

## **Working with Refugees from Burma to Prevent Childhood Lead Poisoning**

This document provides information on the prevalence of childhood lead poisoning among recent Burmese refugees, and prevention issues specific to this population. Also included is a discussion of some of the cultural and health practices common among Burmese refugees. It is intended for staff at resettlement organizations and local health departments, as well as health care providers, in order to facilitate effective communication with Burmese refugees on issues related to lead poisoning prevention, health care, and general health promotion.

The information on cultural and communication issues contained below comes directly from the source documents listed in the references section, and does not represent an official Department of Health position or opinion regarding Burmese culture. Content from these sources has been edited to conform to this document's format.

Over the last ten years, about 37,000 Burmese refugees have settled in New York State. Though Burmese refugees have settled in almost every county of New York, the majority have settled in a handful of counties, including Albany, Broome, Erie, Monroe, Nassau, Oneida, Onondaga, and New York City (U.S. Dept. of State, 2009). The U.S. Government plans to resettle another 100,000 Burmese refugees throughout the U.S. over the next ten years, so additional refugees can be expected in New York State (CDC, 2009).

### **Lead Poisoning Prevalence Among Burmese Refugees**

Data from six states with the highest numbers of resettled Burmese refugees, collected between 2007 and 2008, revealed that 66 (13%) of 508 Burmese refugee children ages six months to five years had elevated blood lead levels (EBLLs), which the Centers for Disease Control defines as a blood lead level (BLL) of  $\geq 10$  mcg/dL. This is approximately eight times higher than the EBLL prevalence of 1.6% for children born in the U.S. The initial median blood lead level for those Burmese refugees with an EBLL was 11.8 mcg/dL (range 10-40 mcg/dL). Because initial refugee BLL screening in the U.S. may occur up to 3 months after arrival, it was unclear whether the lead exposures occurred in the Thailand refugee camps prior to resettlement, or after arrival in the U.S. (CDC, 2008).

To help answer the question of where and how Burmese refugee children were being poisoned, the CDC conducted an investigation in 2009 of the Thai refugee camps. Investigators found that 5.1% of U.S.-bound Burmese refugee children ages 6 months to 14 years had a BLL of  $\geq 10$  mcg/dL, with a prevalence of 14.4% in children under the age of two years (CDC, 2009).

For refugees settling in the U.S. from throughout the world, the CDC has concluded that the majority of cases of childhood lead poisoning occur after resettlement in the U.S. (CDC web site: [www.cdc.gov/nceh/lead/tips/refugees.htm](http://www.cdc.gov/nceh/lead/tips/refugees.htm)). For Burmese refugee children, the 2009 investigation indicates that there is a relatively high risk of lead exposure in the camps as well.

### **Risk Factors for Elevated BLLs Among Refugees in the U.S. include:**

- 1) Living in older homes with lead hazards
- 2) Cultural practices and traditional medicines
- 3) Compromised nutritional status
- 4) Lack of awareness about the dangers of lead

**1) Living in Older Homes (Pre-1978):** The CDC reports that environmental investigations of cases of childhood lead poisoning among refugees have revealed lead-based paint hazards in the residences, and some contamination in soil play areas, with risks exacerbated by chronic malnutrition (CDC web site: [www.cdc.gov/nceh/lead/tips/refugees.htm](http://www.cdc.gov/nceh/lead/tips/refugees.htm)). In New York, many Burmese refugees live in older homes, which often have lead-based paint hazards.

**2) Cultural Practices and Traditional Medicines:** In 2009, in Fort Wayne, Indiana, two folk remedies, **Daw Tway** and **Daw Kyin** (generically referred to as “**wonotsay**”), were found to contain high levels of lead and arsenic. These products are commonly used as digestive aids for children in the Burmese refugee population. In New York State, several years ago, an 18-month-old Burmese child who came from a refugee camp in Thailand was identified with an elevated blood lead level. The child was regularly drinking a **rust or iron-colored powder** mixed with water. The interpreter said that the remedy was taken once a week to enrich the blood. This was one of a number of health remedies the family brought in a box from the refugee camp. Once the family was instructed to use no products from their homeland, within nine months the child’s lead level came down to below 5 mcg/dL.

In the June, 2009 CDC investigation, a major risk factor associated with elevated BLLs was exposure to **motor vehicle batteries**, frequently used for electricity inside camp homes. CDC investigations in refugee camps have found several other items contaminated with lead, including the traditional infant remedy “**Daw Tway Go Mo Dah**” (the same or similar to “Daw Tway” above). Investigators also found lead in an unlabeled red cooking spice, likely the same as “**Asay Mo**” (Burmese) or “**Mo He Gamoo**,” (Karen) and **cooking pots** with the brand name “**Na Myein Pya**” or “**OK8/OK9**.” Samples of **Tum Shwe War**, a chest rub, have been found to contain arsenic, which often exists together with lead in nature. These traditional items are sometimes brought to the U.S.

**3) Compromised Nutritional Status:** Anemia (iron deficiency) is common for Burmese refugee women and children, and can increase lead absorption. Dietary restrictions during pregnancy, especially among ethnic groups, make prenatal nutrition counseling essential. The CDC 2009 investigation in the refugee camps found moderate to severe anemia in 16% of children tested. Anemia was found to be significantly associated with an elevated BLL, as it has in other studies. Anemia and inadequate diet are also associated with pica (eating non-food items such as soil), which can increase risk of lead exposure.

**4) Lack of Awareness:** Though studies specifically on recently resettled Burmese refugees’ understanding of lead poisoning risks have not been identified, it is reasonable to suspect that there is a lack of awareness about the dangers of lead and those risk reduction strategies that are pertinent to older U.S. housing. Literacy levels among refugees are variable, and English language proficiency is generally low. Practices in the camps, such as eating on the floor and minimizing water use, could also increase risk of lead exposure when continued in the U.S.

**More information** on working with refugees to prevent childhood lead poisoning is available from the Center for Disease Control’s *Lead Poisoning Prevention in Newly Arrived Refugee Children Tool Kit*, at: [www.cdc.gov/nceh/lead/Publications/RefugeeToolKit/Refugee\\_Tool\\_Kit.htm](http://www.cdc.gov/nceh/lead/Publications/RefugeeToolKit/Refugee_Tool_Kit.htm)

## **Considerations for Effective Cross-Cultural Communication: Working with People from Burma**

The following comments are from experts who have worked extensively with Burmese refugees. Although they do not address directly the issue of lead poisoning prevention, they describe some of the common practices of the Burmese community.

When describing populations consisting of millions of people, generalizations are inevitable. It is our intent to facilitate communication across cultures, while recognizing that a broad description of a group can never adequately describe or anticipate the characteristics of individuals within that group. Furthermore, Burma is comprised of a number of ethnic groups, each with its own customs and cultural practices. The U.S. Department of State has estimated that 50% of newly arriving refugees are ethnic Karen, 25% ethnic Burmese, 15% Mon, and the remaining 10% are a mix of Chin and other ethnic groups. Consider the following in your communications and interactions:

Many Karen are soft-spoken and will be surprised or worried by American directness of speech, voice levels, and body language. With the Karen, a quiet, low-key style of communication works best, accompanied by friendly, reassuring smiles. It is generally not good to approach issues too directly. When a Karen folds his arms in front of him while talking to you, it is a sign of respect, not aggression or defensiveness.

If a Karen is offered something, such as educational material, s/he may be reluctant to take it, even if the item is needed. Persevere gently. Karen do not like to boast or put themselves forward. They also do not like to complain.

It is good to re-ask a question to which no answer has yet been received, perhaps in different ways. Do not be upset if someone answers a question with “No,” when an affirmative answer might seem more appropriate. Saying “no” is often a way to be modest. Refugees’ politeness and modesty can be a source of misunderstanding. In the words of one worker, “The refugees give you the answer they think you want to hear.”

It is disconcerting for a Karen to be touched by a stranger, however friendly or affectionate the intention. Do not touch people on the head, which is considered the spiritually highest part of the body. Exceptions are made for medical exams.

Do not tower over people. Avoid walking in front of others. Lower your head a little if you have to pass close in front of them. Go behind those who are seated, or ask first and apologize. Normally, Karen walk behind those who are their seniors and elders.

Shoes are not worn in the home. Some refugees might say to you that it’s not necessary to remove your shoes, because they know this is not done in many homes in the U.S. However, removing shoes before entering a home is a show of respect. Also, discussions in the home could occur while sitting on the floor, and this is more appropriately done without shoes.

Pointing one’s finger, hand or foot at another person is considered rude. When handing something to another person, it is polite to use both hands, not just one.

Be aware of age conventions when dealing with families, especially if it is easier—but not necessarily more tactful—to communicate with younger family members who may speak more English. Younger persons do not sit at a level higher than that of an elder in the same room.

### **Mental and Physical Health**

The information in this section is intended to alert providers of health issues that might otherwise not be directly discussed but could influence the interaction, and of the potential need for additional services and information.

Some refugees have experienced forced labor, forced relocation, loss and/or destruction of property, rape, and killing of family members. A CDC study of Karenni refugees found prevalence rates were 41% for depression, 42% for anxiety, and 4.6% for posttraumatic stress disorder. General rates for depression and anxiety in the U.S. population are 7% to 10%. Refugees appeared to function relatively well as a whole.

The families in refugee camps have had access to only basic medical care for many years. Some people have become used to self-medicating and, in the interest of thrift, of using as little as possible. This may be a problem when it comes to following a course of medication.

In the relative safety of the camps, children were allowed to roam and play freely. Their parents might continue this practice in the U.S., not realizing the dangers of busy streets.

Among some Karen men, drinking while driving has been an issue. Some do not realize that drinking can harm driving ability. Some new arrivals do not know that beer is alcohol.

### **Hygiene**

Mothers usually take care of the daily chores, helped by daughters or unmarried sisters. Refugees have had to learn how to identify, store, and use cleaning supplies.

Refugees born in Tham Hin camp have never had access to electricity or running water. Running the tap to flush out lead from plumbing or to wash bodies or homes thoroughly might seem wasteful. Also, in the camps, water was not used to flush toilet paper. Therefore, refugees might need to be taught to dispose of toilet paper in the toilet, rather than in the waste basket.

Many Karen like to eat and relax on the floor. Some refugees are used to eating with their fingers; others use a fork and spoon together. Karen commonly used metal-enameled or plastic plates in camps, and young children might therefore be more likely to break ceramic versions.

### **Adjustment to U.S. Housing**

Burma has a tropical climate, and adjustment to cold weather has been a challenge for some refugees. New arrivals need to be shown how to use sheets and blankets. Otherwise, they may sleep on top of them on the bed.

In the camps, keys and locks were rarely used, so some refugees might require instruction on the need for keys and locks in the U.S., and how they work.

A commonly heard complaint among recent Karen arrivals is that their apartments are too big. Refugees might crowd into one or two rooms to sleep at night, often in the same bed. Parents

have been known to remove the bed frames and place the box springs and mattresses on the floor, explaining that the beds are too high for their children.

### **Profile of Burma**

Burma is about the size of Texas, with a population of 50 million. Burma is one of the poorest countries in Asia. Average life expectancy is 60 years. The infant mortality rate is 10%. Infectious diseases are the leading causes of morbidity and mortality. The economy is predominantly agricultural, with rice the main crop and farming the main occupation of 60% to 80% of the population. All members of the family may be required to help with farm chores, so children's education may stop at around age 10.

*Bamar* or *Burman* refers to the majority ethnic group, and *Burmese* describes the language, citizenship, or country. Burma is also called Myanmar. The Burmese language has two forms. *Myanmar* is used in formal contexts (e.g., in book titles) and *Bamar* in informal conversation. Foreigners and Burmese expatriates who oppose the military government may persist in using the old names, *Burmese* and *Burma*.

### **Ethnic Groups**

It is most likely that Americans will encounter people from three main groups: the Burmans (or Bamar), the Karen and their various subgroups, and the Chin. The largest ethnic group is Burman, and it is about 68% of the population. Karen number 6-7 million, and are the original indigenous people. Several ethnic groups, including the Karen, Chin, Kachin, Mon, and Shan, have been in opposition to the government for fifty years, and many have had to relocate to refugee camps as a result.

### **Language**

Though English is taught in Burma's schools, most Karen who are being resettled in the United States will have little or no knowledge of English. The two main Karen language groups are Sgaw Karen and Pwo Karen, followed by Karenni and Pa-o. Sgaw Karen is the principal language of 70% of all residents of the Thai refugee camps. Sgaw and Pwo speakers often cannot understand each other. In Thailand, the Sgaw and the Pwo tend to speak in Thai when they meet; in Burma, they tend to speak Burmese. In the U.S., people from different ethnic groups will generally speak Burmese when they meet.

### **Tham Hin Camp**

Tham Hin is a Karen refugee camp in Thailand. In 2005, the United States offered resettlement to the entire population of almost 9,500 people. Over half have accepted the offer. The people in Tham Hin had fled to Thailand in 1997 after Burmese troops overran Karen bases and villages in southern Burma. The majority of refugees were Christian Sgaw Karen, with a small minority of Pwo Karen and other groups. Houses in Tham Hin are smaller and closer together than those in other camps. They are also hotter. Sanitation facilities are constantly under pressure, and the incidence of infectious diseases has been higher than in other camps. The native language is 94% Karen. Burmese is spoken by 63%, and Thai by 30%.

About two thirds of camp residents reported having received primary, middle, or secondary education, and about one third reported having received no education. Writing and reading ability in the native language is about 70% 'good' (70% literacy rate).

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