

New Minamata disease discovery in ASGM hotspots (II)

Severe mercury poisoning symptoms are seen in many communities within ASGM hotspots, ranging from tremors to birth defects similar to Minamata disease. To identify the severity of mercury poisoning, BaliFokus in cooperation with experts from the University Hospital of Munich - LMU, employed simple tests and conducted training for local health workers which will allow them to assess people suspected of suffering from such poisoning. Source and photo credit: BaliFokus Foundation.



A set of tests conducted to identify the mercury poisoning symptoms includes the matchbox test. The respondent is asked to put a match stick into a matchbox, both left and right-handed, and the assessor times it with a stop watch. Most mercury poisoned suspects fail to perform the test in less than 17 seconds.

Mercury emissions from coal-fired power plants.

Source and photo credit: Ecological Alert and Recovery - Thailand (EARTH)



Downwind and downstream from the coal-fired power plants and the eucalyptus fields is Shalongwaeng Canal, where IPEN and Thai NGO Ecological Alert and Recovery - Thailand (EARTH) found elevated levels of mercury in fish samples and hair samples of local residents who still rely on the canal's fish as their main source of food and income. Source and photo credit: EARTH



Tuhanda, 45, a farmer and a part-time stone crusher. In the last 4 years his health has quickly degenerated. He could not walk properly, failed the ataxia test, and suffers dysidiadochokinesia (DDK), the medical term for an impaired ability to perform rapid, alternating movements. His wife left him when he started experiencing tremors and he now lives with his mother, 70, who must cook care for him.



Ocih, 63, a housewife and a mother-of-three. For the past 9 years, Ocih has suffered from severe tremors sleeping disturbances and muscle aches requiring her to have help for laying down and getting up. Her husband left her when she started showing symptom. She now lives with her 17 years old daughter who left school to take care of her mother. Recently, her daughter got married to avoid her mother and the daily responsibilities but still visits to bathe her and cook meals.



Kustin, 45, a gold burner and heavy smoker, is mother of Dita. Kustin has been burning amalgam for the last 10 years. She now suffers from hearing problems and loses track of her surroundings. Their neighbours take turn helping out with their chores including feeding the family.



In Tha Tum rural municipality, Prachinburi, Thailand, coal-fired power plants consume at least 700,000 tons of coal every year, supplying electricity and steam power to one of the largest pulp and paper production plants in the country. They also supply energy to over 130 other factories within the 304 Industrial Complex. Mercury releases occur through power plant air emissions and from fly ash disposal. Residents claim coal fly ash is added to the soil on surrounding eucalyptus plantations. Company representatives claim fly ash used to improve the soil on eucalyptus fields only comes from biomass burned at the power plant. Source and photo credit: EARTH



Chuchat Kaysorn, 47, a local farmer has a hair mercury level of 12.76 ppm. For ten years, he lived and farmed next to a coal-fired power plant. He has now moved further away, but still works the farmland downwind from the power plant. Previous tests for pollution done by organizations in the industry's network never found the source of the pollution. After learning his hair mercury level was 12 times the safe level, tests by another NGO - including isotope tests on fish samples taken from his neighbourhood - confirmed his major mercury source of exposure was fish contaminated by mercury coming from the coal-fired power plant.