

## NewsWatch Briefs

**Award helps fund weather research**

The Washington Wine Industry Foundation awarded the Washington State University Agricultural Weather Network \$55,000 from a USDA Risk Management Agency grant partnership to fund research into new telemetry technology to streamline collection and distribution of weather data to the Washington agricultural industry. "The weather is a huge and continual risk factor for growers, and having more accurate information in a timely manner is key to mitigating that risk and to making better decisions," says Vicky Scharlau, WWIF executive director.

**CSU veterinary program ranked 2nd in nation**

The veterinary medicine program at Colorado State University's College of Veterinary Medicine and Biomedical Sciences was ranked second in the nation in the coveted *U.S. News and World Report* annual rankings of America's best university graduate schools. "Colorado State continues to set standards of excellence in veterinary medical programs, with internationally recognized research and clinical programs, as well as a world-class hospital," says Lance Perryman, dean of the college.

**First drop in Oregon farm numbers since 1999**

After holding steady at about 40,000 farms each year since 1999, the number of farms in Oregon dropped to 39,300 in 2006, according to new figures released by USDA's National Agricultural Statistics Service. The latest statistic breaks a trend going back 16 years of either an increasing number or the same number of farms in Oregon. It also marks the lowest number since 1997.

# Beat heat before illnesses hit

**NURSE MURF**

By HELEN MURPHY

It was mid-May and about 78 degrees F in Yakima, Wash. A 35-year-old worker started his job at 9 a.m. By early afternoon, he complained of feeling tired. As he went to lie down, he collapsed, became delirious and had a seizure. His recorded body temperature in the emergency room was 111 degrees.

He died of heat stroke.

Two Washington state farm workers have died in the past decade. Of the industries with heat-related workers' compensation claims, agriculture ranks third.

Your chances of surviving a heat-related illness are good if your body temperature is lowered to at least 102 degrees within 30 to 60 minutes. However, many cases of heat illness are misdiagnosed.

By the time workers reach an emergency room, their temperature may fall enough that heat illness isn't suspected. Symptoms may be misclassified as a heart attack. Less severe cases may never get reported because workers don't recognize heat-related illnesses or don't want to leave work.

Heat stress is a buildup of heat from the body's own work plus external (environmental) sources. If more heat is generated than can be released, you become heat-stressed.

A heat-related illness results

**Adjustment time**

Acclimatization time	Workload/time exposure
Day 1	50%
Day 2	60%
Day 3	70%
Day 4	80%
Day 5	90%

**Key Points**

- A serious condition, heat stroke can lead to death.
- It is important for farmers to know how to deal with heat.
- Water, rest and shade are all vital to guard against heat.

when the body can no longer cope with this stress. The body's physical and mental functions break down. The heart responds to a rise in body temperature by pumping more blood to peripheral vessels, which enlarge or dilate to release heat. If that isn't enough, a person will start sweating to cool down by evaporation.

Three environmental conditions can lead to problems: temperature, high humidity and the absence of air movement. Machinery can add to the sun's heat.

**Four common illnesses**

The following are four common illnesses of overheating:

**Heat cramps:**

Athletes are familiar with this syndrome caused by salt depletion. It is easily treated with rest and electrolyte-balanced fluids such as sports drinks. Drink plain water and eat salty chips or nuts. Avoid salt tablets due to the risks of overdosing.

**Heat syncope:**

Fainting happens when blood pools in the legs, often after standing too long. It is temporary; being horizontal usually prompts a return to consciousness.

The biggest risk is an injury from falling. To help blood return to the heart, elevate the person's legs, and cool the body with wet compresses and fanning. Turn the unconscious person on his or her side to prevent choking.

One exception is if the

person has been working hard; then consider the fainting due to heat stroke and call 911. Check the ABCs (airway, breathing and circulation) and cool him or her down immediately. Anyone who faints should be medically evaluated and not return to work.

**Heat exhaustion:**

This condition is serious and is caused by severe dehydration. Symptoms can include fatigue, dizziness, nausea and vomiting, plus early neurological signs such as headache, impaired judgment and anxiety.

Exhaustion causes profuse sweating and cool, clammy skin. Move the person out of the heat, provide fluids as tolerated, strip off extra clothing, and cool them by wetting clothing and fanning. Have them medically evaluated.

**Heat stroke:**

This is a medical emergency. It can look like exhaustion except the body temperature is 104 degrees F or higher, and the brain is seriously affected. Neurological effects can include confusion, irrational or aggressive behavior, incoherent speech, collapse, convulsion, and coma. When the body's heat-coping mechanisms have failed, sweating stops and the skin becomes red, dry and hot to the touch. Call 911 and quickly lower the body temperature.

**Handling the heat**

To handle the heat better, remember these seven factors to help prevent a heat-related illness.

**Risk assessment:**

Educate yourself on the risk factors to be ready when the heat index is high. Any illness or medications that dehydrate can aggravate heat illness. Be aware of the drugs, diet, medications and illnesses that can

**Meet Nurse Murf**

THIS month Helen Murphy, director of outreach for the University of Washington Environmental and Occupational Health Scientists in Seattle, launches her "Nurse Murf" monthly column, a *Western Farmer-Stockman* exclusive.

A registered nurse well aware of farm health issues, Murphy will continue writing about important farm safety issues over the next several months, including skin cancer, respiratory problems, orchard injuries, tractor safety, and the relationship between pesticides and cancer.

She may be reached by phone at 206-616-5906 or by e-mail at [hmurf@u.washington.edu](mailto:hmurf@u.washington.edu).

make you susceptible. Check elderly workers on hot days.

**Environmental conditions:**

When the heat index is high, shift work hours to the cooler times of day.

**Acclimatization:**

New employees or those off work for two weeks or more should follow a five-day period of acclimatization. (See chart.)

**Fluid intake:**

Good hydration is key to prevention. Workers may not want to stop work for water or toilet breaks because they are working piecemeal or do not want to let their co-workers down.

Remember the half-half rule: ½ liter or ½ quart (that's 1 pint) every half hour. Your fluid intake is inadequate if you stop urinating or your urine is dark.

**Rest:**

Good managers should insist on breaks in the shade to cool down and encourage a culture of rehydration and toilet use.

**Proper clothing:**

Wear light, breathable clothing and hats. Some workers may wear excess clothing to protect themselves from the sun.

In summer 2004, a hops worker found dead from heat stroke was wearing a dark leather jacket over multiple layers of clothing. Changing this belief will take education.

**Illness recognition:**

Learn to recognize heat-related illnesses. Identifying and responding to early symptoms can save lives. Encourage a buddy system for remote work locations.

## Western Close-up

Office of the Vice President for Research, includes \$10,000 to support the research of the award recipient.

**North Dakota State honors alumni Miller**

It's somewhat fitting that an honored weed scientist should return to his collegiate roots. Stephen D. Miller, director of the Wyoming Agricultural Experiment Station and associate dean in the University of Wyoming's College of Agriculture, has received the first distinguished alumni honor from North Dakota

State University's College of Agriculture. "I'm thrilled Steve is going to receive this award," says Rod Lym, professor of weed science at NDSU in Fargo. Lym nominated Miller. "He's a well-respected weed scientist, and he's had many graduate students over the years and brought in millions of dollars of grant money. People respect him. He's a motivator and gets the job done."

**Davis to serve counties of Sweetwater, Uinta**  
Cade Davis, University of Wyoming Cooperative

Extension Service rangeland resources educator, is now serving Uinta and Sweetwater counties in Wyoming. Davis will be based in the Sweetwater County office in Rock Springs. Davis was raised in rural Idaho, where he worked on farms, and he has worked on ranches in Idaho, Nevada and Utah, which allowed him to experience a variety of production practices.

**Scotland's Harley named to potato advisory group**  
World Potato Congress Inc. appointed Douglas Harley of

Scotland, managing director of Alexander Harley Seeds Ltd., to the organization's International Advisory Committee. Allan Parker, president and CEO of the congress, says Harley brings extensive and valuable experience to the Advisory Committee. "World Potato Congress Inc. consults on an ongoing basis with the committee," notes Parker. "I know that Doug's contribution will be appreciated by both the congress and the United Kingdom region that he represents."