1. Annual report on the agreed workplan

Describe progress made on the agreed workplan. For each activity, detail (1) the actions taken, (2) the outputs delivered, as well as (3) any difficulties that may have been encountered. Three responses are expected. [maximum 200 words per activity]. Indicate, if an activity has been completed previously, has not yet started or has been placed on hold.

Activity 1

Title: Developing a global training plan to maximize outreach and use of WHO training modules and assisting WHO HQ and WPRO in implementing the global plan through the organization and delivery of training in CEH

Description: WHO developed with a group of international experts “train the trainer” materials (WHO Training Package on Child Health and the Environment) that are available to all health professionals and are used for training events. Plans for maximizing use of the package are needed.
- At the request of WHO HQ, jointly create a master training plan and calendar for training opportunities in coordination with WHO, the WHO regional offices and the CC network.
- Assist with the implementation of the global training plan by organising or participating in at least one training event per year organized with WHO HQ or a regional office and delivered using WHO training modules with at least 15 participants (2017 – 2021)

Status: completed
For 20/21, an international online workshop was held in by the Pacific Basin Consortium for Environment and Health in Brisbane in September 2021. The focus was Environmental Impacts on Infectious Disease with a substantial number of the presentations on child health. Four summary review articles have been prepared for publication in Annals of Global Health

All the deliverables above have been met.

Activity 2
Title: Assisting WHO to build capacity about prevention of environmental exposures and environmentally-related diseases in children by creating and updating children's environmental health (CEH) training materials.

Description: As children's environmental health (CEH) is an evolving area, new topics need to be introduced to the “train the trainer” materials (WHO Training Package on Child Health and the Environment) and existing modules need to be regularly updated. Online courses are needed to maximise the number of professionals able to be trained and ensure access to training for professionals in rural and underserved areas.

- In collaboration with WHO HQ and the CC Network update at least one training module per year of the WHO Package (2017 – 2021)
- Support WHO in organizing the working meetings on children’s environmental health training (background documents, reporting) (the next meeting is planned for October 2018)
- Support WHO and the CC network to develop online training pilots using WHO training materials. Participate in working group meetings and teleconferences for their implementation. Assist in adapting training materials to online training formats. Training courses to be agreed with WHO as per evolving opportunities. Initial pilots planned for South Africa, Republic of Korea.

Status: completed
Completed in 2020

Activity 3

Title: Creating increased awareness about prevention of environmental exposures and environmentally-related diseases in children through the WHO/UNEP Healthy Environments for Children Alliance (HECA) newsletter

Description: The WHO/UNEP Healthy Environments for Children Alliance (HECA) newsletter has been produced since 2003 to provide monthly updates on WHO and UNEP activities, peer-reviewed publications, media reports, and events on children’s environmental health. It is a valuable resource for professionals in the field.

- In coordination with WHO, continue to develop the monthly WHO/UNEP Healthy Environments for Children Alliance (HECA) newsletter.

Status: completed
Completed in 2020

Activity 4

Title: Strengthening the Network of WHO Collaborating Centres for Children's Environmental Health, with a particular focus on the Western Pacific Region.

Description: The WHO Children’s Environmental Health programme is working closely with 10 WHO collaborating centres (CCs) to reduce the morbidity and mortality of children by increasing awareness and action to prevent harmful exposures during early life. Activities are guided by a Framework for action for WHO CCs (2013-2017) on children’s environmental health developed by WHO and CCs.

- At the request of WHO HQ, and in collaboration with the CEH CC network, develop a new Framework for Action for WHO CCs on children’s environmental health, 2018 – 2021, through email and teleconferences
- Assist WHO HQ with coordinating the Network of WHO Collaborating Centres for Children’s Environmental Health
- Provide advice to CCs developing projects on e-waste and children’s health and other technical CEH areas as requested by WHO HQ and WPRO
- At the request of WPRO, strengthen collaboration between CCs working on environmental health and children’s environmental health in the Western Pacific Region by facilitating meetings of WPRO CCs in environmental health and related areas (to be held every 2-3 years). The meetings will aim to support activities to achieve the Manila Declaration on Health and Environment and the Western Pacific Regional Framework for Action on Health and Environment on a Changing Planet. Drawing from the WPRO Climate Change Resilience initiatives, a key aim will be to strengthen the focus on the impacts of climate change on children’s environmental health. The CC will assist with identifying centres involved in environmental health, background documents, and reporting.
Quarterly teleconferences of the Network of WHOCCs in CEH were still conducted to continue fostering collaboration between CCs since regional workshops have been halted by Covid-19.

Activity 5

Title: Develop joint research publications with WHO HQ, WPRO and the Network of WHO Collaborating Centres for Children's Environmental Health.

Description: Collaboratively develop joint publications as agreed by WHO HQ, WPRO and the CC. At least one peer-reviewed publication or WHO publication per year (2017 – 2021). Topics are to be negotiated with WHO HQ and WPRO on a yearly basis. Current plans under discussion with WHO HQ and WPRO include:

- WHO report on exposure to air pollution and children’s health, to be developed with the network of WHO Collaborating Centres for Children's Environmental Health.
- WHO report on electronic and electrical waste and children’s health, to be developed with the network of WHO Collaborating Centres for Children's Environmental Health.
- Atlas of children’s environmental health in the Western Pacific Region. This publication will be developed with WPRO and Universities in the Pacific and in Asia. It will focus on key threats to children’s environmental health in the region including climate change, air pollution, food safety, waste, and water, sanitation and hygiene.

Status: ongoing

At the request of WHO, we have been involved in developing an Atlas of children's environmental health. "Inheriting a sustainable world? Atlas on children’s health and environment. Geneva. World Health Organization; 2017. Licence: CC BY-NC-SA 3.0 IGO.

At the request of WHO, we have been involved in developing publications on eWaste from multiple locations, including Africa, Bangladesh, and China. Publications include:


At the request of WHO we are currently undertaking a narrative review of the lead exposure in traditional and ayurvedic medicines as part of the new WHO guidelines on lead exposure.

- Lead in traditional and complementary medicine: A systematic review (in preparation)

At the request of WHO participated in the writing, editing, and reviewing the WHO publication on Air pollution and children's health.


2. Annual report on other activities requested

Should WHO have requested activities in addition to the agreed workplan, please describe related actions taken by your institution [maximum 200 words]. Please do not include in this report any activity done by your institution that was not requested by and agreed with WHO.

3. Resources
Indicate staff time spent on the implementation of activities agreed with WHO (i.e. those mentioned in questions no. 1 and no. 2 above). Do not include any data related to other activities done by your institution without the agreement of WHO. Please indicate staff time using the number of “full-day equivalents” – a day of work comprising 8 hours (e.g. 4 hours work per day for 7 days should be recorded as 3.5 full-day equivalents).

**Number of staff involved (either partially or fully)**

<table>
<thead>
<tr>
<th>Senior staff</th>
<th>Mid-career staff</th>
<th>Junior staff, PhD students</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>

**Number of full-day equivalents, total for all staff involved**

<table>
<thead>
<tr>
<th>Senior staff</th>
<th>Mid-career staff</th>
<th>Junior staff, PhD students</th>
</tr>
</thead>
<tbody>
<tr>
<td>72</td>
<td>0</td>
<td>96</td>
</tr>
</tbody>
</table>

Implementation of the agreed workplan activities (i.e. those mentioned in questions no. 1 and no. 2 above) normally require resources beyond staff-time, such as the use of laboratory facilities, purchasing of materials, travel, etc. Please estimate the costs of these other resources as a percentage of the total costs incurred (e.g. if you incurred costs of USD 100 and the value of your staff time was USD 50 which makes the total of USD 150, please report 33.3% and 66.7%).

<table>
<thead>
<tr>
<th>Percentage of costs associated with staff time</th>
<th>Percentage of costs associated with other resources</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>75.00</td>
<td>25.00</td>
<td>100.00</td>
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</tbody>
</table>

4. Networking

Describe any interactions or collaboration with other WHO Collaborating Centres in the context of the implementation of the agreed activities. If you are part of a network of WHO Collaborating Centres, please also mention the name of the network and describe your involvement in that network (maximum 200 words).

The WHO Collaborating Centre for Children's Health and the Environment is an integral part of the Network of WHOCCs on Children’s Environmental Health [https://www.niehs.nih.gov/research/programs/geh/partnerships/network/index.cfm]. We co-lead the network and actively participate in its activities. The network has quarterly teleconferences, has run a series of regional, and sub-regional workshops in South and South-East Asia to promote activities in CEH, and facilitates joint publications.

The WHO Collaborating Centre for Children's Health and the Environment is actively participating in the newly formed Australian Network of WHO Collaborating Centres [http://glham.org/whocc-network/]. Sharon Brabon from our centre is a member of the Executive committee of the network. This network was formed to better coordinate the activities of Australian CCs and to help them better address WHO and WPRO priorities.