Widespread Mercury Poisoning Evident in Impoverished Indonesian Mining Communities

(Jakarta) A preliminary exploration of the impact of mercury use in three Indonesian artisanal and small-scale gold mining (ASGM) communities found that one-third of the people in one community satisfied WHO guidelines for mercury poisoning along with many children with birth defects, nervous system damage and delayed development.

“In the mining communities, families keep mercury under the bed, in the drawer, and in the kitchen,” said Yuyun Ismawati, Senior Advisor of BaliFokus. “It is very clear that the use and trade of mercury in ASGM is harming people and should be stopped immediately. Countries like Indonesia with ASGM communities, should ratify the Minamata Treaty immediately, promote safer alternatives, and regulate this sector, to avoid a greater crisis in Indonesia as families struggle to eat and live.”

Between mid February to early March 2015, BaliFokus and the Medicuss Foundation visited 3 ASGM hotspots in Indonesia to determine the impact of mercury on community health: Cisitu-Lebak Regency, Sekotong-West Lombok Regency, and Bombana, in Southeast Sulawesi Regency.

“We used WHO criteria for mercury poisoning in one community and found one-third of the people satisfied those criteria. In addition, our preliminary findings in these three communities found that 28 children suffered from birth defects, nervous system damage, and delayed development,” said Dr. William Jossep, co-founder and the Team Leader of the Medicuss Foundation. “All of these children spent considerable times living in the ASGM areas.”

The team also observed children with hyper-salivation, seizures, claw-like hands, sensory disturbance, hearing impairment, and juvenile cataract. The level of mercury in the air in the residential areas where gold is processed and children are present, ranged from 1,300 ng/m3 up to 55,000 ng/m3. WHO guidance levels say exposure levels should not exceed 1,000 ng/m3.

Minamata disease is methylmercury (MeHg) poisoning that occurred in humans who ingested fish and shellfish contaminated by MeHg discharged in waste water from a chemical plant (Chisso Co. Ltd.). In 1956, Minamata Disease was first officially discovered in Minamata City, Japan. The marine products in Minamata Bay displayed high levels of mercury contamination and were consumed by the people. Typical symptoms such as sensory disturbances (glove and stocking type), ataxia, dysarthria, constriction of the visual field, auditory disturbances and tremor were also seen.

Further, the fetus was poisoned by MeHg when their mothers ingested contaminated seafood. The symptom of patients were serious. More than 60,000 people were affected by mercury contaminated fish. Until today, the victims of the Minamata tragedy are still struggling for justice.

“No one in the world should suffer the prolonged devastation of mercury poisoning that took place in Minamata, Japan during the latter part of the 20th century,” said Yoichi Tani, Secretary General of the Minamata Disease Victims Mutual Aid Society. “Unfortunately, this new information suggests this may be happening again in ASGM communities. Indonesian government should act without delay instead of waiting for decades like in Minamata.”

The Minamata Convention, signed in October 2013 by 128 countries, set sunset dates for mercury use in some products and processes. Unfortunately, no global target to phase out mercury in ASGM sector was agreed to.

“The Minamata Convention provides a clear outline to reduce and eliminate mercury use in ASGM,” said Joe DiGangi, Senior Science and Technical Advisor of IPEN. “The children suffering in these mining communities deserve an organized, urgent response that makes protecting their health and safety a top priority.”

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BaliFokus is a public interest environmental health NGO working to promote good quality of life in healthy and toxics-free environment.

Medicuss Foundation is a non-profit organisation working to promote medical service, emergency response and health issues.

IPEN is an international network of more than 700 organizations in 106 countries working to eliminate harm to human health and the environment from toxic chemicals.