

factsheet

bath water scalds

This factsheet presents background information mainly for people working with children and families, and students undertaking projects.

More advice on preventing burns and scalds can be found in capt's leaflet *How safe is your child from burns and scalds?* written for parents and carers. A sample of this leaflet can be downloaded from capt's website www.capt.org.uk, where you can also find out how to purchase bulk supplies.

Child Accident Prevention Trust publishes a range of resources for parents, carers and older children, containing comprehensive safety advice. A complete list of these resources – leaflets, booklets, posters, guides, etc – can be found at www.capt.org.uk together with details of how to obtain them.

How many children are scalded in the bath?

Every year in the UK around 450 children under five are admitted to hospital with a severe scald caused by bath water. A further 2,000 suffer less severe scald injuries.

Some scalds caused by bath water are so severe that the child dies - there are a handful of deaths every year. Many more of these accidents lead to lengthy and painful treatments and permanent scarring.

Young children are particularly at risk from hot bath water because their skin is thinner than adult skin. They can be scalded more quickly and at lower temperatures than an adult.

What can be done to prevent these scald injuries?

Very young children learn by experimenting and are not able to understand what will hurt them. Many accidents happen when children are unsupervised – often just for a few seconds. They may play with the hot tap or may climb and fall in to a hot bath. Constant adult supervision is therefore vital to prevent scald accidents happening.

Many people run hot water in to a bath first and then regulate with cold. This means the bath contains dangerously hot water. Running cold water in to a bath before hot or using a mixer tap so that hot and cold are running at the same time can reduce the risk of serious scalds occurring.

On some hot water systems the thermostat can be turned down to ensure that water is delivered at a safe temperature. A meeting of experts organised by Child Accident Prevention Trust agreed that water should come out of bath taps at no more than 46°C to prevent the risk of serious scalding.

Does reducing hot water temperatures increase the risk of contracting legionnaires disease?

Legionella bacteria die at 60°C to remove the risk of contracting legionnaires disease from your hot water system.

There is however no evidence that legionnaires disease is a significant problem in domestic homes. In fact many people have antibodies to legionella bacteria in their bodies, suggesting that they have come into contact with the bacteria without becoming ill.

In the United States legislation was introduced in some states to reduce hot water temperatures. Research showed that this had an impact on reducing bath water scalds but did not result in an increase in legionnaires disease compared to states without legislation.

Current evidence suggests that the risk of a child being scalded by hot water is greater than the risk of contracting legionnaires disease from water stored or delivered at 46°C or less.

How will hot water temperatures be regulated in the future?

Thermostatic mixing valves that allow you to store water at a high temperature but deliver it from the tap at a safe temperature should be available within the next couple of years. Until this option is available to private homes, parents and carers should continue to follow the advice given above.

Further information

A discussion paper is available outlining the extent of the problem and technological and legislative solutions available. The paper also looks in more depth at the impact of legionnaires disease on the debate. A free copy of the paper can be requested from Child Accident Prevention Trust at the address below or it can be downloaded from our website at www.capt.org.uk/pdfs/HotWaterDiscussionPaper.pdf

There is also a Question and Answer factsheet on how bath water scalds can be prevented using thermostatic mixing valves, available on the capt website ([www.capt.org.uk/pdfs/factsheet TMVs.pdf](http://www.capt.org.uk/pdfs/factsheet_TMV.pdf)).

The statistics used in this factsheet are drawn from a number of sources. The government's Home and Leisure Accident Surveillance System that collected information throughout the UK from 1978 was closed down in May 2003. Enquiries should be directed to Information Centre, Royal Society for the Prevention of Accidents, Edgbaston Park, 353 Bristol Road, Birmingham B5 7ST, email: infocentre@rospa.com, fax: 0121 248 2001, tel: 0121 248 2066.

Copies of the Annual Reports of the Home and Leisure Accident Surveillance System can be downloaded from <http://www.ndad.nationalarchives.gov.uk/CRDA/58/DD/1/detail.html>. The reports for 1998 – 2002 inclusive can be downloaded from <http://www.hassandlass.org.uk/query/reports.htm>. Visit www.hassandlass.org.uk to interrogate the database for 2000-2002 yourself.

Factsheets with more detailed information on a variety of accident topics can be found on the Child Accident Prevention Trust website, www.capt.org.uk or can be provided by post on receipt of a stamped address envelope and a list of the subjects you require.

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