

Scald Injury Prevention

Fire and Burn Death and Injury

Deaths

4,000 deaths a year from fire and burns

Injuries

25,000 hospitalized in burn centers

600,000 burn injuries treated in hospital EDs

(Close to half of all burn injuries treated in hospital emergency departments and one – third of admissions to burn centers are scald injuries)

What is a Scald Injury?

A scald injury occurs....

When contact with hot liquid or steam damages one or more layers of skin

Scald Prevention Topics

What are the main sources of scald injury?

Who are the most frequent victims?

How can Scald injury be prevented?

What are the appropriate first-aid responses?

Frequent Scald Burns Sources

Hot tap water

Hot beverages

Hot Food

Steam

Most Frequent Scald Injury Victims

Young children

Older adults

People with disabilities

Young Children and Scald Injury

60% of all scald injuries are to young children

Young Children (Ages 0-4) 60%

All Other Ages 40%

75% of all burns to young children are scalds

All Other Burns 25%

Young Children and Scald Injury

Curiosity, imitation

Limited understanding of danger

Limited ability to react quickly to hot contact

Thin skin = deeper burn

Older Adults and Scald Injury

Thin skin

Reduced mobility, agility

Reduced ability to feel heat, due to health conditions or medication

People with Special Needs and Scald Injury

Sensory impairment

Mobility or other physical impairment

Diminished mental capacity

Common Sites of Scald Injury

Kitchen or dining area

Spills while handling or moving hot foods and liquids, often involving children

Bathing area

Inability to remove self from hot water

Scald Injury Severity Factors

Length of contact with hot substance

Temperature of substance

Nature of substance

Is it thick or sticky?

Does it retain heat?

Extent of body area scalded

Location of scald

Protecting Children from Scalds

Household changes

Everyday precautions

Child supervision

Protecting Children from Scalds:

Kitchen and Dining Areas Household modifications

Mark and explain a “kid-free zone”

Put away tablecloths

Use spill-resistant “Travel mugs”

Protecting Children from Scalds: Kitchen and Dining Areas

Everyday preparations

Keep friends, relatives, and sitters informed

Turn pan handles away from stove front

Observe safe microwave oven practices

Protect electric cooking appliances and cords

Scald-safe child supervision

Supervise young children at all times

Encourage use of “kid-safe “zone

Never hold a child in your arm:

While preparing or serving hot food

While drinking a hot beverage

Keep hot food and liquids high and out of reach of young children

Protecting Children and Adults from Scalds Bathing Areas

Household Modifications

Establish safe hot water temperature

If this is not possible, install tempering valve or safe faucet and shower heads

Install non-slip bath, shower mats

Install grab bar in shower stall

Setting a safe Hot Water Temperature

Time and temperature relationship required to scald a healthy adult

155° F	68° C	1 Second
140° F	60° C	5 Seconds
127° F	52°	C 1 Minute
120° F	48°	C 5 Minutes
100° F	38°	C Safe Bathing Temperature

Maximum Water Temperature Standards

Recommended maximum residential standard

120° F (48° C)

(U.S. Consumer Product Safety Commission)

Nursing homes and child care facilities

110° F (43°)

(Recommended and by some state or local regulations)

Measuring Hot Water Temperature

Run hot water up to two minutes at tap

Test temperature with cooking thermometer

Establishing a Safe Hot Water Temperature

If initial test temperature is above 120° F (48° C), lower heater thermostat setting

Initial test temperature below 120°F/48°C may not prove safety is constant

Retest several times until safe temperature setting is assured

Bathroom Scald Prevention- Equipment

Direct (scald prevention)

Tempering valve on water line

Anti-scald valves on shower heads and faucets

Indirect (fall prevention)

Grab bars

Non-slip mats in tub/shower, on floor

Shower/bath seat

Bathroom Scald Prevention – Precautions

For Single control faucet, always turn on and off in the “cold” position

For dual control faucet, always turn “cold” faucet on first, and off last

Make sure all household members and caregivers understand these controls

Bathroom Scald Prevention – Behaviors

Check water temperature before placing child in tub or shower

Instruct carefully any older siblings who help bathe young children

Young children should never be left alone in the tub

Emergency Care of Scald Injury

Remove scald victim from source

Remove all affected clothing, diapers, shoes, etc.

Cool scalded area briefly with cool water

Cover with clean, dry covering

Do not apply creams, salves or ointments

CALL 9-1-1

Scald Prevention – Some Important Points

Limited mobility and thin skin increase risk and severity for the young and old

Keep young children away when cooking, or when drinking hot beverages

Test hot water temperature and establish thermostat setting at or below 120°F/48°C

(Sources: National Fire Protection Association,

National Center for Health Statistics;

American Burn Association, National Burn Repository, 2005)

Scald Safety – www.amerburn.org