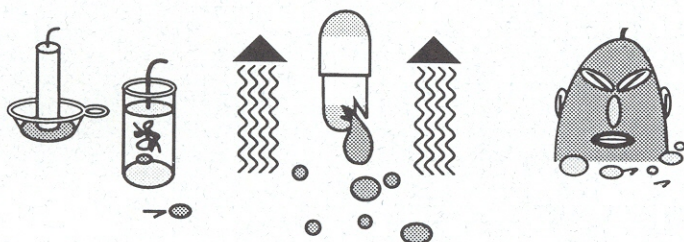


HISPANIC HEALTH COUNCIL
ENVIRONMENTAL HEALTH UNIT
INFORMATION BOOKLET NO. ①

METALLIC MERCURY

(Azogue)



AND YOUR HEALTH

AN EDUCATIONAL GUIDE
FOR HEALTH CARE PROVIDERS AND
AZOQUE DISTRIBUTORS

Hartford, CT

PURPOSE

To create awareness on the health risks of using metallic mercury (azogue).

The Hispanic Health Council (HHC) is a nonprofit organization, dedicated to improving the living conditions and the health of the Hispanic population and other low income groups. The main purpose of this booklet is to inform the health professionals that some of their Hispanic and West Indians patients may be using metallic mercury in rituals that may be affecting their health. Health professionals should be prepared to inform their patients about **azogue** poisoning, and where to get more technical assistance.

Another objective of this booklet is to create awareness among the traditional healers and the azogue distributors about the harmful effects the use of azogue can bring to their clientele. A less technical, shorter brochure on azogue is also available to the general public.

The ultimate goal of this booklet is to inform and to protect the public's health. The HHC respects and defends the traditions and religious beliefs of the Hispanic community and other ethnic groups, but is also conscious that some of these traditional practices may be hazardous to their health. In this booklet the HHC lists other safe **botánica** products that may be used instead of azogue.

SPECIAL THANKS

This booklet is the product of numerous consultations with the Hispanic population of Hartford, particularly **espiritistas**, **santeros**, **santiguadores**, and botánica owners. The Environmental Epidemiology and Occupational Health (EEOH) section of the State of Connecticut Department of Public Health and Addiction Services provided technical assistance in support of this educational project. This project was funded by the DPHAS through a grant from the Agency for Toxic Substances and Disease Registry. Special thanks goes to Dr. Merrill Singer (HHC), Chris Lopez (HHC), Brian Toal (EEOH), and the rest of the staff of both agencies for their assistance in the editing of this document.

INTRODUCTION: WHAT IS THE PROBLEM WITH AZOGUE?

The use of azogue may be affecting the health of your patients or clients.

This booklet may be used to respond to the most common questions that your patients or clients may have about metallic mercury. These questions are: ① What is metallic mercury? ② What is this substance used for? ③ Is there a safe way to use this type of mercury? ④ How can this metal affect the health? ⑤ How can we measure the amount of metallic mercury in the body or home? ⑥ What can be used in place of this toxic substance? ⑦ How can I find out more information about this liquid metal?

①

WHAT IS AZOGUE?

Metallic mercury (azogue) is a very toxic, silvery liquid metal.

In the English and Spanish languages **quicksilver** and **azogue** are popular names for **metallic mercury**. The Hispanic **botánicas** are stores that sell azogue and other popular religious and healing products. Azogue **is not** the only type of mercury. The information provided in this booklet **is limited** to the use of azogue by the Hispanic population of Connecticut but may be useful in other areas of the country.

Azogue can easily be identified when seen because it is a shiny, silver-white liquid metal. This heavy and slippery metal easily breaks up into many small drops, which can join again with equal ease. Azogue has other less obvious characteristics: 1) it does not dissolve in water or alcohol; 2) it has no smell but has a metallic taste; 3) it is liquid under normal room temperature; 4) it evaporates when coming into contact with air, and evaporation increases with temperature; 5) its vapors are invisible to the eye. When azogue gets into the environment (air, home, store, etc.), it stays there for a long time.

There are other types of mercury besides azogue. All types of mercury **are** toxic. Some people confuse the **silvery** metallic mercury with the **red** mercury (Spanish **mercurio**) used to heal wounds and sold in drug stores, of which **Mercurochrome** is one brand.

Azogue is sold in botánicas in three to five ounce capsules for spiritual “works” (**trabajos**). Azogue is also found in most thermometers used to measure body temperature, but in much smaller amounts than in the capsules sold at the botánicas.

Azogue Vapors

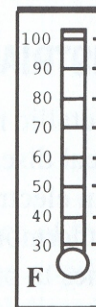
Azogue **does not need** to be heated to start its evaporation. Azogue starts to evaporate as soon as it enters in contact with air. However, heat helps to make the azogue evaporation quicker and to spread wider. The azogue capsules **are not** sealed, therefore this liquid metal is always escaping from this type of container. Azogue will stick to almost anything: gold, carpets, draperies, clothing, washer, drier and cracks in floors or furniture.

Azogue evaporates and slowly spreads, staying in the room for many months. More azogue vapors will enter the lungs during the cold season as people heat their homes and close their windows, so the heat (and the azogue) does not escape. It is important to remember that people **can not** see or smell the azogue vapors.

The azogue that escapes from a broken thermometer is enough to make individuals sick. Children have been poisoned after breaking a thermometer and breathing azogue vapors.

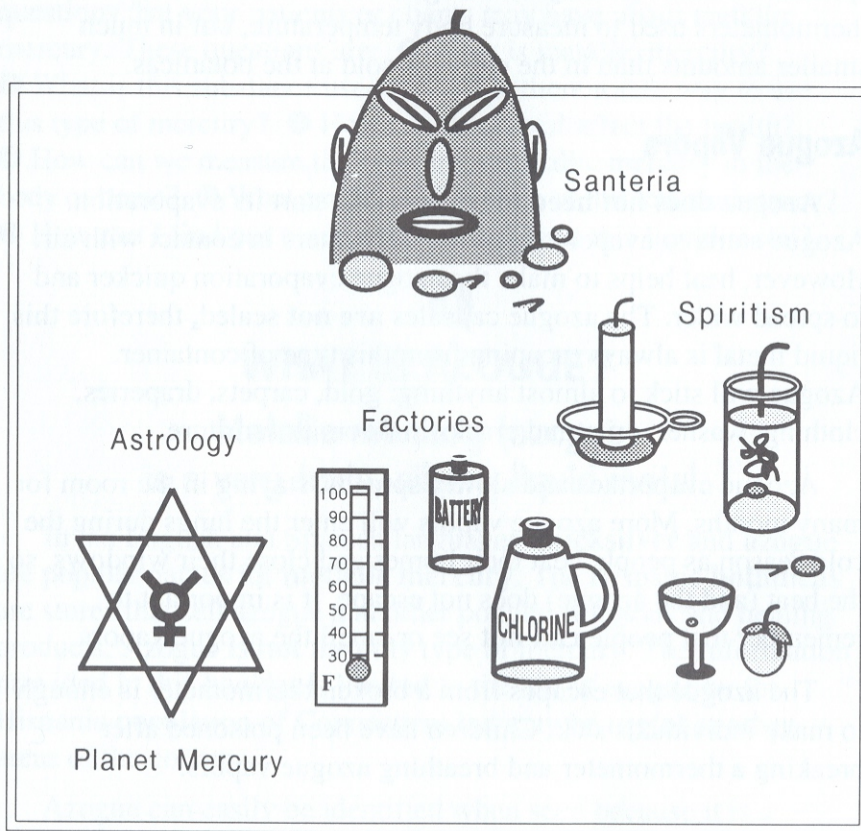


THE AZOGUE CAPSULES HAVE UP TO 10 TIMES (3 TO 5 OUNCES) MORE AZOGUE THAN ONE THERMOMETER.



WHAT IS AZOGUE USED FOR?

Azogue is used for industrial and spiritual works.



INDUSTRIAL USES

Metallic mercury was used **in the past** as medicine for venereal diseases and to coat mirrors. This liquid metal is **now** used in electrical equipment (e.g., batteries), weather instruments (e.g., thermometers), paints, and dental works. It is also used in factories to produce chlorine.

SPIRITUAL USES

Why it is used

Azogue is used according to the faith and traditions of each person. It is believed that azogue has spiritual powers similar to its characteristics as a metal. Just as azogue moves quickly, likewise it “speeds” the “works” of **santeros** and **espiritistas**.

In Santería or **Lucumí** religion, azogue “works” for **Elegguá**, an African **Yoruba** god and one of the **Siete Potencias Africanas** (The Seven African Powers). Elegguá helps to open paths and remove obstacles. Azogue is also one of the seven basic metals of Santería.

Like Elegguá, it is believed that the metal azogue can give protection (**resguardo**) or it may give **cantazo** (strike the person), bring harm and illness. After all, azogue is believed to be like Elegguá, “a spoiled, playful child always quick to change his mind”.

Manner of Use

Spiritually, azogue is:

- ◆ swallowed
- ◆ applied to the skin (e.g., rubbed, in baths, perfumes)
- ◆ placed in oil lamps or glass-encased candles
- ◆ used for floor washes.

Some Uses

There are various reasons for using azogue spiritually:

- ◆ protections or amulets
- ◆ love spells
- ◆ petitions (**ebos**) to the Yoruba gods
- ◆ spiritual cleansing (**despojos**).

In astrology, azogue is said to be under the influence of the planet **Mercury**, and is used for protection and to speed good luck. Azogue is also used to cure **empachos** (gastrointestinal disorders).

③ IS THERE A SAFE WAY TO USE AZOGUE?

NO! It is very dangerous to use azogue and breath its vapors.

A small amount of azogue evaporates into the air when it is used in baths, rubbed on the skin, and passed inside *resguardos* or perfumes than when applied directly on floors. There is **always** a risk of breathing azogue vapors when it is used **in any way**.

Breathing Azogue Vapors

Azogue actually **does more harm** to the health when inhaled than when ingested, although neither use is recommended. This metal evaporates, enters the lungs, passes quickly to the kidneys and central nervous system through the blood stream, and only a small amount leaves the body.

Some of the inhaled azogue is released through the urine, the excrement, and when the person exhales. However, azogue will remain in the nervous system for a long time.

Drinking Azogue

If someone ingests azogue, most of it goes through the intestines and does not enter the blood stream easily. Most of the ingested azogue is expelled as body waste through the urine and the excrement. Of the ingested azogue, around half will exit the body after 35 to 90 days. On the other hand, the same amount of ingested azogue can make a child sick because the maturing organs are very sensitive.

Applying Azogue to the Skin

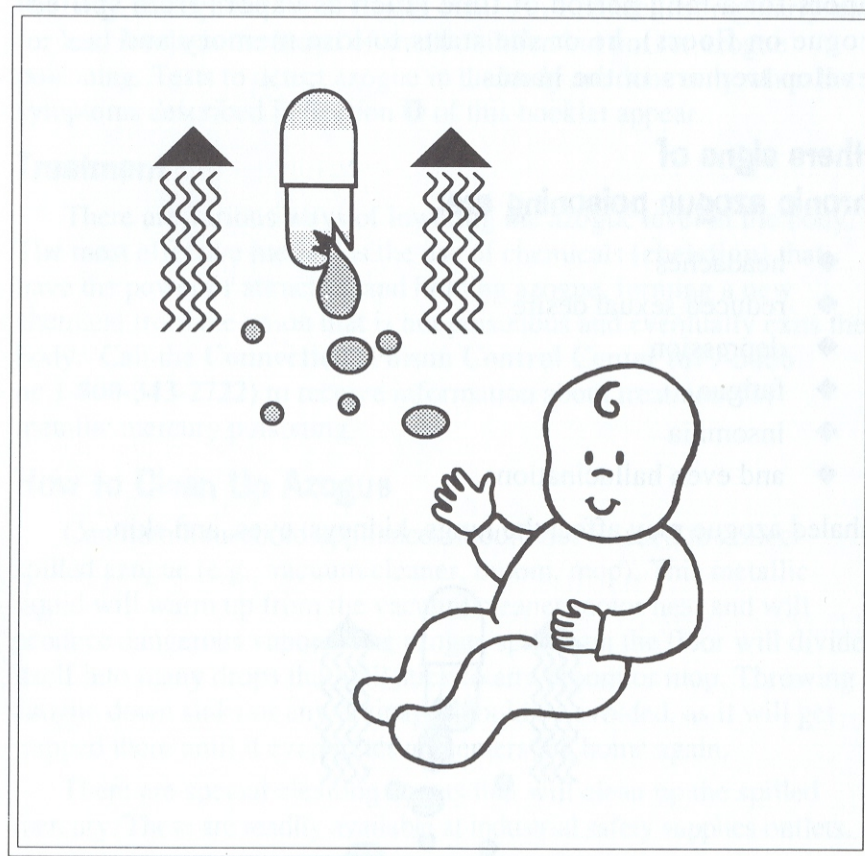
Azogue that is rubbed on the skin or used in spiritual baths may evaporate and enter the body as the person breaths. Azogue will also enter the blood stream directly through the skin and will end up in the kidneys and the central nervous system.

Azogue and Children

Azogue has the greatest effect on the fetus and small children, and their developing central nervous systems.

AZOGUE WILL REACH THE FETUS OF A PREGNANT WOMAN.

It is important to protect pregnant women and small children from azogue. This toxic substance will enter the fetus through the circulatory system of the mother and may produce permanent damage to the child's developing organs (e.g., brain, kidneys, lungs, and liver).



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HOW CAN AZOGUE AFFECT YOUR HEALTH?

Azogue may cause brain damage and even death.

The type of damage to the body caused by azogue is determined by how much and how long the person breaths it. Azogue vapors may be fatal if inhaled in large amounts for even a brief period of time.

The most affected part of the body is the nervous system. The harm done by azogue is similar to lead poisoning, as both metals affect the brain. When the individual is exposed to azogue vapors for a long period of time (such as vapors from spilled azogue on floors), he or she starts to lose memory and develop tremors in the hands.

Others signs of chronic azogue poisoning are:

- ◆ headaches
- ◆ reduced sexual desire
- ◆ depression
- ◆ fatigue
- ◆ insomnia
- ◆ and even hallucinations.

Inhaled azogue may affect the lungs, kidneys, eyes, and skin.



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HOW CAN WE MEASURE THE AMOUNT OF AZOGUE IN THE BODY OR HOME?

There are laboratory tests and equipment for its detection.

How to Test

You can not smell or see azogue vapors. The only way to know if there are azogue vapors in the home is with a small machine (mercury vapor sniffer) that measures the level of azogue in the air in the home. This test takes a few minutes and the results are immediate.

There are laboratory tests that measure the level of azogue in the body: blood, urine, hair, breath, and skin. The urine test is the most effective for cases of contamination with azogue vapors. On the other hand, blood and hair tests are better in cases where the azogue enters the body through the food. Health clinics in Connecticut regularly test for lead levels in the blood of small children but not for azogue poisoning. Tests to detect azogue in the body are done only when the symptoms described in Section 4 of this booklet appear.

Treatment

There are various ways of lowering the azogue level in the body. The most effective method is the use of chemicals (**chelation**) that have the power of attracting and holding azogue, forming a new chemical from the union that is not poisonous and eventually exits the body. Call the **Connecticut Poison Control Center (679-3456 or 1-800-343-2722)** to receive information about treatment for metallic mercury poisoning.

How to Clean Up Azogue

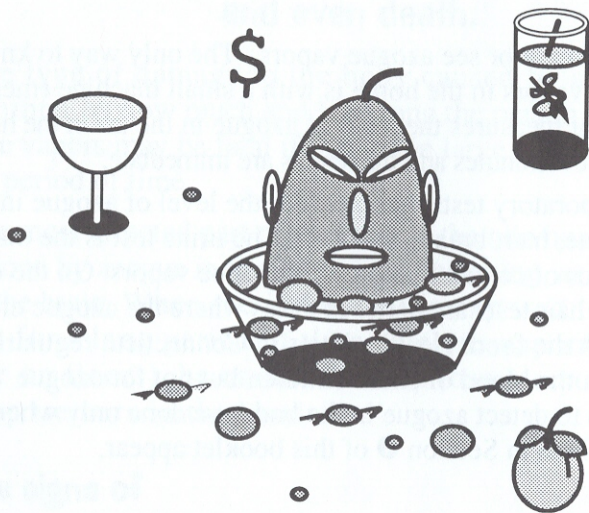
Common household appliances should not be used to collect spilled azogue (e.g., vacuum cleaner, broom, mop). This metallic liquid will warm up from the vacuum cleaner motor heat and will produce dangerous vapors. The azogue spilled on the floor will divide itself into many drops that will stick to any broom or mop. Throwing azogue down sinks or any drainage should be avoided, as it will get trapped there until it evaporates and enters the home again.

There are special cleaning agents that will clean up the spilled mercury. These are readily available at industrial safety supplies outlets.

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WHAT CAN BE USED IN PLACE OF AZOGUE?

Botánicas have other products
as effective as azogue.



Spiritual Guides Recommend

You can suggest to your patient or client alternatives for azogue by using the following information as a guide. Many santeros and espiritistas prefer to work with things closer to the original African and Caribbean Indian traditions. Ingredients that come from places like mountains and forests (**el monte**) are always the healer's first choice for spiritual "works". These natural ingredients are considered more powerful than industrialized synthetics such as the bottled and canned baths and perfumes sold in the botánicas.

Other Sources of Information

Alternatives for azogue can be found in the books sold in the botánicas. Among the most popular and informative are "El Monte" by Lydia Cabrera and "Santería" by Migene González-Wippler (the latter is published in Spanish and English).

Some Substitutes for Azogue

Some espiritistas and santeros suggest others things that may be used in place of azogue. If the azogue user wants to speed ("precipitate") or give strength to a spiritual work, he or she may use stronger things than azogue such as **Precipitado Rojo** or **Sangre de Dragón**. Some spiritual workers recommend the use of gloves to avoid touching the Precipitado Rojo because of the great spiritual power of this substance.

For personal baths, herbs like **rompe zaragüey** can be used. For spiritual washes (**riegos**) and fumigation (**sahumerios**) of the home and business, there are many products considered equal to or better than azogue. To cleanse (**despojar**) evil influences from the home, the individual may also use **pasote** and other plants combined with **Agua de Florida**. However, if he or she prefers things already prepared, the **Bomba Santera** and other similar products sold at the botánicas may be used.

Bottled botanica products such as **kreso**, **aguarras** or **ammoniac** may be used for house washes but they are **as poisonous** as many commonly used household cleaners bought at supermarkets.

For petitions to Elegguá and the other Siete Potencias Africanas, the person may use the Precipitado Rojo and those ingredients preferred by each orisha.

Other Substitutes for Azogue

For personal protection, there are also many substitutes for azogue. To protect the stomach from evil works, a person can may drink a glass of water with three drops of Agua de Florida.

Botanica clients may also use holy water to protect the stomach from "works". Spiritual workers say that Agua de Florida is good for the nerves and also lowers blood pressure, when combined with a medical treatment. For **empachos**, the person may combine the use of oil rubbings on the stomach with medical treatment. An empacho may be a sign of a **serious illness**.

Instead of preparing a personal protection (resguardo) with azogue, other things can be used. One type of resguardo is prepared with a **San Miguel Arcángel** prayer card (**oración**), a **Santa Cruz de Caravaca** prayer card, a **San Miguel** sword (**espada**), incense (**incienso**), myrrh (**mirra**), and other things according to particular traditions. These things may be carried in a small red bag, in a purse or tied to the body. For resguardo, the faithful may carry with him or her a Las Siete Potencias Africanas medallion.

There are many spiritual substitutes for azogue that we cannot include here, not just because of lack of space, but mainly because we are not spiritual workers but community health educators. The azogue substitutes presented here are only general examples.



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FOR MORE INFORMATION



ENVIRONMENTAL HEALTH UNIT

Hispanic Health Council

(860) 527-0856



ENVIRONMENTAL AND OCCUPATIONAL HEALTH ASSESSMENT PROGRAM

State of Connecticut Department of Public Health

(860) 509-7742



CONNECTICUT POISON CONTROL CENTER

University of Connecticut

Farmington, CT 06030

(860) 679-3456 or 1-800-343-2722 (24 Hours)