

For Immediate Release Attn: Health, Science & News Desks December 6, 2017 Contacts: Lee Bell, IPEN Mercury Policy Advisor, +61 417196604, leebell@ipen.org Laura Vyda, IPEN Communications Director, +1 510 3871739, lauravyda@ipen.org

Mercury Pollution, A Threat to All:

New Study Reveals Dangerous Mercury Levels Among Delegates at Minamata Mercury Convention COP1 with Highest Levels from Small Island Developing States

Full Report: <u>http://ipen.org/documents/mercury-cop1-delegates</u> Read about the Press Conference at UNEA3, Nairobi, Kenya, 12/06, 11 am, Press Conference Room: <u>http://ipen.org/news/press-release-mercury-cop1-delegates</u>

(Nairobi, Kenya) Evidence that mercury, a neuro-toxic metal, poses a global health threat to all was underscored today by a study analyzing the mercury body burdens among delegates to the world's first mercury treaty. The study detected mercury levels above health alert thresholds in over half of the global policy decision-makers tested at the first Conference of the Parties to the Minamata Convention. Researchers concluded that even global policy makers who are educated on mercury risks are not protected from mercury contamination.

Researchers from IPEN (a global public health and environment network) and BRI (the Biodiversity Research Institute) analyzed mercury levels in hair samples from 180 delegates (104 women and 76 men) from 75 countries who participated in the COP1 of the Minamata Convention in Geneva from September 24-29th, 2017. The findings revealed mercury in all participants and elevated mercury levels exceeding the United States Environmental Protection Agency (US EPA) health advisory level of 1 ppm, above which brain damage, IQ loss, kidney and cardiovascular damage may occur, in over half of the study participants. Levels many times higher were identified in delegates from a number of regions. Mercury, while harmful to adults, causes the greatest damage to developing nervous systems of fetuses in utero.

When assessed by United Nations region of origin, the mean mercury concentration levels of delegates exceeded the US EPA health advisory level of 1ppm in Africa, Asia Pacific, GRULAC (Latin American and Caribbean Countries), JUSCANZ (Japan, United States, Iceland, Israel, Liechtenstein, Switzerland, Canada, Australia, and New Zealand), Small Island Developing States (SIDS) and Western Europe. The mean level of mercury in hair of delegates from the Asia Pacific region exceeded 2 ppm overall. When researchers isolated the results from SIDS, the average mercury levels increased to above 3 ppm.

Individuals with the highest levels in the sample hailed from regions across globe, said lead author Lee Bell, IPEN Mercury Policy Advisor. "High levels were recorded in delegates from Asia Pacific, but high levels were recorded in delegates from JUSCANZ and Western Europe as well. Delegates, as a group, are well informed about mercury toxicity and exposure, but this knowledge has not afforded them protection from mercury pollution. These results should provide an unequivocal reminder to global decision-makers that mercury pollution is an immediate threat to everyone. We hope that personalizing mercury contamination for delegates and ministers will propel them to create effective global action that will finally address the sources that create mercury pollution. Phasing out coal-fired power plants,



banning the trade in mercury that supplies small-scale gold mining and cleaning up contaminated sites are actions that are needed immediately."

The sampling process was anonymous, but many delegates reported that they were surprised to learn that their levels exceeded the health advisory threshold of 1 ppm (Hg) and could cause neurological health issues and affect a potential pregnancy.

Said the Swedish Minister of the Environment, Minister Karolina Skog, who was among those sampled, "The delegate sampling of mercury in hair personalized a global issue for us. As women, mercury can affect not only our own health, but if we are to become pregnant, the mercury can transfer to the unborn child with dire effects. This fact calls for resolute action on mercury. The Minamata Convention gives us the tools. Now, let's all work together for the implementation."

Peru's Vice Minister of Environment, Marcos Alegre Chang, commented, "I was grateful that my result is below the average (for my region). However, I was surprised to have such a level of mercury in my hair. This motivates me to promote a mercury-free planet...The Minamata Convention is important because it is a multilateral agreement which aims "to protect the human health and the environment from anthropogenic emissions and releases of mercury and mercury compounds." Only a global and national coordinated effort can deal with the complex mercury-related issues. In Peru we have artisanal and small-scale gold mining which uses mercury. The Minamata Convention provides us an excellent umbrella to minimize and eliminate the use of mercury at national level."

Average mercury concentration levels were more than three times higher than the health advisory level for members of Small Island Developing States (SIDS) than in delegates from other regions. This finding echoed earlier findings from the global study <u>Mercury in Women of Child-bearing Age in 25</u> <u>Countries</u>, where 85.7% of the women sampled in the Pacific Islands had levels exceeding the 1 ppm threshold, and most women measured three times above the US EPA standard. That the sampling among SIDS-based delegates mirrored these higher concentrations, reflects the vulnerability of people of the Pacific where mercury depositions to the oceans from a variety of sources, most notably coal-fired power, contaminate fish, the dietary protein staple.

H.E. Minister Mr. Alexander Teabo, Kiribati Ministry of Environment, Lands and Agricultural Development, noted that mercury is a serious concern for the health of the Kiribati people, as well as a significant food security issue because in many places store-bought food is not available. Mercury will also affect the ability of fish to breed, so catches will be reduced, which will affect revenue from fish exports.

"Even the people who are making policy are becoming polluted with mercury so it is clear that education is not enough. We have to address the sources of mercury pollution. Pacific SIDS do not contribute to global mercury pollution, but we are affected by the impacts of global deposition to oceans of mercury vapour from coal-fired power generation. To end this source of contamination of the fish we rely upon for daily protein and export earnings, we need other countries to phase out coal-fired power stations, as part of global cooperation to reduce ocean pollution," commented Imogen Ingram, Cook Islands resident of the Island Sustainability Alliance, whose methylmercury levels were two and half times that of the US EPA health advisory threshold.



"Once it's released to the environment, there's no easy way to put mercury back in its packaging. Mercury pollutes our air, water and soil, and can stay in our food chain. Immediate end of the mercury trade and its use in the small-scale gold mining sector will prevent social and environmental suffering. Alternative livelihoods have to be introduced as poverty alleviation program to achieve sustainable development goals," commented Yuyun Ismawati, Goldman Prize Winner, IPEN Mercury and Mining Lead and founder of Indonesia-based NGO BaliFokus.

Previous Research: Global Study on Women of Childbearing Age

IPEN, with UNEP and BRI, previously conducted a pilot study in 2015-2016 on <u>Mercury in Women of</u> <u>Child-bearing Age in the Asia and Pacific Region</u> of 236 participants in 6 countries. Of the women included in the study, 69.2% had mercury levels exceeding 1ppm; however, when separated by regions, 96% of those sampled in the SIDS region had levels exceeding 1 ppm and only 21.4% of those not in the SIDS region had levels that exceeded this level. This study motivated the larger global study <u>Mercury in</u> Women of Child-bearing Age in 25 Countries.

In the larger study, <u>Mercury in Women of Child-bearing Age in 25 Countries</u>, which was the largest of its kind, researchers from IPEN coordinated hair sampling of 1,044 women of reproductive age in 37 locations across 25 countries on 6 continents. Analysis, conducted by BRI, found that 42% of women sampled had average mercury levels over the US EPA health advisory level of 1ppm, above which brain damage, IQ loss, and kidney and cardiovascular damage may occur. The study additionally found that 55% of the global sample of women measured more than <u>0.58ppm</u> of mercury, a level associated with the onset of fetal neurological damage.

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Attention Editors and Reporters, please contact <u>LauraVyda@ipen.org</u> for more information or to facilitate interviews.

IPEN is a network of non-governmental organizations working in more than 100 countries to reduce and eliminate the harm to human health and the environment from toxic chemicals and metals.