## **Health Concerns with Batteries**

## Become familiar with the do's and don'ts when handling batteries.

Batteries are safe, but caution is necessary when touching damaged/used battery as well as whenever handling lead acid systems that have access to lead. Globally many countries label lead acid as hazardous material. Lead can be a health hazard if not properly handled.

## Lead

Lead is a toxic metal that can enter the body by inhalation of lead dust or ingestion when touching the mouth with lead-contaminated hands. If leaked onto the ground, acid and lead particles contaminate the soil and become airborne when dry. Children and foetuses of pregnant women are most vulnerable to lead exposure because their bodies are developing. Excessive levels of lead can affect a child's growth, cause brain damage, harm kidneys, impair hearing and induce behavioural problems. In adults, lead can cause memory loss and lower the ability to concentrate, as well as harm the reproductive system. Lead is also known to cause high blood pressure, nerve disorders, and muscle and joint pain.



Lead occurs naturally in soil at 15–40mg/kg level. This level can increase multi-fold near lead battery manufacturing and recycling plants.

## **Safety Tips**

- Keep batteries out of sight and reach of children
- Keep lead acid inverter battery away from direct sunlight, under shaded area in airy environment

- Communicate the danger of batteries with your children, as well as caregivers, friends and family members
- Before handling any Lead Acid Battery, refer to the manufacturer's recommendation/ instruction manual carefully
- If you suspect you or your child has come in contact with Lead, go to the hospital immediately. Wait for a medical assessment before allowing yourself or the child to eat and drink



Hence, the consumers will have to ensure that used Lead Acid batteries are deposited with the dealer, importer, assembler or an authorised recycler at the designated collection centres.

Disposal of Lead Acid Battery, as other wastes, into the Municipal Solid Waste (MSW) stream is undesirable. Discarded lead acid batteries contain good amount of lead. Lead is highly toxic metal and should not be allowed to pollute water or food. Recycling of batteries therefore serves two purposes. Useful metals needed are recovered/reused and poisonous substances are prevented from entering the environment.

