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To: Aaron S. Williams, Director
From: Kathy A. Buller, Inspector General 
Date: May 17, 2011
Subject: Management Alert Report: Mitigating a Potential Electrical Safety Hazard

As we work to finalize our inquiry of the death of Peace Corps Volunteer [REDACTED] in Niger last year, we wanted to alert you about a safety issue that may impact Volunteers in Niger and elsewhere. During our review we found that small appliances purchased or used by Volunteers in Niger are often locally adapted for use with 220 volt electrical sockets, which coupled with loose or improper wiring in Volunteer houses, could pose a safety hazard for Volunteers.

OIG consulted with U.S. Consumer Product Safety Commission Director of Engineering Edward Krawiec who suggested that in light of this situation, the Peace Corps could provide Volunteers with portable ground fault circuit interrupters (GFCIs), also known in other parts of the world as residual current circuit breakers (RCCBs). A GFCI is an electrical wiring device that disconnects a circuit whenever it detects that the electric current is not balanced between the energized conductor and the return neutral conductor. An imbalance can occur when a person who is grounded accidentally touches the energized part of the circuit. A lethal shock can result from these conditions. GFCIs are designed to disconnect quickly enough to mitigate the harm caused by such shocks, although they are not intended to provide protection against an overload or short circuit conditions.

In the United States the National Electrical Code requires GFCI devices interrupt the circuit if the leakage of current exceeds a range of 4–6 milli-amperes within 25 milliseconds. In some countries, two-wire (ungrounded) outlets may be replaced with three-wire GFCIs to protect against electrocution, and a grounding wire does not need to be supplied to that GFCI. An informal pricing for GFCIs indicate that their cost is around \$15 per portable outlet.

We recommend that the Peace Corps conduct its own review to determine the feasibility and appropriateness of providing Volunteers with resources to mitigate this risk. The agency could also examine other measures such as whether or not the housing checklist in high risk posts should specifically address this problem.

We make no representations in this memo concerning the finding of our inquiry; rather our intent is to alert you concerning a possible safety issue impacting Volunteers. We expect our final report on this inquiry to be finalized in the coming weeks. We look forward with working with you on this and other important management issues.