

Electrical Safety in Children's Services

By Kumara Tarr

Child care services have a duty of care to ensure that potential hazards are eliminated or made inaccessible to children. This includes ensuring the safety of electrical devices and fittings.

One recent development in electrical safety has been the Earth Leakage Circuit Breaker, also known as a Safety Switch or a Residual Current Device (RCD). These devices are designed to cut off the power source if there has been an imbalance in the positive and negative electrical current. This can happen if a child places an object that conducts a current, such as a knife or a pin, into an electrical socket.

The RCD ensures the circle of out-flowing current and in-flowing current is balanced. If an imbalance is detected, or if some of this current escapes and goes towards 'earth' it shuts off the power at the source, in milliseconds. In the case of a child inserting an object into a power point, this power 'going to earth' is in fact going through the child's body. The RCD shuts down the power so quickly that the level of current that goes through the child's body is minimal, and is considered safe by the accepted Australian standard. This means there is little risk the child will feel discomfort or be at risk of danger.

RCDs have become common, particularly in premises that offer child care services. Their promotion as an electrical safety device has led many service providers to believe they are providing complete electrical protection for the children in their care. Consistent with this belief many service providers consider that the installation of RCDs means that they do not need to cover power points in their premises. However, RCDs do not eliminate the risk of electrocution entirely and service providers need to be aware of

This article relates to:

FDCQA Principles: 4.1, 4.3

OSHCQA Principles: 5.4, 5.5

QIAS Principles: 7.2, 7.3

potentially hazardous scenarios. While there are no documents from recognised authorities that clearly articulate the risks that may still exist when using RCDs, there are sources that support the view that there may still be danger:

- The *Office of Fair Trading Electrical Safety Guide* states, with regard to RCDs: "You need to remember that their use can enhance electrical safety but it DOES NOT remove the need to observe safe electrical practices and properly maintain equipment." (See review below)
- The Kidsafe factsheet, *Electrical Safety*, states: "Children playing with or 'mending' electrical equipment are the group most commonly killed or injured," and "Very young children placing items such as pins into live electrical sockets or into appliances are another main injury group." (See www.kidsafe.com.au)

It is important for children's service providers to ensure that the children in their care are educated about the risks of electricity and that they are protected from harm by using covers on all electrical sockets within their reach. ■

Electrical Safety Website Resource

Office of Fair Trading - www.fairtrading.nsw.gov.au

This website outlines a wide range of services as well as promoting information on relevant consumer issues including electrical safety. Go to the Publications section and select 'Consumers' to find the downloadable publications and factsheets. One in particular to look for is the *Electrical Safety Guide*, which discusses the use of RCDs. Apart from emphasising the need to take care with electricity, these publications provide businesses, households and children's services with guidelines on issues such as electric heaters, cords and plugs, using cleaners on power points, toy safety checklists and unsafe electrical appliances. Translations are also available.