

## Farm Injury Control Summit

On Wednesday, November 20th, provincial, national and international speakers will address the fourth annual Farm Injury Control Summit for Rural Municipal Leaders and Partners.

The real VIPs at the event though will be the community leaders, producers and educators who attend the event. They're the people who can make a difference when it comes to safety on Saskatchewan farms.

Highlights of the day will include details about a safety rating system for tractors in use in Australia; recent research and a panel discussion on the assignment of tractor work to children and youth under the age of 17; news about how communities can get involved in Sask Labour's "Grow Up with Safety" program; and announcement of the first winner of the I.A.R.E.H Media Award for Excellence in Farm Injury Control Reporting.

The Farm Injury Control Summit will take place at the Radisson Hotel in Saskatoon. A \$10 registration fee covers lunch. Register at the door or in advance.

*For further information, contact: Institute of Agricultural Rural and Environmental Health (I.A.R.E.H), 103 Hospital Dr., Saskatoon, SK S7N 0W8 Tel. (306) 966-2110, Fax: (306) 966-8799*

## Spouse 'injured' too

How a serious farm injury affects the spouse of the injured person is being studied by Roxanna Kaminski, a Master's in Nursing student at the University of Saskatchewan. Previous work with injured farmers has led Kaminski to believe the effects are considerable, and that few resources exist specifically to help the spouse and family members cope following a farm injury.

If you are the spouse of someone who has suffered a serious farm injury and are willing to share your experience for this study, please contact Roxanna Kaminski through I.A.R.E.H at (306) 966-8286 or directly at roxannak@shaw.ca.

### Thank you!

For support in publishing Network News, the Agricultural Health and Safety Network wishes to thank: **Saskatchewan Agriculture and Food.**



### Hunting season is b-a-ack!

Two hunters were dragging their dead deer back to their truck.

A farmer pulled along side and said, "Hey, I don't want to tell you fellows how to do something . . . but it's much easier if you drag the deer in the other direction. The antlers won't dig into the ground."

After the farmer left, the two hunters decided to try it. A little while later, one said to the other, "You know, that guy was right. This is a lot easier." "Yeah, but we're getting further from the truck," the second hunter added.

### Welcome new members!

The Agricultural Health and Safety Network is pleased to welcome the following new members:

R. M. of Insinger, #275 R. M. of Eye Hill, #382  
R. M. of Senlac, #411

Welcome also to new Network Steering Committee representative for Division 6:  
Gary Hoppe from the R. M. of Glendale, #377.

### Moved? Retired? Not Farming?

To remove your name from our mailing list, please complete and send to the Editor.

Name \_\_\_\_\_

Address \_\_\_\_\_

Town \_\_\_\_\_ P.C. \_\_\_\_\_

R.M. \_\_\_\_\_ R.M. # \_\_\_\_\_

### From the Editor

We welcome your comments and contributions.  
Send correspondence to:

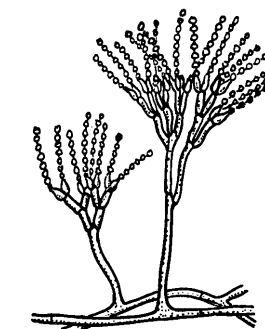
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## Mould: Managing the 2002 crop year's final challenge

### Moulds and human health

Moulds and fungi occur naturally in soil and play an important role in decomposing vegetable matter. Most moulds thrive in warm, humid places but others are adapted to cool, dry climates. Spore counts peak in spring and autumn.



Illness caused by exposure to mould is a hazard for producers, especially following a wet harvest season like the one we've just been through.

Several diseases are known to be the result of exposure to moulds and fungi. Others, including a number of rare cancers, are suspected to be related to moulds and fungi but the relationship has not been proven.

### Mould-related disease often mistaken for 'flu

Organic Dust Toxic Syndrome is a common short-term illness, often mistaken for 'flu, that lasts from 24 to 72 hours after exposure to large amounts of mouldy dust. It does not cause permanent lung damage.

*Due to a wet fall and an early winter, PJ, 46 years old, finished harvesting operations the following spring. During combining, he noticed clouds of white powder as the swaths were picked up. PJ began to cough and complained of burning eyes and throat irritation. Later in the day, he felt unwell with muscle aches, weakness, shortness of breath and chills. He felt well again the following day.*

*(PJ was diagnosed with Organic Dust Toxic Syndrome, a short-term illness that occurs when individuals are exposed to large quantities of dust and mould.)*

Another common health effect of moulds is an increase in symptoms of asthma. Up to 20 percent of asthma sufferers may be allergic to moulds and are often allergic to more than one type of mould.

Less common, but more serious, is Farmer's Lung, an allergic condition that worsens over time. Its symptoms — chills, fever, cough and shortness of breath — are triggered by increasingly small amounts of mouldy dust. Farmer's Lung can result in death from lung fibrosis unless the sufferer avoids exposure to dust or consistently wears respiratory protection. Early diagnosis is important to maximize the success of treatment.

*JS, 40 years old, was using a tub grinder to make feed for his cattle. He added some hay from a round bale to the grinder. During the grinding operation, large amounts of white dust were raised into the air. Later that evening, JS began to complain of chills, fever, muscle pain and a cough. Since then he has had a persistent cough, increasing shortness of breath and chest pain with breathing.*

*(JS was diagnosed with Farmer's Lung, a chronic condition that may worsen if he continues to be exposed to dusts and moulds without respiratory protection.)*

### Job One: Reduce your exposure

- Reduce mould growth in grain and forage:
  - Dry and store cereal grains at 13.5 percent moisture content or less.
  - Dry and store oil seeds at 12 percent moisture content ideally (or a maximum of 16 percent).

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- Dry and bale forage at 16 percent moisture content or less.
- Work outside when possible if grain or bales are mouldy.
- Use ventilation (fans, exhaust blowers) if you must work in an enclosed area.
- Wet down mouldy material before disturbing it to reduce the dust released.
- Use mechanized handling systems when possible.
- Avoid breathing dust created by bale grinders or feed mixers.
- Be especially careful when harvesting crops that have over-wintered in the field.
- Use crop rotation to reduce fungal growth, especially for crops prone to fungal infection.

### Job Two: Protect yourself

Despite good storage efforts, moulds and fungi can still grow. If you have to work with mouldy grain or feed, take the following safety precautions:

- Use a NIOSH-approved P-100 respirator, now available in disposable mask as well as half-face respirator format. A standard N-95 disposable dust mask *does not* screen out very small particles like mould spores.
- Wear coveralls over work clothes.
- Remove coveralls outside and wash exposed skin (hands, face, neck) before meals and at the end of the day to limit hand-to-mouth contact with mould.
- Change air filters frequently on harvesting equipment.



### Hog barn "bouquet"

Ratepayers in R. M.'s considering an intensive hog operation are concerned, understandably, about odour from manure gases. The good

news is: they needn't worry about airborne contaminants affecting their health.

The Veterinary Infectious Disease Organization (VIDO) at the University of Saskatchewan has published the results of a 2001 study that measured airborne microbial DNA and endotoxins downwind from the Prairie Swine Centre, a 6,000 hog operation outside Saskatoon. In high concentrations, these breakdown products of bacteria and other

microorganisms can cause coughing, phlegm, wheezing, fever and, in severe cases, chronic inflammation of the lungs and airways.

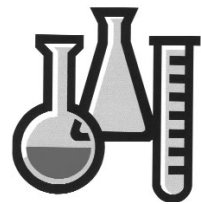
Dr. Phil Willson, primary researcher for the VIDO study, says the group looked at the issue from a scientist's point of view in order to shed some light on a subject that typically generates a fair amount of heat.

Researchers tested air upwind of the barn, at the barn's fan outlets and 600 metres downwind. They measured 100 to 500 endotoxin units per cubic metre in air 600 metres downwind from the swine farm, approximately a fifth of the levels found at the ventilation air outlet of the hog barn. Willson concludes, "This suggests that there is modest environmental concern downwind from the barn, which may be managed with low impact controls such as landscaping."

The team was surprised to find no more contaminants 600 metres downwind of the farm than 2.4 kilometres upwind. In fact, higher amounts of endotoxins were measured in the air during spring seeding and other field operations that release naturally-occurring microorganisms found in soil.

VIDO researchers repeated the study during 2002 in order to validate the earlier results. Willson reports the results of that study will be published this fall.

### Get the facts: Rural water quality



Did you know that rural water treatment facilities often have no pretreatment equipment or processes in place to remove dissolved organic carbon (DOC) to acceptable levels?

There are two reasons to be concerned about DOC. One is straightforward — reducing organic carbon improves water colour and turbidity. The second reason is less apparent, but equally important. If the organic content of water is too high, chlorine reacts with it to form compounds known as trihalomethanes, which are potential cancer-causing agents.

Removal of DOC from rural water supplies was just one of ten topics discussed in the Spring 2002 issue of *Prairie Water News*, a newsletter dedicated to protecting and improving rural water supplies. Other topics included: "It's time to update your water supply"; "Understanding water quality

testing results"; "How to extend your pump motor life"; and "Winter watering with frost free nose pumps."

*Prairie Water News* is published twice yearly by the Saskatchewan Research Council. Look for it on the Internet at <http://www.quantumlynx.com/water>. Subscriptions are also available, at \$25 for ten issues.

Contact: Saskatchewan Research Council, 15 Innovation Blvd., Saskatoon, SK S7N 2X8 Tel: (306) 933-5400

### Hantavirus warning

Saskatchewan's Chief Medical Health Officer Dr. David Butler-Jones has issued a warning to the province's residents to take precautions against hantavirus. Saskatchewan's eighth case of the disease was reported in June. The patient, an outdoor construction worker in the Belle Plain area, was hospitalized and has since recovered.



Though rare, hantavirus is a serious and potentially fatal infectious disease," Butler-Jones said. "It begins with flu-like symptoms and can progress into a severe lung infection that makes it difficult to breathe."

As of June 2002, there had been a total of 41 cases of hantavirus in Canada, resulting in 16 deaths. Approximately one quarter of the cases involved exposure on farms to infected mouse droppings.

The primary carriers of hantavirus are deer mice, and the disease is transmitted to humans through contaminated airborne particles. Farmers, grain handlers, hikers and cottagers are especially warned to take precautions, and to thoroughly clean and disinfect rodent-infested buildings or articles removed from buildings. This should be done while wearing eye protection, a P-100 mask (see page 2) and rubber gloves.

Hantavirus begins with fever, muscle aches, cough, headache, nausea and vomiting. Individuals who develop a fever or respiratory illness within one to six weeks of potential exposure to mouse droppings should seek immediate medical attention and inform the physician about their exposure.

For more facts about preventing hantavirus infection, visit the Saskatchewan Health Web site at [www.health.gov.sk.ca](http://www.health.gov.sk.ca) and click on "Hantavirus Disease Guidelines for Protecting Workers and the Public".

### 2002 Network Scholarship winner



2002 Network Scholarship winner, Melissa Schachtel

The 2002 winner of the SARM 90th Anniversary Scholarship comes from the R. M. of Eye Hill, #382. Melissa Schachtel plans to pursue a career in dentistry and has applied the \$1,000 award toward her tuition at the University of Saskatchewan. Her parents, Pius and Theresa Schachtel, operate a mixed farm fourteen miles from Macklin where they raise beef cattle, have a small dairy herd and grow canola, barley and wheat crops.

Melissa opened her winning essay entitled, "The Importance of Safety and Health on Our Farm," with these moving words:

*"Farming is a truly amazing occupation and a way of life for many. Whether it's watching a mother cow give birth to her calf, witnessing a foal awkwardly taking his first steps, or standing mesmerized by the wide open spaces, farming is definitely an extraordinary and unique experience for everyone. However, it also has many dangers. In Saskatchewan in 1998, 24 people died and 250 were injured in farm-related accidents. This shows us that safety on our farms needs to be improved."*

The 2003 Scholarship will be awarded at SARM's Annual Meeting in March. Rural Grade 12 students planning to attend post-secondary education are eligible to apply for it. Applicants are invited to submit a 1000-word essay on one of two topics, "The Importance of Safety and Health on Our Farm" or "Safety and Health Hazards on Our Farm."

For a scholarship application form, contact your local R. M. Office or Rural Service Centre; or download the form at: <http://iareh.usask.ca/rhep/scholarships.php>. Applications must be postmarked on or before January 17, 2003.

For further information, contact: Lori Lockinger, Institute of Agricultural Rural and Environmental Health (I.A.R.E.H.), Box 120, 103 Hospital Drive, Saskatoon, SK S7N 0W8 Tel: (306) 966-6643, E-mail: [lockinger@sask.usask.ca](mailto:lockinger@sask.usask.ca)