

# Virtual Workshop

## Antigua and Barbuda

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### ***COMMUNICATION STRATEGY AND OUTREACH OPTIONS***

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MINAMATA  
CONVENTION  
ON MERCURY



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# *MANAGING MERCURY IN THE CARIBBEAN- COMMUNICATION STRATEGY AND OUTREACH OPTIONS*

- ▶ BRI is collaborating on SIP project led by Antigua and Barbuda to build capacity for managing mercury in the Caribbean
  - ▶ Component 3 of this project focuses on developing outreach materials (e.g., video, print, website) to build capacity, disseminate findings (including at COP4) and raise awareness
  - ▶ Outreach materials targeted to the regional mercury monitoring network and country ministries for public outreach

# MANAGING MERCURY IN THE CARIBBEAN- COMMUNICATION STRATEGY AND OPTIONS

- ▶ Establish a regional laboratory will assist with the assessment of mercury in the environment and exposure to people (e.g., dietary uptake and skin-lightening creams) to better protect human and environmental health and guide policies related to mercury risks
- ▶ Important for countries that have ratified (or plan to ratify) the Minamata Convention on Mercury to meet obligations and effectively implement provisions.
- ▶ Project objectives are driven by several articles of the Convention
  - ▶ Art 12: Contaminated sites
  - ▶ Art 14: Capacity building, technical assistance and technology transfer:
  - ▶ Art 16: Health Aspects
  - ▶ Art 17: Information Exchange
  - ▶ Art 18: Public Information, Awareness and Education
  - ▶ Art 19. Research, Development and Monitoring
  - ▶ Art 22. Effectiveness Evaluation
- ▶ This project in the Caribbean will help to establish a precedent for other regional hubs in the interest of the Minamata Convention

# MANAGING MERCURY IN THE CARIBBEAN: COMMUNICATION STRATEGY AND OPTIONS



- ▶ Website initially hosted by BRI (will transfer to Antigua and Barbuda)

**URL: [briwildlife.org/sampling](http://briwildlife.org/sampling)**

- ▶ Developed SOPs for sampling (air, fish, bird, human hair, and cosmetics)
- ▶ In-field videos of relevant SOPs will also be developed to help visualize field sampling procedures
- ▶ Outreach materials could include flyers, fish cards, videos, website materials and other options to be determined by the country ministries
- ▶ Videos could include both “how to” and public messaging/awareness raising
- ▶ Regional Workshops will be organized to share expertise and disseminate findings of the sampling efforts (messaging of results will be handled in sensitive manner and with approval of relevant country ministries)

# COMMUNICATION STRATEGY AND OPTIONS- MIA CARIBBEAN PROJECT

- ▶ BRI worked as technical consultant for BCRC on several MIA projects in Caribbean from 2018-2021
- ▶ As part of these MIAs, BCRC and BRI developed several outreach materials – many which can be considered for this project
  - ▶ BCRC- Communication package (guiding and supporting documents), Infographics/Flyers/Brochures, Animated Videos with complimentary flyers and banners
  - ▶ BRI-Biomonitoring brochures, fish cards, MIA summary brochures and technical reports





# COMMUNICATION STRATEGY AND OPTIONS- MIA CARIBBEAN PROJECT

- ▶ BCRC-Infographics, flyers and brochures to raise awareness of mercury issues
- ▶ Target audience: general public
- ▶ Topics:
  - ▶ Mercury in Household Products
  - ▶ Mercury in Industrial and Medical Devices
  - ▶ Mercury in Cosmetics
  - ▶ Mercury and Health

**mercury in cosmetics**

The highly toxic chemical element, mercury, is found in some cosmetics, particularly some skin-lightening creams and soaps.

It may be absorbed through the skin where it blocks the formation of the pigment melanin.

Mercury can accumulate in the body over time and damage the nervous system, kidney and other organs.

The addition of mercury in some skin-lightening creams is often not disclosed, and some labels may even be written in a foreign language.

**WHAT CAN YOU DO?**

Make a conscious effort to check labels on these cosmetics before buying. Find and use mercury-free alternative cosmetics.

Mercury may be listed as:

- Ammoniated mercury
- Mercurous chloride
- Hg
- Calomel
- Mercuric
- Mercurio
- Cinnabaris

**PARTIES TO THE MINAMATA CONVENTION AS OF JUNE 2018**

- Antigua and Barbuda
- Cuba
- Dominican Republic
- Guyana
- Jamaica
- Saint Kitts and Nevis

As Parties to the Minamata Convention, these Caribbean countries have agreed to take measures to end the import, export and manufacture of mercury-added products - including cosmetics with potentially harmful concentrations of mercury (above 1ppm) - by 2020.

gef UN environment The Basel Convention Regional Centre for the Caribbean (BCRC-Caribbean)

Developed under the project "Development of Minamata Initial Assessment for the Caribbean (Jamaica, Saint Kitts and Nevis, Saint Lucia, Trinidad and Tobago)"

For more information, visit the Global Mercury Partnership website and [www.bcrc-caribbean.org](http://www.bcrc-caribbean.org)

**mercury and your health**

Mercury is a toxic element which can potentially lead to serious health effects.

You may be exposed through:

- Breakage, leakage or improper disposal of mercury-added products.
- Using mercury-added skin-lightening creams and other cosmetics.
- Breakage and leakage of mercury devices at your home or workplace.
- Consuming fish and shellfish from at-risk (artisanal, small-scale) mining.
- Regularly consuming fish with high levels of mercury.

**Possible health effects**

- Neurological disorders
- Behavioural disorders
- Memory loss
- Tremors
- Insomnia
- Headaches
- Muscle weakness
- Learning disabilities

Fetuses and children are at highest risk when exposed to mercury because their nervous systems are still developing.

**Organs impacted by mercury exposure**

- Nervous system
- Skin
- Lungs
- Heart
- Liver
- Kidneys
- Digestive system

**what can you do?**

- Use mercury-free alternatives, like LED lightbulbs and digital thermometers.
- Check labels on skin-lightening creams and soaps. Be aware that many of these products are mislabeled and mercury is not always listed as an ingredient.
- Avoid water transportation industrial production equipment. If your job may expose you to mercury.
- Reduce the frequency of consumption of large predatory fish species which are known to contain higher levels of mercury.

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**mercury in everyday products**

Although toxic, mercury is used in a range of manufactured products.

These products are typically not harmful to health unless they are broken or disposed of in an environmentally unsound manner. When they are broken, mercury emissions and releases can be released into the air, land and water.

**Routes of Exposure**

- Direct skin contact
- Inhalation
- Dental amalgam exposure

By 2020, it is expected that the global manufacture, trade and use of certain mercury-added products will be phased out through the Minamata Convention on Mercury.

However, there is need for safe disposal of mercury-containing wastes beyond 2020.

Mercury-free alternatives are already widespread and available on the global market.

For more guidance on this, visit the Global Mercury Partnership Website and [www.bcrc-caribbean.org](http://www.bcrc-caribbean.org)

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# COMMUNICATION STRATEGY AND OPTIONS- MIA CARIBBEAN PROJECT

- ▶ Animated Videos and Complimentary Flyers
- ▶ 2-minute animated videos
- ▶ Topics include Mercury as Global Issue, Minamata Convention, Mercury and Diet, and Mercury in Skin-lightening Creams
- ▶ Accompanying 10-second teasers and promotional digital flyers

## Mercury in your diet

**MERCURY, A TOXIC ELEMENT**  
that can cause damage to our nervous system, liver and kidneys in addition to a number of varying symptoms.

Fish is a healthy source of protein, however mercury can be found in some species that we consume.

**Mercury levels**

- Larger species of fish may contain higher levels of mercury.
- Pregnant women should not consume too much of these species of fish because it can affect the baby's developing brain.
- You can limit your exposure to mercury by adding other sources of protein to your diet.

WATCH THE FULL VIDEO and to find out more, visit [www.bcrc-caribbean.org](http://www.bcrc-caribbean.org)

Facebook: Basel Convention Regional Centre - Caribbean  
Twitter: @bcrcaribbean  
Instagram: @bcrcaribbean  
LinkedIn: @BCRC-Caribbean

Let's move to a Mercury Free Society!

## Mercury in Skin Lightening

**MERCURY, A TOXIC ELEMENT**  
that can cause damage to our nervous system, liver and kidneys in addition to a number of varying symptoms.

Mercury can be found in many markets in skin lightening or brightening products.

**Can be dangerous for you and your child.**  
Be mindful and check the labels of skincare products that you purchase.

- Mercury can adversely affect babies developing brains in the womb.
- Elder children and toddlers are at risk of exposure from product residue through skin to skin contact.
- Mercury absorbed by the body can have severe long-term effects.

WATCH THE FULL VIDEO and to find out more, visit [www.bcrc-caribbean.org](http://www.bcrc-caribbean.org)

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Let's move to a Mercury Free Society!

## The Mercury Cycle

**MERCURY, A TOXIC ELEMENT**  
Can cause damage to our nervous system, liver and kidneys in addition to a number of varying symptoms.

**Naturally Occurring**  
Mercury can be found in the pores and crevices of the earth's crust, and can be released into the environment during natural volcanic events such as earthquakes and volcanic eruptions.

**Compounding Negative Effects**  
Over time, mercury in the atmosphere and the environment may get into waterbodies and enter the aquatic food chain, where it accumulates in larger species of fish that we may consume.

**Harmful Human Activity**  
Mercury has been used in some industrial processes and in the production of some products, but this continued use can increase levels of exposure in the atmosphere, as well as in our water sources.

WATCH THE FULL VIDEO and to find out more, visit [www.bcrc-caribbean.org](http://www.bcrc-caribbean.org)

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Let's move to a Mercury Free Society!

## Minamata Convention & The Caribbean

**MERCURY, A TOXIC ELEMENT**  
Mercury can cause damage to our nervous system, liver and kidneys in addition to a number of varying symptoms.

**COMBATING THE ISSUE**

**Minamata Initial Assessments**  
Countries are carrying out Minamata Initial Assessments to establish a baseline of industrial mercury use, mercury emissions, mercury-containing products and mercury stocks, mercury in the environment, mercury in food, and mercury in waste.

**National Implementation Plans**  
Countries are developing national plans to phase out mercury added products, for strengthening product regulations, promoting the use of alternative products, mercury free to the public, and encouraging proper storage and disposal efforts.

**We're making the move to a Mercury Free Society!**  
Mercury, while naturally occurring is widely used in some everyday products and industrial processes and can be released to the atmosphere, soil and water where products are damaged and not disposed properly.

**The Minamata Convention on Mercury** is a global treaty to protect human health and the environment from the adverse effects of mercury exposure.

As of October 2019, 18 countries from the Caribbean have ratified the Convention, with others in the region also taking meaningful steps towards this action.

WATCH THE FULL VIDEO and to find out more, visit [www.bcrc-caribbean.org](http://www.bcrc-caribbean.org)

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# COMMUNICATION OPTIONS AND STRATEGY- MIA CARIBBEAN PROJECT

- ▶ Animated Videos and Complimentary Flyers
  - ▶ 90 second animated videos that tied to the POPs campaign
  - ▶ Targeted at younger audience



**CAPTAIN MINAMATA**  
**VS MERCURY**

LET'S GO  
MERCURY FREE!

**MERCURY, A TOXIC ELEMENT**  
that can cause damage to our nervous system, liver and kidneys in addition to a number of varying symptoms.

**Household Products with Mercury**  
People can be exposed to mercury and its harmful compounds when these products are damaged or disposed of improperly.

**Safeguard Yourself and Your Family**  
Proper collection systems for end of life products and environmentally sound storage and disposal mechanisms could help reduce exposure to mercury from household products.  
Purchasing mercury-free products would safeguard you and your family and help us to become a mercury-free society.

**WATCH THE FULL VIDEO**  
and to find out more, visit [www.bcrc-caribbean.org](http://www.bcrc-caribbean.org)

Facebook - Basal Convention Regional Centre - Caribbean  
Twitter - @bcrc.caribbean  
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LinkedIn - @BCRC-Caribbean

BCRC CARIBBEAN  
UN environment programme  
gef GLOBAL ENVIRONMENT FACILITY



# COMMUNICATION OPTIONS AND STRATEGY- MIA CARIBBEAN PROJECT

- ▶ BRI developed brochures for mercury monitoring in the Caribbean Region
  - ▶ Skin-Lightening Creams and Cosmetics
  - ▶ People
  - ▶ Seafood
  
- ▶ This information was generated to help raise awareness and interest for stakeholders (e.g., policy makers, NGOs, the public)





# COMMUNICATION STRATEGY AND OPTIONS- MIA CARIBBEAN PROJECT

- ▶ State of Mercury Brochures for each MIA country
- ▶ Target audience: government, NGOs, the public
  - ▶ Summary of Convention
  - ▶ Country-specific findings of MIA
  - ▶ Mercury and Human Health
  - ▶ Mercury and Ecological Health
  - ▶ Summary of recommendations (often including fish card)

**The State of Mercury in Antigua and Barbuda**

The Minamata Convention on Mercury is the first global agreement specifically designed to address contamination from a heavy metal. Opened for signature on October 10, 2013 and entered into force on August 16, 2017, the Convention seeks to address issues related to the use and release of mercury in trade and in industrial processes. The treaty also addresses major sources of atmospheric emissions and releases of mercury into the environment, as well as long-term storage and disposal of mercury and mercury compounds.

Under the Minamata Convention, individual countries are charged with protecting human health and the environment from the risks of mercury exposure, which involves systematically controlling mercury emissions and releases, including phasing out the use of mercury in certain products and processes.

In order to assist with preparations for the ratification and implementation of the Convention, the Government of Antigua and Barbuda conducted a Minamata Initial Assessment (MIA) in 2017. This brochure summarizes the major findings of the MIA in Antigua and Barbuda.

**The Status of Mercury in Trinidad and Tobago**  
The Minamata Initial Assessment

The Minamata Convention on Mercury is the first global agreement specifically designed to address contamination from a heavy metal. Opened for signature on October 10, 2013 and entered into force on August 16, 2017, the Convention seeks to address issues related to the use and release of mercury in trade and in industrial processes. The treaty also addresses major sources of atmospheric emissions and releases of mercury into the environment, as well as long-term storage and disposal of mercury and mercury compounds.

Under the Minamata Convention, individual countries are charged with protecting human health and the environment from the risks of mercury exposure, which involves systematically controlling mercury emissions and releases, including phasing out the use of mercury in certain products and processes.

In order to assist with preparations for the ratification and implementation of the Convention, the Government of Trinidad and Tobago conducted a Minamata Initial Assessment (MIA) in 2017. This brochure summarizes the major findings of the MIA in Trinidad and Tobago.

**The State of Mercury in Saint Kitts and Nevis**

The Minamata Convention on Mercury is the first global agreement specifically designed to address contamination from a heavy metal. Opened for signature on October 10, 2013 and entered into force on August 16, 2017, the Convention seeks to address issues related to the use and release of mercury in trade and in industrial processes. The treaty also addresses major sources of atmospheric emissions and releases of mercury into the environment, as well as long-term storage and disposal of mercury and mercury compounds.

Under the Minamata Convention, individual countries are charged with protecting human health and the environment from the risks of mercury exposure, which involves systematically controlling mercury emissions and releases, including phasing out the use of mercury in certain products and processes.

In order to assist with preparations for the ratification and implementation of the Convention, the Government of Saint Kitts and Nevis conducted a Minamata Initial Assessment (MIA) in 2017. This brochure summarizes the major findings of the MIA in Saint Kitts and Nevis.

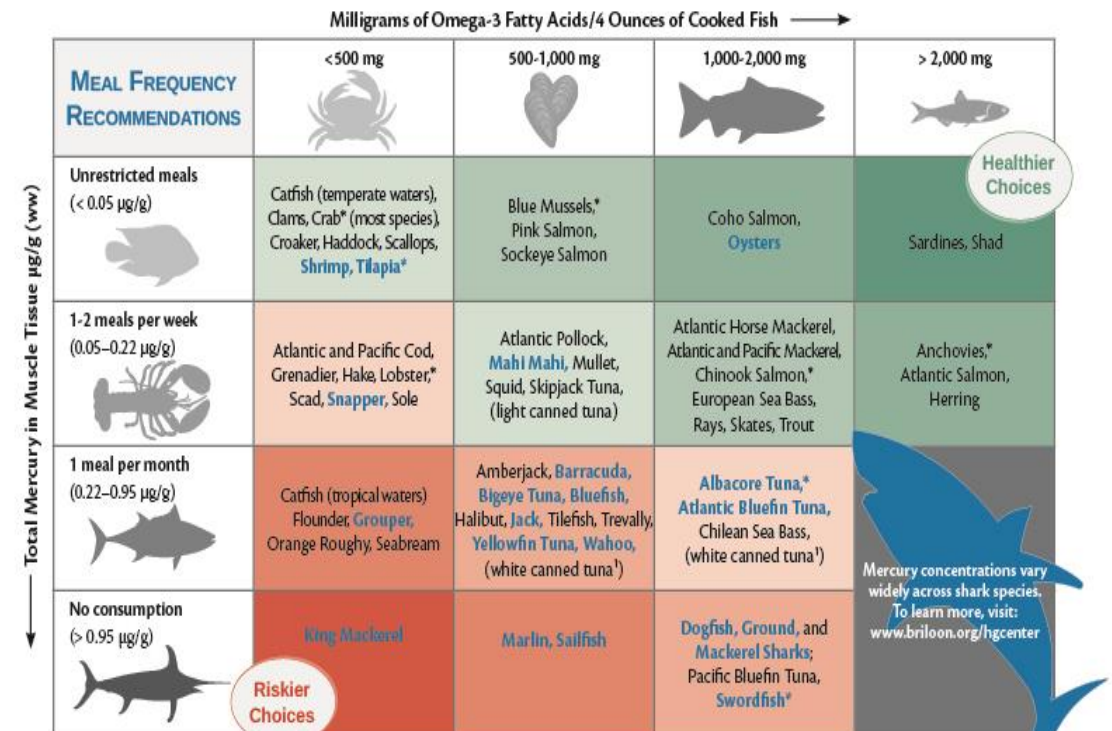
The MIA was conducted with financial assistance from the Global Environment Facility (GEF) and was implemented in collaboration with UN Environment and the Basel Convention Regional Centre for the Caribbean based in Trinidad and Tobago. This brochure summarizes the major findings of the MIA in Saint Kitts and Nevis.

- A review of institutional and capacity needs for implementation of the Convention;
- An assessment of national regulations, policies, and legislation to assist with preparations for compliance with the obligations of the Convention; and
- An identification of the primary sources of mercury emissions and releases as part of a detailed National Mercury Profile.

# COMMUNICATION OPTIONS AND STRATEGY-MIA CARIBBEAN PROJECT

- ▶ Fish cards were created for the Caribbean region
  - ▶ Fish are an important part of the local diet and economy
  - ▶ Highlights healthier versus riskier choices
  - ▶ Important to message without raising unnecessary alarm with the public
- ▶ Fish cards can be developed for each country based on findings from sampling efforts of this current project

## Global Health Trade-off for Mercury and Omega-3 in Seafood: Caribbean



Data Sources: BRI's Global Biotic Mercury Synthesis (CBMS) Database, U.S. Environmental Protection Agency, U.S. Food and Drug Administration  
<sup>1</sup> White canned tuna can be albacore or yellowfin.

\*Pictured

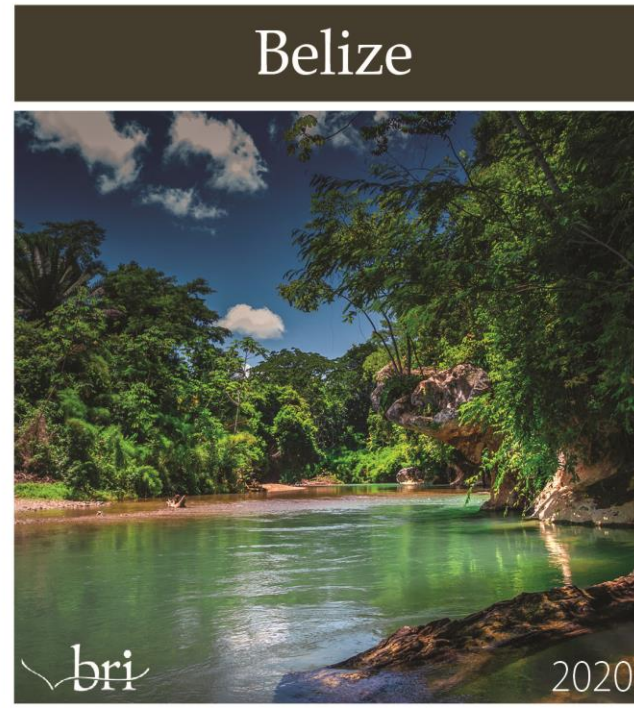


# COMMUNICATION STRATEGY AND OPTIONS- MIA CARIBBEAN PROJECT

- ▶ BRI developed Technical Briefing for Belize (primarily because of the volume of available information on mercury in the environment)
- ▶ Same approach could be used for this project for each country once more mercury data is generated – please let us know of your interest



## Mercury Monitoring



A Series Publication for the Caribbean Region Mercury Monitoring Network

## Ecosystem Sensitivity Mapping



### Why Map Ecosystem Sensitivity?

Mapping ecosystem sensitivity spots helps identify critical areas where mercury affects important human food sources or threatened and endangered fish and wildlife species.

Mercury emissions and deposition from contaminated sites are important, but explain only part of the spatial story of mercury pollution. Ecosystem sensitivity and food web relationships help further describe the actual risks to human and ecohealth.

Elemental mercury is converted to a more toxic organic form through the process of methylation, which occurs with the help of bacteria found primarily in wet areas. Variations in methylmercury (MeHg) concentrations may occur in different parts of the food web depending on the sensitivity of the ecosystem to mercury input.

Where methylmercury availability is elevated, fish and wildlife may exhibit harmful mercury concentrations and represent the places that will require the most attention by countries and global monitoring programs.

### Minamata Convention on Mercury—A Global Effort

Participation in this project will help Belize comply with four Minamata Convention Articles, including:

**Article 12:** Requirements for identification and evaluation of contaminated sites

**Article 16:** Health aspects, which details requirements to develop strategies to identify and protect populations at risk and to promote health care services

**Article 18:** Public information and awareness, which outlines the need to develop outreach programs

**Article 19:** Research, development and monitoring, which outlines the need to develop inventories and assess impacts of mercury on human health and the environment.



# COMMUNICATION STRATEGY AND OPTIONS- MIA CARIBBEAN PROJECT

- A regional Caribbean mercury monitoring network document has been created for this workshop
  - Options for the future include:
    - An annual regional report
    - Country-specific reports
- Could be presented to the regional and global COP meetings

## *Caribbean Region* Mercury Monitoring Network

### State of the Region



2021

# MANAGING MERCURY IN THE CARIBBEAN- COMMUNICATION STRATEGY AND OPTIONS

## Overall Communication Strategy

- Identify target audience (e.g., policy makers, technical stakeholders, general public)
- Determine messaging based on scientific findings (messaging should be presented in succinct, clear language to engage audience who may not be experts in the field)
- Decide on platform for raising awareness (website, local workshops, social media such as Instagram, videos, press conferences, legislative hearings)
- Engage collaborations/find synergies in region when possible and focus on sustainability and capacity building