



a toxics-free future

www.ipen.org

ipen@ipen.org

International SAICM Implementation Project (ISIP)

In 2010, in an effort to demonstrate SAICM implementation via IPEN Participating Organizations, IPEN launched an International SAICM Implementation Project, also known as ISIP. ISIP aims to mobilize resources for initial enabling activities pertaining to national priorities, in keeping with the work areas set out in the strategic objectives of section IV of the SAICM Overarching Policy Strategy.

In particular, the ISIP supports the Governance objective of SAICM's Overarching Policy Strategy paragraph 26, which calls for enhanced "cooperation on the sound management of chemicals between Governments, the private sector and civil society at the national, regional and global levels."

In addition, ISIP builds on the 2008-2009 Global SAICM Outreach Campaign to raise awareness about SAICM and strengthen collaboration among the public interest, health and labor sectors.

ISIP Objectives

ISIP's four objectives include:

- Promoting the need for sound chemicals management
- Advancing National SAICM Implementation
- Promoting global SAICM implementation by global civil society
- Building capacity among NGOs developing countries and countries with economies in transition

Title of activity: Raising awareness on mercury

NGO: Eko-svest/Eco-sense

Country: Macedonia

Date: April 2011

Elements of SAICM Covered:

Promote reduction of the risks posed to human health and the environment (57); Help develop comprehensive national profiles or country situation reports about mercury (1, 166); Programs to monitor mercury to assess exposure (66, 82); Promote the development and use of products and processes that pose lesser risks (44); Take immediate action to reduce the risk to human health and the environment posed on a global scale by mercury in products and production processes (59); Participation in activities related to the negotiation of a legally binding instrument on mercury

Description of mercury that is available in the market:

Most common products sold in Macedonia that contain mercury are: batteries, thermometers, blood pressure instruments and cosmetics.

Description of the most common forms of mercury exposure:

In Macedonia, people are most exposed to mercury by using mercury thermometers and blood pressure instruments, as well as by eating sea food, which is not so common in Macedonia.

People living near industries (cement kiln in the center of Skopje, refinery near Skopje settlements) are also exposed to mercury, because of the release of mercury into the soil and air.

In Macedonia the amalgam dental fillings are still in use, so a lot of people are exposed to mercury vapor by using this kind of dental fillings (most people choose amalgam dental fillings due to the fact that these are less expensive than the regular white fillings).

Description of human sources of mercury:

In our country there is a limited amount of available information regarding the presence of mercury in the air, soil and the human organism, its treatment and waste management. In Macedonia this is still new unexplored research area, for which recently some research institutions have shown interest.

The Institute of Chemistry at the Faculty of Natural Sciences in Skopje is the only one that does testing and research of heavy metals on our territory, including mercury. The knowledge we could gather at the Institute indicates that release of mercury as a result of human activities is a rare occurrence in Macedonia and it is not serious threat to human health. We can point out a few examples of human activities that could lead to release of mercury in the environment:

- A factory for chemical industry called Ohis, situated in Skopje, used to have a facility for producing hydrochloric acid by using mercury electrodes. During the procedure mercury was released in the air, resulting in its sedimentation near the factory. Research of the surrounding soil and the underground waters showed higher concentrations of mercury, although the plant is not in use any longer. As a result of the production process, higher concentration of mercury is found in the sediments of the river Vardar, near the factory Ohis.
- Higher concentrations of mercury are found in the city of Ohrid at a place where a factory for production of mirrors was situated. In the process of mirror making, mercury was used, leading to its release in the environment. Mercury is still found in that area, although the factory is no longer in use.
- Veles is a city that we cannot overlook when discussing high concentrations of mercury. The city is famous for the large lead and zinc smelter active for decades and closed in 2003 due to citizens' demand. The people living there have serious health disorders as a result of the pollution. A high concentration of mercury is found in the soil, air, and the Vardar river, near Veles. In 2008/2009 extensive testing was done on hair, blood and nail samples in children. The results showed significantly higher concentrations of all heavy metals (including mercury).

Additionally, there have been many cases of broken thermometers and inappropriate collection and disposal of the mercury in Macedonia.

Description of the levels of mercury release and exposure:

Until now, there is no debate or any campaign that would give information to the public, about the toxicity and presence of mercury, as well as reducing and eliminating it. People for now are only familiar with the ban of use of mercury thermometers in EU, but other information, debate, roundtables, guidelines or warnings do not exist or are minimal.

Description of the damage caused by mercury:

Official information about mercury poisoning is hard to find. Regarding what we could find as unofficial data, in Macedonia, mercury poisoning cases are rare.

So far, there aren't registered cases of vaccination problems in children with vaccines that contain mercury, as in neighbor countries like Bosnia and Herzegovina.

In our basic health care, vaccines containing thimerosal as a preservative are fully covered by our health fund, but if you want thimerosal-free vaccines, they are available only if you purchase them by yourself.

When it comes to the environment, as said above, Veles is of a great concern regarding the pollution from the smelter, which releases heavy metals into the air and soil. Because of this situation, citizens from Veles filled a lawsuit against the government for not taking any measures for the pollution. The process is still ongoing.

Description of the laws currently regulating mercury:

In Macedonia there isn't existing laws for limiting or banning the use of mercury, or mercury waste treatment.

As a result, in the pharmacies and markets you can freely buy mercury thermometers or other devices that contain mercury. Health care institutions are also using mercury devices. Mercury is still being used in dental clinics, in the amalgam dental fillings and a lot of people settle for this kind of dental fillings because of the fact that they are half the price of the regular white dental fillings. Dentists are aware of the toxicity of this kind of fillings, so they are trying to avoid them when it is possible.

There aren't any guidelines about the sea fish that is imported in Macedonia, which types are mercury free or not. Also, people aren't able to manage spills of mercury, because of the fact that advisories or any information about taking care of broken thermometers or other mercury devices do not exist.

Description of the efforts to deal with mercury:

According to everything written above, our government is not taking any action to reduce mercury exposure.

Description of what forces support and oppose the Mercury Treaty, the public participation consultation process, and the level of public awareness of the treaty process:

Until now, there isn't any information about the treaty process. There is an international agreement that is about to be signed, but according to the SAICM focal point in Macedonia that's not going to happen this year. Hopefully, we expect next year the authorities will begin with the treaty process about mercury and implementation of the imposed obligations.

Project Outcome:

Description of the activity conducted:

As a follow up of the chemicals-related project "Dangerous chemicals in Macedonia," we continued with research of the toxic metal mercury.

Our goal was to get the truth closer to the public about the toxicity of this metal, and its effects on the human health and environment.

For that purpose we've conducted the following activities:

- **Developing mercury fact sheets**

We translated 5 informative fact sheets about mercury in Macedonian, available at www.toxic.mk. The fact sheets focus on:

- *Health Care Industry*
- *How toxic is Hg*

- *Mercury and vaccines*
- *Fish consumption*
- *Managing Small Spills*
- **Testing hair samples**

For the purposes of the project and for making statistics about the content of mercury in human organisms, we conducted testing of mercury presence in hair samples. We managed to get 33 hair samples from people who voluntarily agreed to the testing procedure.

The testing was provided by the Chemistry Institute on St. Cyril and Methodius University in Skopje, by using atomic absorption spectroscopy, a technique that is used for determining the concentration of a particular element in the analysed sample.

We managed to prepare a report in Macedonian, containing the results from the testing, so the public can see what the situation in our country is considering mercury presence in human organism.

This report consists of charts illustrating the content of mercury in hair samples according to different characteristics of the individuals, such as age, gender, smoker/non smoker, fish eaters/non fish eaters, using hair dye/not using hair dye etc. We used a questionnaire (attached) to gather basic information about the individuals and their life habits.

- **Media work**

The project coordinator was involved in the following media related activities:

- One TV interview on national television MTV, which was aired 4 times.
- Organized press café with journalists (27.01.2011). The invitation was available on the www.ekosvest.org.mk web site.
- 1 press release in national daily newspaper Dnevnik
- 1 online release on the web site on MIA (Macedonian informative agency)

- **Inform NGOs**

By communicating through the existing coalitions and networks in the country, Eco-sense managed to inform the NGOs about the existing information on mercury, and by promoting the web site www.toxic.mk. On the web portal Eko.net.mk we managed to get the top 2 logos (leading to Eco-sense website and Toxic.mk website).



Impact on target groups:

The public is informed about the toxic effects of mercury contained in various products existing on the market and is aware of the existence of alternatives through our web site, factsheets about mercury and data reports.

By being informed, consumers will take special care when choosing products and when choosing products without mercury, consumers will protect their children, their health and the environment from the release of this toxic metal.

Impact on target policies:

By promoting the web site www.toxic.mk and by spreading information about the presence of the toxic metal mercury in our organism and environment, to the public through the media, they become a critical mass that can request from the Government stricter legislation and regulations in order to protect the public and the environment from the toxic substance.

Eko-svest as a non-governmental organization will continue to do lobby work for missing legislation about restricted chemicals.

Outreach to stakeholders:

In this activity mainly the citizens of Macedonia were most involved and most interested, due to the testing. These citizens automatically get information on the mercury levels, possibilities for detoxification of their body and how to protect themselves from mercury exposure.

Deliverables, outputs and/or products:

- 5 informative brochures about mercury, in Macedonian (available at www.toxic.mk)

- Test report from the Chemical Institute
- Mercury report about the results from the testing, in Macedonian (available at www.toxic.mk)
- TV interview broadcasted 1 time
- TV show about Eco-sense and mercury broadcasted 3 times

Communication efforts:

As a result of the research, we managed to inform the public about the results and the project itself through:

- 1 Press release published in national daily newspaper:
 - o Dnevnik (14.10.2010)
- 1 release on the web site of MIA (Macedonian informative agency)
- Organized 1 press cafe on 27.01.2011, where 3 journalists from daily newspapers were present.
- Presenting our work and all the information on TV show on national television MTV (23.12.2010, 20.01.2011, 15.01.2011 and 22.01.2011)

Recommendations, from a public interest, NGO perspective, on reducing and eliminating human sources of mercury:

As a center for environmental research, Eco-sense will continue informing about mercury toxicity and available alternatives through the media and our web site www.toxic.mk. Because of the great concern about effects of mercury on human health and environment, we will continue lobbying about the missing legislative.