

Risk Management focus

Summer 2014



Hot Tips for Safe Summer Travel

Summertime is that glorious time of year where the schools are out, the sun is shining, and many people are focused on vacation time. During this time you will see many people hit the roads. State Risk recommends taking extra precautions while traveling, whether on the job or on vacation, to keep yourselves safe. Keep in mind that vehicle maintenance is even more important during the summer months to prevent breakdowns in the desert. You will want to prepare for dust storms and unanticipated vehicle breakdowns by following these “hot” travel tips.

1. Plan ahead. Allow extra travel time for any unscheduled road closures. It is also a good idea to check your route for current conditions. ADOT offers real-time traffic information: You may call 5-1-1 or log on to ADOT’s Traveler Information site at www.az511.gov to check on updated highway conditions around the state. You also can get additional ADOT updates via Twitter at <http://www.twitter.com/ArizonaDOT> or Facebook at www.facebook.com/AZDOT.
2. Pay attention, and buckle up!
3. Get plenty of rest before traveling and take regular rest breaks.
4. Maintain your vehicle.
 - Check your tires! Safe driving starts with properly inflated tires. Government studies show that proper tire pressure, observing tire and vehicle load limits, avoiding road hazards, and inspecting tires for cuts, slashes, and other irregularities are the most important things you can do to avoid tire failures such as tread separation, blowouts or flat tires. Next to the brakes, the tires on your vehicle are the most important safety equipment. According to tire manufacturers, seasonal climate

changes result in air pressure losses of about one psi for every ten-degree decrease in air temperature. Due to large temperature fluctuations in the desert, it is best to check your tire pressure each month. One tire manufacturer summarized tire safety this way: “Inflate, Rotate & Evaluate.” Rotate your tires every 5,000 miles to achieve even wear.

- Keep your vehicle well maintained by getting regular tune-ups, oil changes, battery checks, etc...
 - Examine your wiper blades for signs of wear and tear.
 - Check your coolant level - you’ll want your cooling system functioning at peak performance to avoid the possibility of your engine overheating.
 - Check your fluid levels - oil, brake, transmission, power steering, coolant, and windshield washer fluids.
 - Make sure all the lights on your vehicle are in working order – check you headlights, brake lights, turn signals, emergency flashers, interior lights, and trailer lights.
 - Make sure you air conditioning system is functioning properly.
5. Be aware of high winds and monsoon storms.
 - Avoid dust storms. If driving in a monsoon area, keep the radio tuned for weather alerts.
 - Ensure new employees who travel know what counties they are in (furnish a map) in the event of regional alerts.
 - Keep headlights on when conditions are overcast or dusty.

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We’re on
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New Consultants join the Loss Prevention Team

State Risk's Loss Prevention section has happily gained two new Consultants. With these new additions there have been some Agency re-assignments. If you are unsure of who your assigned consultant is, you may contact 602-542-2175 to be directed.

Rick Baker

Rick comes to us with 24 years in Corrections; the last 2 years as a Safety Manager at Corrections Corporation of America, CADC in Florence. Prior to that, he retired from the Arizona DOC; the last 13 years there as the Florence Complex Occupational Safety Consultant.

Rick has his A.S. in Occupational Safety and Health from Columbia Southern University. He is an Arizona State-Certified Firefighter and Instructor, EMT and OSHA 501 (OSHA 30 hour) Instructor, amongst various other certifications held.

Having been raised in Virginia he is a "country-boy at heart," as evidenced by his multiple hobbies, which include hunting, fishing, and becoming a brew master.

His other life experiences are his marriage to his wonderful wife, their 3 boys and their families, and of course spoiling the grandkids.

Rick is excited to be part of the ADOA team and the opportunity to extend his career in safety, and utilize his broad spectrum of skills, knowledge,



and his good decision making to help our state agencies become safer places to work.

Linda Guarascio-Howard

Linda joins State Risk with 30 years experience as a safety and ergonomics consultant for the insurance industry, AHCCCS, and AT&T. Most recently she was the Faculty and Program Director at Gateway Community College.



Home to Linda is Chicago, and as a White Sox fan married to a Cubs fan, Arizona was the perfect choice for enjoying spring training games and future retirement. Family life includes three children, six grandchildren, three brothers (all Chicago firemen), one sister, two nieces, one grandniece, and five nephews. Vacations consist of visits to Chicago, Minneapolis, Florida and Laughlin to visit family.

Her education includes a M.S. in Industrial Safety, M.A. in Ergonomics and Biomechanics, and a Ph.D. in Human Factors and Design. She is also active in several industry associations and is a Certified Safety Professional and a Certified Industrial Ergonomist.

Linda is happy to return to state service and the ADOA team to provide loss prevention services. The combination of industry and teaching experience will be an appropriate fit with existing Loss Prevention resources and services.

Cause for Applause

State Risk takes their responsibility to serve and protect State Agencies very seriously. This past Spring, two of our Loss Prevention team members completed some outstanding achievements to help them do just that!

Our Environmental Consultant, Erik Lohman, received his CHMM designation (Certified Hazardous Materials Manager). This allows him to better aide Agencies with their hazardous material handling.

Our Industrial Hygienist, Dee Amen, received her Associates of Applied Science in Occupational Safety and Health Technology, which will aid in her current preparations for completing the Certified Industrial Hygiene examination in the Spring of 2015. Once the Certified Industrial Hygienist designation is achieved, Dee will be able to broaden State Risk's current abilities to assist all State Agencies in multiple subjects encompassed by the career field.

Great job Erik and Dee!





Please Pass the Salt! Hydration and Acclimation

The Issue

As Arizona residents, we have probably all been reminded to 'stay hydrated' while working or playing outdoors in the heat. Hydration is the preventative measure we take in order to decrease our risk of developing a heat related illness. Hydration seems simple; "drinking more water will rehydrate my body, right?" Not exactly; water is not the only compound/element lost when the human body reacts to heat.

The Science

When the human body is placed in a hot environment, it will naturally react by producing sweat. Sweat is composed of water, as well as sodium and potassium, or 'electrolytes.' Heat is removed from the body once the sweat we produce evaporates into the air, which in turn, cools the skin. When the body becomes overheated, it can generate up to one gallon of sweat per hour. Therefore, we must replenish the lost water, sodium, and potassium at a similar rate to keep the body from shutting down. If we replace these lost compound/elements with water alone, the positively charged sodium ions becomes diluted, triggering an illness called hyponatremia or 'water intoxication.' The normal range for sodium levels in blood is 135 to 145 millimoles per liter (mmol/L). The body will enter into hyponatremia when blood sodium levels deplete to 135 mmol/L and severe hyponatremia will manifest when blood sodium levels drop below 125 mmol/L. Prolonged hyponatremia may cause kidney and congestive heart failure. Symptoms of hyponatremia include weakness, muddled thinking, sensitivity to light, and seizures.

Prevention

Here are some ways to protect yourself when exposed to extreme heat.

- Increase fluid intake, regardless of your activity level.
- Avoid alcohol and coffee; they will increase fluid loss and dehydrate the body.
- Drink 16 to 32 ounces of water and electrolytes (sodium and potassium) per hour in order to prevent hyponatremia. Common sports drinks are designed to rehydrate the body correctly.
- Add extra sodium to your diet if you plan on exposing your body to extreme heat. Sodium intake can decrease once your body acclimates to the heat.

- **Know the benefits of acclimation.** It will lower your heart rate and core body temperature and improve water and electrolyte retention, which will protect your vital organs and improve blood flow.

- **Pace yourself.** Allow your body 10 to 14 days to sufficiently acclimate to the heat.

- **Control exposure time.** For low to moderate activities, limit yourself to 2 hours of heat exposure. For high to vigorous activities, limit yourself to 10 to 15 minutes of heat exposure.

- **Gradually increase exposure time.** Depending on the intensity of your activity, gradually increase (10 minutes to 2 hours) by 20 percent each day. Your cardiovascular functions will improve within 5 days.

- **Hydrate correctly.** Replenish lost fluid with water and electrolytes. Add extra sodium to your diet for the first 5 days of acclimation.

- **Wear light-colored, loose fitting, breathable**

clothing. Improper attire can disrupt the heat transfer process when sweat evaporates into the air. Cotton is recommended.

References:

- 1) Fundamentals of Industrial Hygiene, National Safety Council, Third Edition
- 2) Heat Acclimation on Construction Jobs, <http://brassmeir.com/articles/safety/acclimation.htm>

Acclimation

Acclimation to heat is a slow process; it may take ten to fourteen days to acclimatize. Acclimation can be lost in as little as 24 to 48 hours. After three to four weeks, acclimation is completely lost. A lack of salt and water will increase the speed in which acclimation is lost. A physically fit person will become acclimatized 50 percent faster than a non-physically fit person. Follow these **six steps** when acclimatizing yourself to heat.



State Risk Training Events

Fuel Tank Program Management

**August 12, 2014,
9:30—11:30 AM**

The Fuel Tank Program Management Training course will give State workers who receive fuel deliveries and manage fuel tanks at State Facilities an overview of regulatory requirements.

Topics include:

- Spill Prevention Control and Countermeasures (SPCC)
- Community Right-to-Know Act Tier II Reporting
- 40 CFR Part 112 Oil Pollution Prevention
- Spill or release reporting requirements
- Air permit requirements
- Fuel dispensing
- Inspections and Best Management Practices
- International Fire Code and Building Code



- Hazardous and Solid Waste Amendments (HSWA) of the Solid Waste Disposal Act (SWDA)
- Resource Conservation and Recovery Act (RCRA)
- Oil Pollution Act (OPA)
- Clean Water Act (CWA)

To Register:

- Log on to [Y.E.S.](#), then choose Employee Training
- Registration by Category: State Risk Management Courses
- Choose Course: UST100AB—UST A&B Operator Training, Session 2

Participants will receive a **Training Certificate**.

Note: the focus of both training courses will be on diesel and gasoline fuel.

**System Tip—when registering for a course click on the course number, not the course description.*

To Register:

- Log on to [Y.E.S.](#), then choose Employee Training
- Registration by Category: State Risk Management Courses
- Choose Course: FTP300—Fuel Tank Program Management, Session 2

UST Class A&B Operator Training

**August 12, 2014,
12:30—3:30 PM**

The Underground Storage Tank (UST) Class A&B Operator Training will give workers who receive UST fuel deliveries at State Facilities an overview of regulatory requirements.

In addition to topics covered in the Fuel Tank Program Management course, we will cover:

- Federal and State UST requirements

Save the Dates!

Asbestos Awareness 2-Hr—Course ACM100,
- and -

Asbestos Awareness for Project Managers—
Course ACM100PM
September 16, 2014

Dynamics of Risk 4-part Insurance series (refer to the [Risk](#) website for session details).

Courses as follows:

September 17:	INS-101
September 24:	INS-102
October 1:	INS-103
October 8:	INS-104

Stay tuned for additional information on these courses.





Analyze your Risks

JSA or JHA (Job Safety or Job Hazard Analysis) is the practice of focusing on job tasks as a way to identify hazards before they occur. It focuses on the relationship between the worker, the task, the tools, and the work environment. This should be done for all equipment and every specific operation that presents safety hazards and/or concerns. After determining that an operation is a safety hazard and/or concern, follow these steps:

Steps

1. Identify each of its tasks. (See Task column)
2. Identify the individual hazards associated with each task. (See Hazards)
3. Recommend controls to mitigate each identified hazard. (See Controls)
4. Involve employees that perform the task to provide input. (Optional)

Then the best part; use this document as a training tool to educate your employees on safe practices prior to equipment use. Don't forget to include your experienced employees who routinely utilize equipment and/or perform specific job tasks. This is a great tool to identify other issues or hazards associated with the work; this way your JSA or JHA becomes a living document that is fluid and adjustable to its environment.



Following is an example of an Angle Grinder Operation JSA:

TASK	HAZARDS	CONTROLS
1. Prepare for Use	Bodily Injury Electric Shock	<ul style="list-style-type: none"> • Make sure accessories are rated for the recommended speed to prevent parts from flying apart. • Make sure the switch is in the OFF position before connecting into a power supply. • Change accessories before connecting into a power supply.
2. Use	Bodily Injury Inhalation or Absorption of Harmful Chemicals/ Dust Electric Shock Fire Eye Injury Hearing Loss Loss of Control	<ul style="list-style-type: none"> • Use proper guard with grinding wheel to protect against flying broken fragments. • Use gloves when handling the wire brushes. • Use a dust mask. • Work in a well-ventilated area. • Wear protective clothing and wash exposed areas with soap and water. • Hold tool by insulated gripping surface. • Direct sparks away from self, any person, or flammable material. • Wear proper eye protection. • Wear appropriate hearing protection during use. • Make sure the side handle is tightened. • Always have a secure and firm grip on the side handle. • Make sure the wheel comes to a complete stop before laying the tool down. • Allow the tool to reach full speed before touching the work surface. • Remove the tool from the work surface before turning it off.
3. After Use	Electric Shock Inhalation	<ul style="list-style-type: none"> • Use clean, dry compressed air to clean out the tool after every use to prevent metal particles from accumulating. • Vacuum and thoroughly clean the work area and tool after each use to prevent dust inhalation. • Use a dust mask.

Remember, State Risk Loss Prevention Consultants are available for questions and reference material; call 602-542-2175.

Did you Know?

Q I wear a respirator from time-to-time on the job—are there any rules I need to know?

A Your Agency may have internal procedures in addition to the federal protocols—but at a minimum you are required, per OSHA, to be medically cleared to wear a respirator (respirators put strain on the body and its organs), fit-tested, and trained to use it. Your Agency is also required to have a Respiratory Protection Program that meets federal requirements at minimum, but may be more stringent at the Agency's discretion.

Your Agency should make arrangements for medical clearance. See your LPC for more information. State Risk is available to assist or provide guidance and review support in developing your Agency's Respiratory Protection Program— simply call or email.

(Continued from page 1) *Hot Tips for Safe Summer Travel*



- Do not drive into a dust storm. If you must pull off the road, pull as far to the right as possible. Turn off your lights so that other cars do not follow you off the road. Keep your foot off your brake.
 - Slow down.
 - Do not attempt to cross rain-filled washes. Hundreds of vehicles each year are swept away in Arizona storms. Vehicle control is lost in six inches of water; most vehicles float in two feet of water.
 - [A.R.S. §28-910](#) (Stupid Motorist Law) Liability for emergency responses in flood areas, makes the driver responsible for rescue costs. State insurance does not cover those costs.
6. Keep supplies in your vehicle. Following is a list of suggested items:
- Cell phone - make sure it is fully charged; It is also a good idea to keep a portable charging device
 - First aid kit
 - Flashlight

- Flares and a white flag
- Jumper cables
- Jack (and ground mat) for changing a tire. If driving a State vehicle, call the emergency number provided for road-side assistance. Changing the tire yourself should only be a last resort!
- Work gloves and a change of clothes
- Basic repair tools and some duct tape (for temporarily repairing a hose leak)
- A jug of water and paper towels for cleaning up, or if your vehicle overheats
- Nonperishable food, drinking water, and medicines
- Extra windshield washer fluid
- Maps

State Risk wishes you a happy, healthy, and safe summer!

References:

- 1) <http://www.nhtsa.dot.gov/cars/rules/TireSafety/ridesonit/brochure.html>
- 2) <http://www.rma.org/>
- 3) <http://desertmessenger.blogspot.com/2011/05/adot-summer-travel-driving-tips.html>
- 4) http://www.nhtsa.gov/links/SummerDrivingTips/NHSTA_Summer_Tips_23May2013.pdf
- 5) http://www.azdps.gov/Information/Travel_Tips/

