irwin siegel agency

RISK MANAGEMENT DIVISION

Preventing SCALD INJURIES

Contents

A Guide to Preventing

SCALD INJURIES

COULD THIS HAPPEN AT YOUR AGENCY?

CASE #1 Daniel, a 55 year-old- male with intellectual and developmental disabilities, had a history of having seizures. He went into the bathroom to take a bath by himself. Shortly after, a staff heard another individual yelling for help, indicating that something was wrong with Daniel. Daniel was found unresponsive in the tub and died later that evening of hyperthermia. His body temperature was 110° Fahrenheit.

This tragic event was the result of several factors. Even though the agency had temperature control valves installed on the hot water heater and tub faucet the temperatures were set too high. It was determined the water at the hot water heater was 180°F, and the water coming out of the faucet was 130°F. Second, the agency did not keep maintenance records for its hot water heater and had several outstanding work orders for missing knobs on the tub faucets. Third, despite the fact that the room where the hot water heater was located was kept locked, the maintenance man, group home manager, and all of the group home staff had access to the key. Consequently any one of them could have adjusted the temperature settings.

Staff was required to check and record the water temperature nightly. However, after the incident, it was found that the temperature recorded in the log was consistently recorded as 100°F because no one actually checked the temperature. Worse yet, weeks earlier, the State completed an inspection and issued violations for the water temperature being too low.

It doesn't end there. The staff members did not seem to know whether or not Daniel required assistance while bathing. The staff members reported seeing him head toward the bathroom about a half hour before they found him. They also failed to call 911 for several hours, and then told the emergency room doctor that he had only taken a three minute bath, after which he had a seizure while being dried off.

Daniel's family brought a lawsuit against the agency. The agency was found liable because it had failed to do the following:

- Maintain the temperature controls at a safe temperature.
- Ensure the water temperature records were being reviewed.
- Properly train and supervise its direct support professionals on Daniel's care plan which called for assistance while bathing.
- Obtain timely medical attention for Daniel.

CASE #2 In another incident, Sara, a 23 year-old female was diagnosed with oppositional defiant disorder. One of the behaviors associated with this diagnoses is pulling back whenever someone tried to assist her. Sara bathed independently, according to her plan. On the day of the incident, she went to take a bath and as she got into the tub, she called out in pain. Staff members responded immediately, however when they tried to get her out of the tub, she sat down in the scalding hot water. The staff members provided first aid and transported her to the hospital. She suffered 2nd degree burns to her feet and buttocks, as well as permanent scarring in those areas.

In this incident, the provider had a mixing valve installed on the hot water heater, but the valve failed due to inadequate maintenance that led to mineral buildup. The water coming out of the faucet was 130°F. What made matters worse was that despite their awareness of Sara's oppositional defiant disorder, staff tried to help by assisting her out of the tub. In light of her condition, they should have known that Sara's response would be to pull away when offered assistance. In this instance, not only did she pull away, but she sat down in the hot water, causing a more severe injury.

CASE #3 Jill is a 40 year-old female who is non-verbal and has an intellectual and developmental disability, and is also diagnosed with cerebral palsy. She was taken to the bathroom by a staff member. In preparation for Jill's bath, the staff member removed Jill's clothes and found that her skin was red and peeling. She had 2nd and 3rd degree burns to 30% of her body. It was found that three days earlier, Jill had been burned during a bath. The staff member who bathed her that day had tried to hide that Jill was injured. Peeled skin was found in her bed. During the investigation it was found that the water heater was set to 138°F. The state standard is 110°F. The agency did not have mixing valves installed on the hot water heater or the tub faucet. It was also found that an employee had turned up the water temperature in order to increase the amount of hot water available in the house.

In addition to the lack of mechanical controls, the staff member who gave Jill the bath that caused her injury failed to check the water temperature prior to placing her in the tub. Because the staff member also tried to hide Jill's injuries, and Jill could not communicate her injuries, she did not receive medical attention for several days. During the following months, she was moved from the burn unit at the hospital to a nursing home where she was tube fed. Her condition worsened at the home as her pre-existing medical conditions intensified as a result of the scalding. She returned to the hospital three months later due to dehydration, hypotension and pneumonia. After several additional weeks in the hospital, Jill returned to the nursing home where she currently resides. Jill was unable to return to her pre-trauma quality of life and is now living in a nursing home indefinitely.

CASE #4 Emma is a 10 month-old infant living in a foster home. After having accidentally spilled juice on herself, her foster mother placed her in the bathroom shower stall, turned on the water, and left the bathroom to finish feeding her five other foster children. One of the children went into the bathroom and flushed the toilet. The flushing caused the water temperature to spike in the shower and scald Emma. She suffered 2nd and 3rd degree burns to 50% of her body, including her face, scalp, torso, arms, and genitalia. A year after the incident, Emma still needs pressure bandages and requires extensive physical therapy, subsequent to surgeries, and skin grafts during her future years and life long care.

In this incident, the agency put the foster family in charge of installing temperature limiting devices on the water heater, tub and shower. Although the provider agency's policies and procedures stated that all foster homes would be inspected monthly, including an inspection of the hot water temperature, this never occurred. Although the family knew there were temperature fluctuations they failed to notify the landlord. During her training, the foster mother was made aware that Emma, due to her young age, should have been bathed by her foster parents, and that the water temperature must always be hand-tested before putting Emma into the tub. The agency was deemed responsible for the injuries to the child even though the foster family was considered an "independent contractor." It turns out that the foster family neglected to obtain its own liability insurance, although the terms of its contract with the agency required to family to do so. This could have been discovered in the agency followed its policy of requesting proof of insurance from the foster family. Unfortunately, this check was never done. What made matters worse was that the family's renter's insurance excluded liability for a claim arising out of the "business exposure of operating a foster care facility." The provider was also responsible because it placed the child in a foster home with another infant and four other children under the age of six, which violated the state guidelines for placement. The standards for effect at the time of placement allowed the foster family to have no more than two children under the age of six if it already had two infants under the age of 18 months in the home.

Emma's biological parents brought suit against the provider, who was found liable for failure to do the following:

- Ensure that the foster family followed the rules set forth in its foster child handbook.
- Follow its own policies and procedures of inspecting the foster family and testing the hot water temperature at the foster home monthly.
- Ensure that the foster family obtained appropriate insurance coverage.
- Follow the state guidelines regarding placement.

While these cases may seem extreme, similar incidents happen each day. These types of injuries can happen at any facility on any given day. The following information discusses the risks involved with scald injuries, what a scald injury is, and how severe it can be. It also discusses preventative measures that can be taken to reduce the potential for this type of injury occurring at your agency.

WHAT IS THE RISK OF A SCALD INJURY?

This policy takes places with no limits on the number of syringes a participant may receive regardless of the number of used syringes returned. Participants do not need to return any used syringes in order to receive new, sterile syringes. Disposal is still a priority to programs that engage in needs-based distribution – however it is not a requirement.

Each year, there are approximately 25,000 people hospitalized in burn centers, and 600,000 burn injuries are treated in hospital emergency departments. Close to half of all burn injuries treated in hospital emergency departments and one-third of admissions to burn centers are scald injuries. (American burn association, national fire protection association, national center for health statistics)

Scalds can cause considerable pain, prolonged treatment and lifelong scarring. In addition, the complications and related injuries can be permanent. In severe cases, scalding injuries can be fatal. Individuals in the high-risk groups are often less likely to survive the injury, endure prolonged hospital stays and generally undergo more difficult recoveries. The severity of this type of injury can be devastating and safeguards must be in place.

HIGH RISK GROUPS

Children

Young children are especially vulnerable to scald injuries because they have thinner skin, which can lead to deeper burns at lower temperatures. The proportion of the body that is exposed is generally much greater than an adult. Children also have little control over their environment, less perception of danger, and a lower ability to escape a burning sensation.

Scalds typically occur because:

- The child was left unattended, even if only for a moment.
- The person assisting the child did not test the water temperature.
- The child was placed in water that was too hot.
- An inexperienced or untrained person was bathing the child.
- The child fell into the tub.

Older Adults and Individuals With Disabilities

For older adults and individuals with disabilities, there is an increased risk for deeper burns because like children, they often have thinner skin. Other risk factors include medical conditions, medications, and cognitive changes that can affect the individual's understanding and reaction to a scald burn. These individuals may also have a decreased ability to feel heat due to sensory impairments. In addition, some individuals may be more prone to falling in the bathtub or shower. Recovery for these individuals is likely to be prolonged and more difficult due to their pre-existing medical conditions.

Scalds for these individuals typically occur because:

- The person assisting the individual failed to recognize that the water was too hot.
- The water temperature fluctuated due to running water in other parts of the home.
- Faucet or plumbing fixtures malfunctioned and the person was unable to escape.

WHAT IS A SCALD BURN AND HOW SEVERE CAN IT BE?

A scald burn is one of the most common causes of serious burn injuries. Scald injury occurs when contact with hot liquid or steam damages one or more layers of skin. Healing is slower than other types of burns and there is greater scar formation. The severity of a scald burn depends on two things:

1. The temperature at which the skin is exposed.

2. The length of time the hot water/liquid or vapor is in contact with the skin.

As you can see in the table below, there is a drastic increase in injury risk with relatively small increases in water temperature. *(Please note, this data is based on the effects of hot water on the average adult.)*

Water Temp	First Degree	Second Degree
111°F	4.5 hrs	5 hrs
113°F	2.0 hrs	3 hrs
116.4°F	20 minutes	45 minutes
118.4°F	15 minutes	20 minutes
120°F	8 minutes	10 minutes
124°F	2 minutes	4.2 minutes
125.6°F	45 seconds	1.5 minutes
127.4°F	30 seconds	60 seconds
131°F	17 seconds	30 seconds
140°F	3 seconds.	5 seconds
151°F	0 seconds	2 seconds
158°F	0 seconds	1 second

First second and third degree burns are classified by depth. The depth of the burn is dependent on the nature of the burn victim's skin, the temperature of the liquid or vapor, and the amount of time the skin is on contact.

First degree burns (superficial burns) include minor scalds. They normally heal in three to five days with no scarring. A first degree burn is pink to red in color, painful, and often causes dryness to the skin without blistering it.

Second degree burns (partial thickness burns) damage, but don't destroy, the top two layers of skin. It normally heals in 10-21 days. In most cases, second degree burns do not require a skin graft. The skin will appear moist, wet, and weepy with blisters. It will be bright pink to cherry red in color. There will be lots of swelling and will be very painful.

Third degree burns (full thickness burns) destroy all layers of skin and may involve fat, muscle, and/or bone. It requires a skin graft for healing. The skin may be very bright red or dry and leathery, charred, waxy white, tan, or brown. The person may also lose the sense of touch in the area of injury.

PREVENTION

Preventing scald injuries has to be done by the agency as a whole. Administrative controls, staff training and mechanical controls all play a vital role in making sure the individuals you support do not suffer from such a serious injury.

Mechanical Controls

Mechanical controls are the first line of defense in preventing scalding injuries. However, it would not be wise to rely on them completely.

Hot water heaters were never intended to provide precise temperature limits. For example, the American National Standards Institute (ANSI) allows the temperature for gas-fired hot water heaters to vary by ten degrees above or below the thermostat setting. Another standard allows the temperature to rise as much as 30°F above the thermostat setting. This is to allow for "stacking." This means that hot water gathers at the top of the heater due to recurring short heating cycles caused by frequent, small quantity hot water uses.

Hot water heaters often leave the factory with their thermostats set to 104-150°F. It is typically recommended that the installer reduce the setting to 120°F, but this step is often overlooked.

Health and safety codes may require higher temperature settings at the hot water heater in order to reduce the risk of legionella growth. For agencies providing food service, public health may require high water temperatures for the food preparation area and dish washing. The statutes, codes, standards, and guidelines for public health and human service providers around the country vary greatly. Some facilities are required to have final water temperature at 90°F, and some allow a temperature of up to 130°F. Keep in mind, the average temperature for bathing is 100°F and bath water at a temperature of 130°F can cause a first degree burn in 17 seconds.

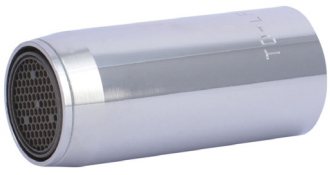
Your facility may have mechanical temperature limiting devices already installed. These devices are typically installed on the hot water heater and/or at the point of use, such as the tub faucet or shower. It is important not to take these controls for granted, as they can fail at any time. This is why both administrative controls and proper staff training are extremely important in preventing a scald injury.

Install a temperature actuated mixing valve at the hot water heater. This device should comply with **ASSE 1017** (refer to addendum 1 for additional information). These devices sense the temperature of the water being distributed to the system and compensate for fluctuations in either the incoming hot or cold water temperatures. Many state agencies that oversee human service providers require these types of devices to be installed on the hot water system. These devices, however, are not intended to provide final temperature controls at the fixtures and are typically set to 120°F. The American Society of Sanitary Engineers recommends that other mixing devices be provided to control the final temperature.

Install thermostatic mixing, pressure balancing, or combination pressure balancing and thermostatic valves at the point-of-use. Plumbing codes throughout the U.S. currently require thermostatic mixing, pressure balancing or combination pressure balancing and thermostatic valves that comply with **ASSE 1016** for use in individual bathing facilities, such as a shower or combination tub/shower. The Plumbing Manufacturer's Institute also recommends that these devices be used for tub fillers or lavatory faucets. These valves automatically adjust the ratio of hot and cold water according to the temperature setting of the valve. They can be installed in the water lines as single valves or as the fixture fittings themselves. It is preferable to have these devices located at the point-of-use, as localized changes in water pressure (flushing a toilet or running an appliance that uses water), can take water away from the bathtub, shower or sink, and increase the risk of thermal shock.

Install a temperature actuated flow reduction (TAFR) valve on existing showers, tub fillers, or sinks without the protection of a thermostatic and/or pressure balancing valve. Look for valves that meet **ASSE 1062** (refer to Addendum 1). These devices are installed before the showerhead on the shower arm, on the tub spout, or on the faucet. For combination tub/showers, a TAFR valve must be installed on both the showerhead and the tub spout. Fittings of this type are often the easiest and least expensive valves to install as they simply screw into the existing fixture fittings. It should be noted that these devices restrict the water flow to a trickle, consequently reducing the scald risk because a large area of the body would not be affected due to the restricted water flow. These types of devices may be beneficial for provider agencies that lease residential locations where the water heater temperature cannot be lowered, or where in-line valves cannot be installed.

Many of these devices are available at local hardware or plumbing needs based on age of existing plumbing, the type of hardware used and the nature of residence. Therefore, the type of device used must be evaluated to guarantee that it meets the needs of the residence.



Temperature Actuated Flow Reduction (TAFR) Valve

Administrative Controls

As mentioned earlier, mechanical controls are not 100% reliable. While the controls may be set correctly when originally installed, the settings may change over time due to deterioration or lack of maintenance.

Policies should be in place such as daily temperature checks. These checks should be logged and reviewed on a weekly basis by someone other than the person(s) who conduct the daily checks. Checking temperature logs regularly will help ensure accuracy and maintain quality assurance. It is important to train all staff on the proper way to check water temperature. The water temperature should be tested in the morning before the hot water has been used, or, at least two hours after it was used last. Turn on the tap closest to the valve on the water heater and allow it to run for several minutes. Fill a cup with water and immediately use a thermometer to check the temperature. The reading should be logged with the temperature, date and time of the test, the faucet that was tested and the person who completed the test (see sample).

MAIN STREET GROUP HOME WATER TEMPERATURE LOG

Date	Time	Temp.	Faucet Location	Print Staff Name	Staff Signature	Notes
7/26	5:00 am	115F°	1st floor tub faucet	Janie Smith	Janie Smith	Advised maintenance that water temperature too high. (JS) 7/26 5:30 am Water temperature was checked and lowered by Jim from maintenance. (JS)
7/27	5:05 am	112F°	1st floor tub faucet	Ryan Thomas	Ryan Thomas	Water temperature is still too high, advised maintenance to adjust the water temperature again. (RT) 7/27 6:00am Linda from maintenance checked and lowered water temperature. (RT)
7/28	4.55 am	110F°	1st floor tub faucet	Janie Smith	Janie Smith	Water temperature is correct (JS)

If the water temperature is not correct, the cause of the incorrect temperature should be investigated and corrected immediately. It may take several attempts to get the temperature to the correct point. Wait 24 hours after each adjustment before checking the temperature again. Document each adjustment.

Conduct regular inspections of your hot water heater and valves. Water quality, debris, and normal wear and tear can all have an impact on the system. Set up a timetable to enforce scheduled inspections. It is recommended to check them quarterly. Check with your manufacturer of your hot water heater or valves for information and recommended maintenance cycles. The hot water heater should also be flushed by draining a few gallons of water from the tank every 6 months to remove any sediment.

A system should be established to ensure initial and refresher training are provided and documented.

TRAINING

Staff Training

Staff training is crucial. It is especially important for direct support professionals who are assisting an individual who needs full or partial assistance in the bath or shower. Training should include the following:

- How to implement the individual's service plan as to the level of supervision and assistance needed:
  - ❑ Does the person require full supervision and assistance?
  - ❑ Does the person need assistance turning on the water and entering or exiting the shower or tub? If the individual only needs partial assistance, is the staff member required to remain in the bathing area or is he/she required to give the individual privacy?
  - ❑ Does the individual need to be monitored for set periods of time while bathing?
  - ❑ Can the individual bathe independently?
- How to properly check the water temperature prior to placing or allowing an individual into a bath or shower. This should cover the following areas:

  Testing bath water: fill the tub to the desired level by turning on cold water first, then turn on the hot. After mixing the water thoroughly, the water temperature is ready to be tested.

  Testing the temperature: use a bare wrist or a bath thermometer. One's wrist is not as precise as a thermometer as we all have a different tolerance for heat. The average bath temperature is 100°F. For some people, this may be too warm, so it is important to adjust the water specifically for the person you are assisting.

  Reminding staff: they should never rely on any one water temperature control procedure. Products can malfunction and should never fully replace the act of physically checking the water.
- Implement a requirement that staff never leave the bathroom unattended while the tub is being filled. Supervision should be provided for young children and those who need assistance with bathing. These individuals may not be able to physically remove themselves from hot water on their own, and they may not recognize the dangers of turning on the hot water.
- Implement a policy that staff gathers all necessary supplies before entering the bathroom so there is no reason/excuse to leave an individual unattended.
- Staff should face individuals with a limited safety awareness away from the faucet to decrease the risk that he/she will turn on the hot water.
- Staff should turn the faucet handle for single handle fixtures to the "cold" position when not in use.

Training for the People You Support

For people who bathe independently or with only partial assistance, it is important to educate them on the following:

- The dangers of scalding.
- How to test the water to make sure it is not too hot.
- How to adjust the water temperature controls in the bathtub or shower.
- How to call for help when needed.

There should always be a documented service plan for each individual that specifically states the amount of assistance needed when bathing or showering. All staff must be trained on these service plans.

TREATMENT

Treatment for Scald Burns

Even with all of the proper controls in place, something can go wrong. Whether mechanical or human error causes a device failure, or a there is a lapse in judgment, disaster can become a reality. It is important that your agency has procedures when prompt medical attention is necessary. Always consult a doctor if burns occur on the face, hands, genitalia, feet, or to any body part of an infant or an individual who is medically fragile.

Treatment for Minor Burns

- Hold burned area under cool (not cold) running water for several minutes.
- Cover the area with clean, dry gauze or cloth.
- Protect the burn from friction and pressure.
- Do not apply ice, as this can lower the body temperature and make the burn worse.
- Do not break blisters.
- Do not apply creams, ointments, salves or butter, as these products can trap heat in the tissue and make the burn deeper.

Treatment for Severe Burns

- Have one person call 911 or the local emergency number while another person runs cool water over the burned area.
- Hold burned area under cool (not cold) running water for several minutes.
- Cover the area with clean, dry gauze or cloth.
- Protect the burn from friction and pressure.
- Keep the burn victim from being chilled or overheated.
- Do not apply ice, as this can lower the body temperature and make the burn worse.
- Do not break blisters.
- Do not apply creams, ointments, salves or butter, as these products can trap heat in the tissue and make the burn deeper.

Severe burns require prompt attention and may warrant hospitalization, antibiotics and/or skin grafts.

ASSE STANDARDS

The standards mentioned below are from the American Society of Safety Engineers (ASSE). The goal of these standards is to identify important safety features and minimum performance requirements for plumbing system components.

ASSE 1016
This Standard applies to automatic compensating valves intended to be installed at the point of use, where the user has access to flow or final temperature controls, and where no further mixing occurs downstream of the device.

This Standard covers automatic compensating valves intended to control the water temperature

to wall or ceiling mounted:

- hand-held showers;
- shower heads;
- body sprays either in individual shower or tub/shower combination fittings; and
- tub sprouts when in part of tub/shower combination fittings.

ASSE 1017
This standard is intended for temperature actuated mixing valves for hot water systems. These devices are installed at the hot water source and are not intended for final temperature at the faucet.

ASSE 1062
This standard applies to temperature actuated flow reduction (TAFR) valves for individual fixtures. These devices react to high temperature water and automatically reduce the water flow to .25 gallons per minute or less when the outlet temperature is greater than the preset temperature. They can be installed in the line or integrated into individual plumbing fixture fittings, such as showerheads, bath or lavatory faucets.

To purchase ASSE product standards, visit http://www.asse-plumbing.org/standards.html

ADDENDUM 2
PREVENT SCALDING INJURIES

(Safety Bulletin to be provided to staff for supplemental training purposes)

WHAT IS A SCALD INJURY?

A scald injury occurs when contact with hot liquid or steam damages one or more layers of skin. Scalds can cause considerable pain, prolonged treatment, and lifelong scarring. In severe cases, scalding injuries can be fatal. The most frequent scald injury victims are young children, older adults and people with disabilities.

Why are children more vulnerable?

- Limited understanding of danger
- Limited ability to react quickly to hot contact
- Thin skin results in a deeper burn

Why are older adults more vulnerable?

- Thin skin
- Reduced mobility and agility
- Reduced ability to feel heat due to health conditions or medication

Why are individuals with disabilities more vulnerable?

- Sensory impairment
- Mobility or other physical impairment
- Cognitive/Intellectual disability
- Inability to verbally communicate

Did you know?

Hot water can cause third degree burns

- In one second at 156°F
- In 2 seconds at 149°F
- In 5 seconds at 140°F
- In 15 seconds at 133°F

PREVENTION: MECHANICAL CONTROLS

Mechanical controls should be the first line of defense in preventing scalding injuries. Keep in mind that they should not be completely relied on for several reasons:

- Thermostats on hot water heaters are not intended to provide precise temperature limits. For example, the American National Standards Institute's (ANSI) standard for covering gas-fired hot water heaters allows the temperature to vary by 10 degrees either above or below the thermostat setting. The ANSI Z21.10.1 standard allows the temperature to rise as much as 30 degrees above the setting. (HGExperts.com)
- Hot water heaters often leave the factory with their thermostats set to 140-150 °F.
- Health and safety codes may require higher temperature settings at the hot water heater in order to reduce the risk of legionella growth. Codes, standards, and guidelines for public health and human service providers vary throughout the country. Keep in mind, the average temperature for bathing is approximately 100°F and bath water at a temperature of 130°F can cause a first degree burn in only 17 seconds.
- Install a temperature actuated mixing valve at the hot water heater. Make sure it is in compliance with ASSE 1017 (The American Society of Safety Engineers). These devices sense the temperature of the water being distributed to the system, and compensate for fluctuations in the incoming hot or cold water temperatures. Again, these devices can fail and it is important to check water temperature daily and maintain a log.
- Install thermostatic mixing, pressure balancing, or combination pressure balancing and thermostatic valves at the point-of-use. These must comply with ASSE 1016 for use in individual bathing facilities, such as a shower or combination tub/shower.
- Install a temperature actuated flow reduction valve on existing showers, tub fillers, or sinks. These must meet ASSE 1062 standards. These are often the least expensive valves to install as they simply screw into the existing fixtures.

It is important to check your local state guidelines on required water temperatures to ensure you are in compliance with these regulations. Find information on ASSE standards at *www.plumbingengineer.com*.

PREVENTION: TRAINING

Establish bath/shower protocols for all individuals in your care.

- Does the individual require full supervision and assistance?
- If the individual needs only partial assistance, is a staff member to remain in the bathing area or is he/she required to leave the area for the individual's privacy?
- Can the individual bathe independently?
- Train staff working with individuals on these protocols and ensure information is readily available for frequent review.
- Implement a requirement that staff never leave the bathroom while the tub is being filled. They should gather all supplies needed prior to entering the bathroom with the person they are supporting.
- Face individuals away from the faucet to decrease the chance he/she will turn on the hot water.
- Train staff to properly check the water temperature prior to placing or allowing an individual into a bath or shower.
- Use a bare wrist or a thermometer to test the water. As people have different tolerance to heat, a thermometer is the best option.
- Remind staff not to rely on water temperature control devices. Products can malfunction and water temperature should always be physically checked.

PREVENTION: ADMINISTRATIVE CONTROL

- Policies should be in place such as daily temperature checks. These should be logged and reviewed regularly by an employee other than those who conduct the daily checks.
- All staff required to test water temperature should be trained on how to do so properly.
- To accurately check the temperature, turn on the tap closest to the valve on the water heater and allow it to run for several minutes. Fill a cup with water and immediately use a thermometer to check the temperature. Log the temperature, date, time, the faucet that was tested, and the person who completed the test.

TREATMENT FOR BURNS

Treatment for minor burns: First & second degree burns no larger than 3" in diameter

- Cool the burn. Hold under cold running tap water until the area is free from pain even after removal from the water. If this is not possible cool with a cold compress.
- Cover the burn with a sterile nonstick dressing and bandage. Don't use fluffy cotton or other material that may stick to or get lint in the wound. Wrap the bandage loosely to avoid putting pressure on burned skin. Bandaging reduces pain, protects blistered skin, and helps prevent infection.

Treatment for major/severe burns: Call 911 or your local emergency # immediately

- Do not remove clothing that is stuck to the skin
- Do not immerse large severe burns in cold water. This could cause a drop in body temperature and deteriorate blood pressure and circulation causing shock.
- Check for responsiveness and signs of normal breathing. If there is no normal breathing begin CPR.
- Treat for shock: have the person lie on back, elevate legs if no trauma and maintain normal body temperature.
- If you are unsure about the depth of the burn, treat it as a severe burn.

Do Not:

- Use ice, it can cause further damage to the wound.
- Apply butter or ointments, they can increase severity.
- Break blisters, as broken blisters are more vulnerable to infection.

ADDENDUM 3

CHECKLIST FOR ADMINISTRATIVE AND MECHANICAL CONTROLS

Even though you may have installed all of the appropriate mechanical controls on your hot water heaters, shower heads, and tub fillers, you still must confirm they are functioning correctly on a regular basis.

DAILY OR WEEKLY CHECKS

- Confirm the water temperature of the hot water faucet closest to the hot water heater is no higher than 110°F, or the designated temperature required by your state or local licensing agency.

MONTHLY CHECKS

- Ensure the hot water heater thermostat is set no higher than 140°F, or the designated temperature required by your state or local licensing agency).
- Ensure the temperature actuated mixing valve temperature is set no higher than 120°F.
- Ensure the water temperatures that are being recorded daily or weekly are accurate.

QUARTERLY CHECKS

- Ensure the hot water heater and all valves are inspected, cleaned, and maintained pursuant to the manufacturer's instructions.
- Ensure all faucets are inspected and maintained according to the manufacturer's instructions in order to make sure they are working correctly.

STAFF TRAINING

- Check and document all staff are trained on how to properly test water temperature. Regularly confirm during semi-annual or annual performance reviews.
- Check and document that all staff that are to be working with individuals are trained on the specifics of all individuals' service plans. This includes staff members who are floaters. It is important to periodically review service plans with each staff member.
- Ensure individuals who bathe independently are trained on testing water temperature.

ADDITIONAL RESOURCES

You may visit the following websites for more in-depth information about scald injuries:

BURN FOUNDATION

www.burnfoundation.org

AMERICAN BURN ASSOCIATION

www.ameriburn.org

THE PLUMBING MANUFACTURERS INSTITUTE

www.pmihome.org

NATIONAL SAFE KIDS CAMPAIGN, INJURY FACTS: BURN INJURY

www.safekids.org

NATIONAL RESOURCE CENTER FOR HEALTH & SAFETY IN CHILDCARE

http://nrckids.org/

Contact Irwin Siegel Agency's Risk Management Division for additional information and safety resources, or to request a copy of Addendum 2, Prevent Scalding Injuries flyer.

IRWIN SIEGEL AGENCY
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About Irwin Siegel Agency

Irwin Siegel Agency (ISA) is a leading insurance and risk management organization service the Human Services field and Non-Profit sector, and insures service providers in 50 states and the District of Columbia. ISA continues to set the standards of quality, innovation and value when it comes to developing new programs that meet the dynamic nature of the Human Services and Non-Profit fields.

Our Risk Management Division continues to develop specialized resources to assist our customers in their endeavors to effectively manage risk and control losses. In conjunction with our business partners, we offer loss control training seminars and teleconferences that address important field-related issues. We have also accrued an inclusive video lending library containing information on field-related programs, including but not limited to; vehicle safety, workforce issues, stress management, medication administration, fire safety, self-determination, and working with challenging behaviors.

Not only does our Claims Department offer a caring and experienced staff, but also the claims offices with which we work are staffed with designated adjusters who have extensive training in the Human Services and Non-Profit fields and who are familiar with the unique coverages and nuances of our policies. To supplement our adjuster base, we have a network of distinguished legal professionals who bring years of successful experience to the table, particularly with regard to those legal matters indigenous to the Human Services and Non-Profit fields.

ARE YOU COVERED?
Some insurance coverages available through ISA include:

Directors & Officers Liability Insurance
Employment Practices Liability Insurance
CyberLiability - Network Security, Privacy Liability & Identity Theft Coverage
HIPAA/Medefense® Plus
Volunteer Accident Protection
Professional Liability

Availability may vary by state.

irwin siegel agency

INSURANCE PROGRAMS & RISK MANAGEMENT

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