regulations.

· Legislation: Biosecurity Act

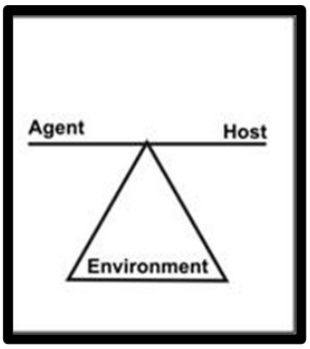
· Policy: Food safety and security, Border Health, radiation and Biotoxin, Security Sensitive Biological Agents, Health Emergency Planning, Regulation and Compliance – Biosecurity, IHRs, chemicals and providing model regulations to these aspects for State and Territory adoption and support strategy implementation.

· Response: National Incident Centre, AUSMAT, Public and Environmental Health Risk Assessments, Emergency response in long-term care facilities

·Planning: Scenario planning and exercises, Reviews and Lessons learned

The consultation paper places environmental health in-scope but limits this at present to an area of priority for research. Environmental health is an inextricable part of our public health landscape and it is not an option that can be included 'in or out' of the CDCs mission, scope and discussions of the makeup of disease control and prevention. Environmental health, although intuitive to many in that we expect to drink safe water, eat safe food and breath clean air, is largely an 'unknown' health profession and at the local level the only profession undertaking health protection and promoting a preventive agenda aimed at protecting the communities health[2]. The professions applied health science foundation allows for a credible vigilance to health threats and provides a scientific approach to risk which makes it by far the largest order of magnitude of importance to human health and the biggest contributor to disease control (See Figure 2) and is vital to prevention of all causes of morbidity and mortality[3].

Figure 1: Epidemiologic Triad (adapted from Lesson 1: Introduction to Epidemiology https://www.cdc.gov/csels/dsepd/ss1978/Lesson1/Section8.html#ALT116)



Environmental health should be included explicitly in the mission statement of the CDC and included in every aspect of the CDCs response on all hazards. At a glimpse and in no order of priority, environment health assists with controls in all environments from something as basic as the temperature control and chain of custody of vaccines, the air quality within buildings and emissions from industry, safe and quality food from paddock to plate, safe and quality drinking and recreational water, safe waste disposal including biomedical waste, infection control in hospital and health care settings, safety of mass gatherings and vector borne disease control to name a few.

A recent example of an emerging human health risk reported in the media is the first ever detection of microplastics in human breast milk[4]. This would no doubt be on the horizon for the future CDC and highlights this relationship between the environment and human health but also brings up immediate environmental health related discussion around how it enters the body and the environmental health controls. The list of environmental health risks and

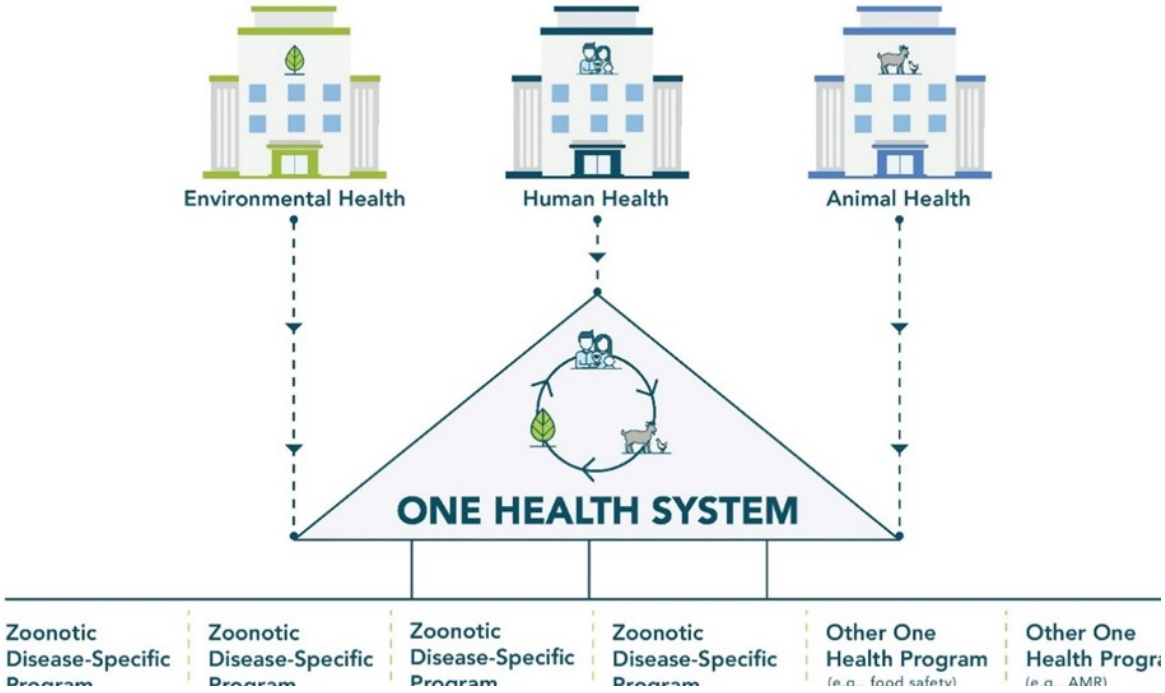
controls is long and the subject of volumes of research and a myriad of legislation, regulation and guidance notes at every level of government and industry.

Disease control and prevention activities are population based in nature and pertain to the public health outcomes in urban environment, rural, regional and international settings alike. There is no setting where environmental health has no reach, no controls and an absence to the discussion of disease control or the prevention agenda. Even the cover of the consultation paper contains pictures of environmental health, including a mosquito and a person sampling water. By explicitly stating environmental health through simply changing the wording to 'public and environmental health' will ensure it is a fundamental pillar of the CDCs design, work and mission, firmly setting the focus on the holistic efforts required for effective disease control and prevention.

What should the role of the CDC be in promoting or coordinating a One Health framework?

EHA supports the approach of utilising the One Health framework but highlights that there are determinants of disease that also require a broader systems approach. For instance complex adaptive systems for food and water as outlined in the enHealth document Risky Business (2012)[5]. Whilst the lessons in the document are both legalistic as well as having disease implications, in some instances, they highlight the need for broader science based controls at the local level. The CDCs opportunity to establish a world class health intelligence program and its partnerships with scientific experts all working within a One Health framework (see Figure 2) would be invaluable to support a systems approach to the CDCs work of disease surveillance and control[6]. This would be achieved by the CDC providing leadership as a central point of coordination, enabling synchronisation of highly collaborative multidisciplinary professionals (including Environmental Health Officers and other professionals) and well-rehearsed and exercised teams, to deliver an effective National response to zoonotic and other diseases, in addition to other associated threats.

Figure 2. A generalizable one health framework for the control of zoonotic diseases.



3. What governance arrangements should be implemented to ensure public confidence in the CDC?

The CDC needs to be independent, transparent and have a strategic plan that aligns with its mission and scope. It needs to effectively communicate to the public at all opportunities that Australia's public and environmental health security is national security! It needs to report to an oversight board (non-political) to review its strategic plan (within a defined term), report its work within its key domains and explain its commitment and progress towards achieving its mission to the public annually.

As mentioned previously, with the federated nature of Australia, the recent pandemic has highlighted a need for better National coordination to better manage responses in emergency situations that will assist in uniformity in action. The improvement of systems and processes to enable the collection of uniformed data and regular reporting will aid in developing public confidence and earning respect. There are already established cross jurisdictional organisations that have earned the respect and confidence from the public such as Food Standards Australia New Zealand (FSANZ) and enHealth that could be used as best practice examples. It is important to remember though, that the continuity of work and the continued improvement in chronic, rather than acute disease, within the Australian population would be something that will better advance the relevance and respect for a CDC over time.

<u>How can the CDC balance the need for the CDC to be responsive and accountable to governments, while also providing trusted, authoritative, and evidence-based advice?</u>

EHA agrees with the consultation paper that the primary focus of the CDC is <u>not</u> research but can present as a platform to consolidate data and expertise for health decision making and facilitate coordination mechanisms for research such as a development of a public and environmental health clearing house. An internal review of the US CDC, post Covid 19, has found that it had become too academic. And it is currently undergoing a cultural change aimed at ensuring that CDC personnel are not only rewarded for publications but also for excellence in operational execution[7].

As the CDC will be informed by scientists, it will need to uphold the highest level of scientific integrity, however a balance between publications and capability to transfer knowledge into operational execution, and broader communication, also needs to be achieved. Calling on expertise within communities could greatly assist this, as for example, environmental health professionals in local community focused health services, that have existing scientific expertise and regulatory responsibility for health at the communities' heart. It is an existing workforce which can rapidly translate scientific principles of disease control and prevention to action and ensure practical implementation at a local community level and remains ready to do so. In this context, if the CDC is trusted and is providing the best scientific advice, there is an existing committed workforce that would relish the opportunity to carry such advice forward in a practical sense.

<u>What aspects of independence do you believe are important to the successful function of the Australian CDC?</u>

It is essential that CDC operations are transparent but that such an agency can operate without political interference. Performance indicators and benchmarks should be established and reported against to ensure the organisation is held accountable by

parliament and the public. It is not the province of EHA to comment on the political sphere in this regard, but whilst the CDC would need political oversight it would be extremely important that politicians could not "steer" or "sideline" the role of the CDC.

What aspects of independence do you believe are important to the successful function of the Australian CDC?

The CDC should act as a Commonwealth hub of multidisciplinary consultants and specialist scientists in communicable disease and all hazards that are biological, chemical and radiological in nature. One approach could be a consultant-based model where personnel are not centralised but located in a diffused 'regionalised' structure and primarily stationed in State and local health departments, universities or other institutions. This will facilitate partnerships, networking and collaboration and ensure the CDC's functioning in building scientific consensus, engaging stakeholders in real time, act as an early warning system and support outbreak response for health crises, while interacting with a centralised hub for processing intelligence information and generating policy guidance.

Why do we need a CDC?

A coordinated and national approach to public health

4. How can the CDC best support national coordination of the Australian public health sector?

National public health leadership models in other countries, integrate environmental health (both science and workforce) into their national public health agency model. EHA supports a coordinated national approach that is consistent and transparent. Communication with existing NGO's, government organisations (local and state), industry groups and professional associations is essential. EHA is the peak professional body for environmental health professionals with its board comprising environmental health experts, opinion leaders, researchers and academics appointed from each Australian state and territory. As such it is well placed, and willing, to assist in contributing to a new system of disease control and prevention in Australia.

5. What lessons could be learned from Australia's pandemic response?

As the consultation paper states, it became clear in the response to COVID 19 that "there is no single and coordinated mechanism responsible for all aspects of national public health information, preparedness, response or guidance in Australia. This led to a lack of clarity on responsibilities, conflicting responses, information gaps, significant delays in the publication of advice and mixed messages to the public."

With the experience of the COVID 19 pandemic still clear in everyone's mind, nearly every state and territory has undertaken research into how their response to the pandemic could be improved. A new CDC could cumulatively draw on that research and develop and continually improve a best practice model for a pandemic response.

In WA, an online survey [8] found that participants believed there was inadequate resourcing, workforce shortages, increased workloads, and a lack of recognition and integration of the environmental health profession within the COVID-19 response. This research has

demonstrated that the COVID-19 pandemic in WA had clear gaps in its processes which lead to confusion and a disjointed approach to managing the pandemic response.

The state reviews of the COVID 19 pandemic highlight the need for a coordinated response, the ability to utilise existing resources effectively (including staff) and to establish best practices.

A data revolution

6. What are the barriers to achieving timely, consistent and accurate national data?

The architecture for collecting data of State, National and International public health importance already has precedent and is guided by the IHR 2005, notifiable infection and collected with the NNDSS and CDNA etc. The CDC would assume an expert role to ensure partners and stakeholders maintained standardised and quality processes that support the adoption of real-time data management and would oversee a program expanded to additional over the horizon data points including current and emerging environmental health indicators.

To support this data revolution the following data projects could be adopted:

1. EHA recommends the CDC, as a matter of urgency, develop a baseline of the condition of public and environmental health infrastructure through the development of a National account program. This can be likened to Australia's recently initiated National environment account, the world's first national accounting system that tracks the health of a country's natural environment [9]. A baseline for public and environmental health will provide valuable data on which to make evidence based and highly informed economic decisions. An example of 130 descriptors and 14 themes for identified public and environmental health infrastructure are included in the paper Ryan et al., 2016[10].

- EHA would like the CDC to be central to the establishment of a resiliency index and scorecard for public and environmental health infrastructure at all levels of the public health system would allow for best practice to be incorporated into the CDCs prevention agenda, a quality process to be followed and risks to the systems integrity be identified and gaps to be closed[11].
- EHA recommends the incorporation of the UN Sustainable Development Goals into the new CDCs architecture and reporting. A CDC progressing environmental health indicators for First Nations people's communities allows for the continued support and improvement of programmes that materially reduce environmental risk factors to health and wellbeing and improve the overall quality of life in Aboriginal and Torres Strait Islander communities throughout Australia[12]. This presents an opportunity to work with First Nations data sovereignty organisations to capture data that is disaggregated and reflective of the circumstances of First Nation public and environmental health and incorporate a two-way knowledge process which illuminates diverse lived realities and allows for the aspirations of sustainable development[13]. This is to ensure the new organisations prevention agenda inherently works with First Nations communities towards the goals of Closing the Gap targets for First Nations people.
- Collaboration with local governments so that the data can be used to develop community programs to manage emerging health issues.

7. What existing data sources are important for informing the work of the CDC, and how could existing data bodies (national, state and territory) be utilised and/or influenced by the CDC?

A national data plan with an agreed scope and an evidence-based health monitoring framework would be beneficial. This would need to be supported by all commonwealth and state government departments to enable the collection and sharing of research and data. This would ensure consistent data collection and reporting across all jurisdictions and aid with the development of localised community health programs.

EHA suggests that data collection on morbidity and mortality information be considered and normalised. National data on this matter is not clear and makes it difficult to plan and prepare public health programs on specific illnesses and conditions, due to data inconsistency at local, state and commonwealth level.

8. What governance needs to be in place to ensure the appropriate collection, management and security of data?

A coordinated approach across the commonwealth and states and territory governments would be required to ensure the data is managed effectively and stored securely. EHA suggests that the CDC structure incorporates a platform for a public and environmental health clearinghouse for research and data that incorporates policies and principles for access and operation.

9. How do we ensure the CDC has the technical capability to analyse this data and develop timely guidance?

I refer to the EHA response to question 6 above, EHA strongly recommends that the CDC develop a baseline of the condition of public and environmental health infrastructure through the development of a National account program. A baseline for public and environmental health will provide valuable data on which to make evidence based and highly informed economic decisions.

The CDC needs to be adequately resourced to ensure it has the appropriate technical and analytical infrastructure and adequately trained personnel. There is, however, world class scientific and technical expertise within the Universities and research facilities around Australia, that have the capability and will to contribute substantially to the disease control and prevention efforts of a CDC. For example, Associate Professor Kirstin Ross and her team at Flinders University in South Australia have a dedicated laboratory and ongoing research programmes on a variety of environmental health issues. EHA also coordinates an Educators Forum for environmental health academics around Australia who would willingly contribute to the efforts of an efficient and effective CDC.

10. How can the CDC ensure collaboration with affected populations to ensure access to, and the capability to use, locally relevant data and information, particularly as it relates to First Nations people?

The CDC should provide identifiable data to health care professionals and public health units at the local government level to assist in informing policies and programs in real time. The CDC should work to maximize community benefit from research and data by developing and expanding partnerships across existing networks.

National, consistent and comprehensive guidelines and communications

11. How can the CDC establish itself as a leading and trusted national body that provides guidance to governments based on the best available evidence, and participates in generating that evidence?

It is important that the CDC is an independent entity, though collaborates with reputable and trusted agencies/companies/organisations. Communication from the CDC needs to be clear, concise and consistent. Confidence and respect for the organisation will be based on the timeliness of communication resulting from data collection which will enable the development of public policy and programs.

The staff members in the CDC will need to be culturally diverse and representative of the Australian community. This will have an impact on how information is communicated to the public.

A variety of communication strategies should be utilised to disseminate the information obtained by the CDC. This should include using existing communication networks (state and local governments) as well as through schools, universities and the use of trusted "celebrities" to provide additional weight to messages.

12. To what extent should the CDC lead health promotion, communication and outreach activities?

The CDC should be the lead agency for health promotion, communication and outreach activities for all aspects of disease control and prevention. This can be achieved through collaboration with existing organisations and agencies to undertake a coordinated approach to research and allocation of scarce resources.

The CDC should take the primary carriage of promoting and communicating the National Preventive Health Strategy which should include environmental health and Sustainable Development Goals (SDGs).

The CDC should also take a leading role in linking chronic disease to communicable disease and providing research, communication and direction in this area.

13. Are there stakeholders outside of health structures that can be included in the formulation of advice?

There are a number of stakeholders that are outside of the health structures that need to be included in the formation of advice. There is a plethora of health infrastructure such as water supply, housing, physical and social determinants of health that are controlled by the private sector that should be consulted.

A database of stakeholders will need to be developed to ensure that the appropriate organisations, agencies and industries are consulted on the appropriate issues.

Utilising existing, and developing new, media and communication strategies will be important to ensure that the correct advice is being formulated and communicated.

National Medical Stockpile

14. What has your experience, if any, been of accessing supplies from the National Medical Stockpile (either before or during COVID-19), and can you identify any areas on which the CDC could expand or improve?

The CDC should play a key role in leadership and national coordination of a National Medical Stockpile. At the beginning of the COVID 19 pandemic, there were difficulties in accessing PPE. With the CDC in control of a medical stockpile, access to medical supplies and PPE should not result in a crisis situation.

World-class workforce

15. How could a CDC work to ensure that our public health workforce is prepared for future emergencies, both in Australia and abroad?

The Environmental Health Officer workforce is small, numbering approx. 3600 across Australia. They are highly skilled, degree qualified in the applied science of public health and environmental risk management. Environmental Health Officers are predominantly employed by Local, State and Territory governments in health protection roles[14].

Despite environmental health being responsible for 15 of the 20 extra years of life expectancy gained over the past century, the profession is often overlooked in health policy circles. To continue to maintain gains in health attributed to these intervention of environmental health programs, a substantial increase in the workforce is required to ensure these gains are not lost to emerging impacts such as the pressure of climate change, increasing urbanisation, our growing population at the expense of maintaining vigilance for the resurgence of old foes[15].

This presents an opportunity for the CDC to establish and champion a world class environmental health workforce that's primary focus is on reducing the burden on primary care and health system capacity. As such, environmental health personnel engaged by CDC should meet certain criteria.

Firstly, a pathway into the CDC workforce adapted from Ryan et al., 2020[16] to the Australian context is to recommend the person be a member of Environmental Health Australia. This would indicate active involvement in the environmental health field. EHA is the peak national association and the sole Australian member organisation of the International Federation of Environmental Health. Secondly, the environmental health degree should be accredited by EHA or deemed equivalent if international. For example, an EHA accredited degree, is often considered the industry standard and guarantees eligibility of membership to EHA, a requirement to work as an Environmental Health Officer in most Australian jurisdictions. Thirdly, anyone engaged should be credentialed further by having passed the above two steps plus demonstrate recent experience as an Environmental Health practitioner in a population health setting. Applying these criteria would ensure mobilisation of a qualified, skilled, and professionally supported environmental health workforce.

EHA is the accrediting body for University Environmental Health qualifications. The EHA accreditation policy was developed in 2006 based on best practice at the time. The policy was reviewed and updated in 2012 to align with the enHealth national 'Environmental Health Officer Skills and Knowledge Matrix' as this was now the benchmark for the minimum level of skills and knowledge required to be appointed as a competent Environmental Health Officer (EHO). There are currently five (5) undergraduate courses, three (3) post graduate courses and two (2) master's qualifications that are accredited across Australia. These EHA accredited qualifications are based on science and are existing courses that can provide an immediate response to upskilling the workforce.

This is an opportunity to engage the workforce through a national accreditation program to ensure that the workforce has the skills and knowledge required to complete essential tasks. There is a high risk associated with not having an appropriately skilled workforce dealing with population health issues.

16. How could the CDC support and retain the public health workforce in reducing the burden of non-communicable disease?

There is no definition of the 'public health workforce' within the consultation paper. Environmental health professionals are an essential part of the public health effort, and particular expertise is directly relevant to disease control and prevention. Disease control work is often undertaken by environmental health officers at the local and state government levels. In an outbreak, environmental health officers are best placed to effectively manage the outbreak issue due to having a broad science based approach to developing solutions .

As outlined in question 15, the CDC could support and retain the public health workforce by leading workforce development programs, including the promotion of EHA accredited qualifications to ensure a highly qualified and knowledgeable workforce. A workforce that is accredited and as such has the verifiable skills and knowledge to do the job is an essential component of public health infrastructure. An accredited workforce can be integrated into effective performance and monitoring systems including an index of environmental health risk.

Rapid response to health threats

17. What role could the CDC play in greater national and international collaboration on One Health issues, including threat detection?

With an established One Health platform, the CDC will need to be aligned with other CDC and public health agencies overseas. This collaboration with international partners will be important for the development and implementation of initiatives, research and for workforce development.

The Pacific region is an area greatly affected by environmental health issues including climate related threats. The CDC could play a greater role through collaboration with our neighbours and international institutions by ensuring that Australia's environmental health workforce accreditation, environmental health indicators and data quality assurance

mechanisms are adopted internationally and data can be shared across international boundaries. [17]

18. What are the gaps in Australia's preparedness and response capabilities?

As mentioned throughout the submission, the national response to the COVID pandemic resulted in inconsistent messaging and information being provided to the public. This is an opportunity for the CDC to take on a leading coordination role to support public health responses and cross sector coordination, with real-time sharing of information, better planning and building relationships. An additional function that the CDC should consider is the integration of climate change and SDGs into the scope and charter of the organisation.

The CDC could look to integrate with the preparedness frameworks and utilise the reporting tools for gap analysis such as the Public Health System Resilience Scorecard for offered by the United Nations Office for Disaster Risk Reduction, (UNDRR) as this brings governments, partners and communities together to reduce disaster risk and losses and to ensure a safer, sustainable future. [18]

19. How can the CDC position Australia, mindful of global, regional and local expertise, to be better prepared for future pandemics, health emergencies, and other public health threats?

EHA has referred to how the CDC can be positioned in the response above. Other considerations for the CDC to be better prepared could be to link public health and biosecurity emergencies to disaster management arrangements including funding, recovery, LDMG, DDMG, and SDMG Frameworks.

Expertise should be drawn from established CDCs that have experienced and evaluated their response to the COVID 19 pandemic. Consideration should also be given to maritime law and other cross jurisdictional issues such as climate change, migration, SGDs and national security which will affect Australians irrespective of jurisdictional borders.

The CDC needs to position itself as a national agency with strong international ties to strengthen public health systems and prevent and protect against the spread of infectious disease, reduce the burden of non-communicable diseases, and respond to public health threats.

International partnerships

20. What role should the CDC undertake in international engagement and support internationally, regionally or domestically?

As mentioned in question 17 above, with an established One Health platform, the CDC will need to align with other CDC and public health agencies overseas. This collaboration with international partners will be important for the development and implementation of initiatives, research and for workforce development.

EHA is unclear of the relationship between Commonwealth agencies, the Department of Foreign Affairs and Trade and the CDC. It seems likely that there will be a transfer of activities between commonwealth agencies to reduce duplication and ensure the appropriate allocation of resources.

Leadership on preventive health

21. How can the CDC foster a holistic approach across public health, including the domains of health protection, and promotion and disease prevention and control?

The CDC can position itself as the leading public and environmental health agency with a specific focus on disease preparedness, management and prevention. Environmental health needs to be a focal point and central pillar for the CDC to address disease prevention and control.

To this end, environmental health needs to be included explicitly in the mission statement of the CDC and included in every aspect of the CDCs decision making on all hazards.

22. What role could the CDC have in implementing the goals of the National Preventive Health Strategy?

The CDC needs to secure funding for the National Preventive Health Strategy (NPHS) and take leadership in the implementation of the national strategy. This should include the establishment of key performance indicators for reporting back to parliament and the public.

The timeline of 2030 for the National Environmental Health Strategic plan needs to be accelerated. Carriage of the NPHS presents the perfect opportunity for the CDC to frame its focus on environmental health as vital to preventive health. The Environmental Health Strategic Plan is vital to materially supporting the National Aboriginal and Torres Strait Islander Health Workforce Strategic Framework and Implementation Plan 2021–2031 which call for support to grow the Aboriginal and Torres Strait Islander environmental health workforce. [19]

23. Should the CDC have a role in assessing the efficacy of preventive health measures?

The CDC should provide data to local governments about specific health risks in the community to enable the development of a targeted public health response at the local level, particularly in rural and remote local government areas.

The CDC should also establish grant funding objectives and frameworks for implementation at the federal and state level.

Wider determinants of health

24. How could the CDC work in partnership with at-risk populations and associated health sectors, including First Nations people, people with a disability and older Australians, to ensure their voices are included in policy development?

In particular parts of Australia, environmental determinants of health still lead to significant and avoidable burden of disease. This ranges from remnant trachoma found in no other developed country, to acute rheumatic fever and its life limiting complication rheumatic heart disease; and the related acute post-streptococcal glomerulonephritis. Diabetes, renal impairment and failure (leading to expensive renal dialysis), and avoidable amputation are only some of the complications and lead ultimately to diminished quality of life and

shortened life span. Funding is currently targeted at medical research for the above mentioned conditions and even more funding is directed towards treatment services.

The Healthy Environment and Lives Network (HEAL) is another example of an existing organisation whose aim is to take national and international leadership in environmental change and health research that will provide the evidence, capacity and capability and tools urgently needed to:

1. Protect and improve community health, especially at-risk groups and people in regions and communities disproportionately affected by environmental and climate change;
2. Strengthen health system resilience, preparedness and responsiveness to changing environmental conditions and related diseases, and reduce its environmental impact; and
3. Reduce inequities and inequalities within and across communities and generations.

The HEAL Network is a broad coalition of 100 investigators and more than 30 organisations from across Australia that aims to bridge the gap between knowledge and action by bringing together Aboriginal and Torres Strait Islander wisdom, sustainable development, epidemiology, and data science and communication to address environmental change and its impacts on health across all Australian states and territories.

HEAL is an initiative funded through the National Health and Medical Research Council.

25. How can the CDC best deliver timely, appropriate, and evidence-based health information to culturally diverse and/or at-risk populations?

As indicated above, it is important that the CDC is a well established, functional and independent entity. Communication from the CDC needs to be clear, concise and consistent. Staffing for the CDC needs to be representative of Australia's culture to ensure that the information and development of policies and programs are culturally appropriate.

During COVID, the national cabinet was the main avenue for information dissemination and communication to the states and territories. As indicated above, EHA believes that a variety of communication strategies should be utilised to disseminate the information obtained by the CDC. This should include using existing communication networks (state and local governments) as well as through schools, universities and the use of trusted "celebrities" to provide additional weight to the message.

26. How should the CDC engage across sectors outside its immediate remit (including portfolios with policy responsibility for wider determinants of health, culture, and disability)?

As referenced in question 13, there are a number of stakeholders that are outside of the health structures that need to be included in the formulation of advice. A database of cross organisational stakeholders will need to be developed to ensure that the appropriate organisations, agencies and industries are engaged in the decision-making process. This will ensure that the appropriate data trends are identified and communicated.

EHA recommends topic-specific dashboards be established for environmental health indicator data to put information into the hands of public health planners, the media, and

the public. Ensuring interactive data tools are readily accessible will provide a more complete, detailed picture of important environmental health topics all in one place. [20]

Research prioritisation

27. Should the CDC have a role in advising on (or directly administering) funding or prioritisation of public health and medical research?

EHA supports the CDC not being a research-based agency BUT having the capacity to advise on, and direct research opportunities, from the appropriate institution in areas that will influence policy decisions that impact on funding for disease prevention and control. Research opportunities should be inclusive of environmental health, climate change and biosecurity. The CDC should also have the ability to establish grant funding objectives and frameworks for implementation at the federal and state level.

The CDC Project

28. How could the success of a CDC be measured and evaluated?

The success of the CDC can be measured and evaluated by:

- high quality objective assessments
- being subject to regular reviews
- establishing a suite of performance-based indicators for regular reporting processes
- provision of an annual report

Conclusion

Environmental Health Australia would like to thank the Department of Health and Aged Care for the opportunity to submit our response to the consultation document on the development of an Australian CDC. It is pleasing the inclusion of environmental health in the consultation process.

The profound nature and scale of the impacts from environmental health factors on disease control and prevention including climate change means that the establishment of the Australian CDC provides a unique opportunity to promote human health and well-being for the Australian people. I urge the Taskforce to ensure the CDC focuses on tackling the most significant risks to positive health and wellbeing – environmental health.

EHA is happy to provide feedback and clarification on opportunities we have presented in this submission.

Phil Swain LFEHA
National President
Environmental Health Australia

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5 Risky Business – A resource to help local governments manage environmental health risks, November 2012 https://www.eh.org.au/documents/item/502

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9 Economics has helped to destroy the environment. Can it be used to save it? https://www.abc.net.au/news/2022-11-28/economics-has-destroyed-the-environment-could-it-save-it/101693286

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