

The Agricultural Health and Safety Network's
25th Anniversary
Commemorative Edition 2013



NetworkNews



THE NETWORK providing agricultural occupational health and safety information and programs to Saskatchewan farm families since 1988

The Network Newsletter is a cornerstone of the Agricultural Health and Safety Network (The Network) bringing farm safety information to Saskatchewan farm families since its humble beginnings. As the Network enters its third decade it welcomes the challenge of a changing agricultural world including new technology, different family farming structures, and new industry players.

Reporting ground breaking research from

the Canadian Centre for Health and Safety in Agriculture (CCHSA) and getting that valuable information to rural Saskatchewan has been a primary goal for the Network. For an update on some of that research, read pages six and seven of this Network Newsletter.

To reach a milestone as significant as 25 years, many people have worked over and above the call of duty. Long term health and injury studies, as well as new and innovative

research demonstrate CCHSA's dedication to rural people.

At the heart of the Network is the desire to care about farm families and their future in a changing agricultural scene and sometimes very difficult times. Inside this issue you will find the history of the Network, information about what we can provide farm families, and how this has developed using CCHSA research.

Return undeliverable Canadian addresses to:
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Celebrating Who the Network has Become

“For it is not so much what we at the Network can do for each farm family, but what thousands of farm families working together can do to promote a healthy and safe rural way of life”

Leo Kristjanson, Former President,
University of Saskatchewan

Letter from the Editor

My five years at the Network has been an exciting adventure. It has been my pleasure to have met and worked with many people across the province and across Canada who place a high priority on farm safety.

The most important thing that I have learned is that in most cases, injuries are predictable, and therefore preventable. My challenge has become to provide information to prevent injury and illness on the Saskatchewan family farm.

My experience working in the Network is that our success depends on many individuals who volunteer their time. There are many people who go over and above with their time, energy and financial support to bring safety programs to their rural communities. We could not accomplish as much as we do without them. This cooperative effort has contributed to the development of a program that compares to no other program in the country, or around the world.

I look forward to a golden age where priority is given to injury prevention programs and no one is hurt farming. A wise person once told me to “Invest your time in those who deserve it.” Who deserves our time more than Saskatchewan farm families?

Bonita

What the Network Offers

The Network was founded with the mission “to improve health and safety on the farm through education, service and evaluation research.” The goal is to reduce injury and illness related to the farm environment through cooperative efforts with our partners.

The Network consists of full and part time staff working primarily on bringing health and safety training and resources to Saskatchewan’s farm families as well as many people who volunteer their time to help bring programming to their communities. Network funding comes from RM fees, the Ministry of Agriculture, and CCHSA. Additional funding for projects has been obtained through small grants from the Canadian Association of Safety in Agriculture (CASA) and the Farm Credit Corporation (FCC).

Since its inception, the Network has grown with Saskatchewan farm families in effort to keep up with their health and safety information needs.

Respiratory Clinics

Network members are eligible for an educational and respiratory screening service provided by the Network and their rural municipality. A registered nurse works with farmers and their families in their local community to increase awareness of health and safety risks associated with respiratory hazards on the farm, develop methods to reduce their exposure and show how they and their family physician can monitor the effects such hazards have on their respiratory health.

Hearing Clinics

Network members are eligible for an educational and hearing screening service provided by the Network and their rural municipality. Trained staff work with farmers and their families in their



local community to increase awareness of noise hazards on the farm, develop methods to reduce their exposure to harmful noise and show how they and their physician can monitor the effects of hazardous noise on their hearing.

Health and Safety Workshops

A variety of workshops are available to members of the Network including: The Farm Safety Walkabout, Farm Safety Plans, Aging Farmers, Stress and Agriculture, Making Sleep Work for You, Caring for the Rural Caregiver, and Respiratory Safety.



Printed Resources

The Network is continually developing new resources for farm families including booklets, a biannual newsletter, factsheets and DVDs. These are developed out of need expressed by Saskatchewan farm families and current research. There are also workshop packages available for anyone who would be interested in presenting in their own community or organization. The Network also sends out a periodic educational package including a current farm safety theme.

Website

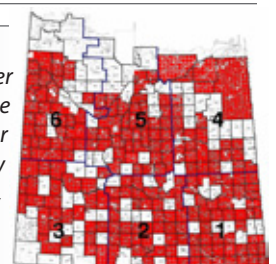
As movement towards electronically based resources continues, the Network is working towards servicing the progressive and technologically savvy farmers by keeping our website up to date and uploading current and new resources and videos as well as providing the option to stay connected by our new email list. Our website gets over 7,000 hits per month.



Tradeshows

The Network attends rural tradeshows throughout the year to increase our exposure and have the opportunity to talk to many individual producers who stop to look at our resources.

If your RM is not a member and you would like more information to take to your local council on how they may become a member, please call (306) 966-6647.



Realizing a Dream: The Founding of the Agricultural Health and Safety Network

207 Rural Municipalities Can't Be Wrong

By James A Dosman, MD

The Centre for Agricultural Medicine at the University of Saskatchewan was formed in 1986 by joint agreement between the University of Saskatchewan and the Saskatchewan Lung Association. It was recognized that dusts, chemicals, injuries, climate, distance, and production methods resulted in serious threats to the health and safety of farmers, their family members and others in the agricultural industries. A Board of Directors representing the University, Lung Association, Government of Saskatchewan, Saskatchewan Medical Association, Colleges of Agriculture and Veterinary Medicine and the Saskatchewan Association of Rural Municipalities was formed to guide the development of the Centre. Since 1986 the Centre has grown from a part-time Director and Secretary to Canada's leading and a world leader in agricultural safety and health.

The goals of the Centre for Agricultural Medicine, now the Canadian Centre for Health and Safety in Agriculture, were to carry-out research, training, service and prevention for the farmers and rural people of Saskatchewan and Canada. In research, following its inception, the Centre capitalized on research in grain dust and breathing, stress, chemicals, and injury surveillance. In training, students at the Masters and Doctoral levels soon began training programs. In service, the Centre offered much needed occupational health programs for grain companies and swine producing companies in the province.

However, a much more difficult problem was how to get the word out on prevention to thousands of farm families scattered over the vast geographic area of rural Saskatchewan. In the end, this problem was addressed by the farmers themselves through their elective representatives in SARM. Early in 1988, I met with Mr. Ike Thiessen, former Reeve of Aberdeen RM #373 who was President of SARM. We discussed the model that the predecessor of the Lung Association, the Saskatchewan Anti-Tuberculosis League had used in recruiting farmers and their families to come out for tuberculosis screening x-rays. We decided to invite RM Councillors in participating RMs to drive around and collect \$10 per farm family per year in support of a prevention program.

The Agricultural Health and Safety Network was born! The theme was taken from then-University President Leo Kristjensen: "For it is not so much what we at the Network can do for each farm family, but what thousands of farm families working together can do to promote a healthy and safe rural way of life." The first year 6 municipalities joined: St. Peter #369, Fish Creek #402, Aberdeen #373, Round Valley #410, Biggar #347, and Lumsden #189. By 2013 the Network includes 207 participating municipalities involving more than 30,000 farm families. RMs now contribute a small fee per numbers of farm families. A Steering Committee elected at the annual meeting of SARM assists in guiding

the program. Programs now include twice yearly newsletter, yearly prevention themes, breathing tests, and participating in local events. The Network is world-unique!

207 rural municipalities can't be wrong!!



In the quarter of a century since it was founded, the Network has done what Dr. James Dosman set out to do – make an impact. Now considered the Father of Agriculture Medicine, Dr. Dosman has earned numerous prestigious awards for working in his chosen field. Most recently these include induction into the Saskatchewan Agricultural Hall of Fame (2011) and being named an officer of the Order of Canada (2011).



Inspiration

It has been 25 years since two visionary men discussed the challenge of providing agricultural health and safety information to farmers in Saskatchewan. When he completed his term as SARM president, Mr. Thiessen was recruited by Dr. Dosman to assist in the continuing development of the Network. The present success of the Network is a tribute to the hard work, dedication, patience, and wisdom of Mr. Ike Thiessen. His gentle nature and genuine concern for the health and wellbeing of farm families in Saskatchewan continues to inspire those involved with the Network.

The Story of the Network Logo

The original Network Logo symbolized the partnership of the Network with the Rural Municipal Councils, Farm Families and the Centre for Agriculture Medicine (now CCHSA). The grid pattern on the province represents the networking between the members, and the sheaf of grain symbolizes the agricultural focus of the Network. The updated Network Logo demonstrates the solid connection that we have developed with rural Saskatchewan.



Partnership with SARM

The Saskatchewan Association of Rural Municipalities (SARM) has proudly performed its role as the voice of rural Saskatchewan since 1905. All 296 RMs in the province are voluntary members of the organization. SARM represents rural municipal government in Saskatchewan and is the principal advocate in representing them before senior governments.

The Network's devotion to farm families parallels SARM's dedication to rural Saskatchewan. SARM has a rich history of advocating for the health and safety of Saskatchewan agriculture producers. This natural partnership between CCHSA and SARM has contributed to the steady growth and success of the Network.



1989

1st Response Health Programs

1st Respiratory Mobile Health Program

1992

Farm Stress Line comes into existence



1994

The first issue of the Network News is sent out to 21,500 member farmers in 53 RMs

1996

Farm Response Course

1999

First Breath Video is film

Stress on the Initiative bu momentum

First Farm Injury Contr

Network 1988-2013

1988

The Network is founded to improve health and safety on the farm through education, service, and evaluation.

1990

22 RMs belong to the Network

Mobile Program: Pesticide Safety Course



1993

50 RMs belong to the Network. The Steering Committee is formed.

The Ministry of Agriculture decides to financially support the Network

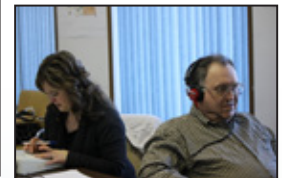


Saskatchewan Ministry of Agriculture

1995

1st SARM 90th Anniversary Scholarship is presented

Hearing Conservation Program begins



1998

The Network celebrates its 10th Anniversary





2001

Off Guard Photo Exhibition is launched



2005

The Sleepless in Saskatchewan tour begins



2007

Saskatchewan Farm Injury Project begins

2009

Farm Safety Plan workshop series begins



2013

Farm Safety Walkabout

208 RMs belong to the Network

The Network celebrates 25 years of caring about farm families.

2000

Farm Injury Control Summit II. Sow Safety, Harvest Life campaign



2002

Off Guard exhibit at the Regina Legislative Building

120 RMs belong to the Network



2006

Difficult Times Resource

154 RMs are members of the Network

2008

Sleepless in Saskatchewan DVD project

Low Stress Cattle Handling workshop series



2010

The Network reaches 200 RMs

Saskatchewan Rural Health Project begins



1988-2013



Long Term **Health & Safety Initiatives**



Respiratory and Hearing Initiatives

Research at the Canadian Centre for Health and Safety in Agriculture (CCHSA) found that farmers' respiratory health and auditory health was conclusively affected by farming exposures. Hearing and Respiratory clinics were held all over the province. These initiatives included health clinics, factsheets, resources, workshops and DVDs which have continued since the founding of the Network.

Provincial Farm Stress Initiative

In 1999 the Centre for Agricultural Medicine and the Farm Stress Unit organized a meeting to address farm stress and its impact on farm families and rural communities. The goal of the group was to ensure a coordinated response to farm stress in every region of the province. Those who attended agreed that the stress levels in Saskatchewan were much higher during the farm crisis of the 1980s. Debt, long hours of work on the farm and off-farm jobs, powerlessness over commodity prices and government policy were to blame for high stress levels.

"Things have gotten real bad around here. My husband and I fight all the time, he can't sleep, he complains about headaches and stomach aches. The kids are cranky and yesterday I almost hit my youngest for fighting with her sister. We're behind in our payments and we have a meeting that involves our creditors in two weeks. I don't know how we're going to make it. Talk about stress, we're up to our eyeballs in it."

—Saskatchewan farmer

The Network proceeded to develop *A Stress on the Farm Initiative* including:

- Distribution of *The Rural Stress* Toolbook
- Launching *The Sleepless in Saskatchewan* tour
- *A Farm Stress Inventory* which is a survey to give farmers an opportunity to have their voices heard about stress on the farm
- Development of *Difficult Times: Stress on the Farm* which is a resource which allows farmers and their families to explore how to individually balance stress
- The *Sleepless in Saskatchewan* DVD

Injury Initiatives

In 2000 Dr. Dosman said: "We have made good progress in reducing agricultural lung disease. Now we need to tackle agricultural injuries. That is the problem that causes the greatest loss of potential years of life in our farmers."

Injury researcher Louise Hagel completed an analysis of Saskatchewan farm fatalities and hospitalized injuries from 1990 to 1996. The data for this study was provided by the Provincial Coroner's Office and Saskatchewan health. The findings of Louise Hagel's study were publicized at a Farm Injury Control Summit in 2000.

Saskatchewan Farm Injury Facts

- Fatal and hospitalized farm injuries occur at all ages and in both sexes.
- Tractor rollovers and runovers are the most common cause of fatal injury.
- The majority of children killed on farms are children who live there, not visitors.
- The rate of fatal injury among male farmers aged 60 and older is three times higher than expected, based on their numbers in the farm population.

The Off Guard Photographic Exhibition and Book



Twenty pictures were displayed along with a 48 page exhibition booklet portraying survivors of farm machinery incidents. The booklet included information on each survivor's incident and relevant Saskatchewan agricultural injury statistics. The exhibition toured rural Saskatchewan on behalf of the Organization of Saskatchewan Arts Councils during 2002-03. It is still available for display.

Saskatchewan Farm Injury Project

In the winter of 2007, the Saskatchewan Farm Injury Project used a large cohort study to ask farmers about themselves, their families and their farm operations. The purpose was to understand risk factors associated with agricultural injury, with the long-term goal of informing the development of prevention programs.



"Working together, we can prevent the epidemic of farm injuries."

— Dr. James Dosman

The findings of this study indicate that farm families are at risk for the following reasons:

- Long work hours and fatigue
- The physical environment
- The aging process puts older farmers at a higher risk
- Children and teens are at a higher risk while parents are coping with long work hours.

The Network used the Saskatchewan Farm Injury Project findings to develop Farm Safety Plans, Low Stress Cattle Handling, Farm Safety Walkabouts, safety for older farmers, and positive sleep strategies.

"Sometimes we don't give safety the attention it deserves or requires. We get too tied up in the haste of the moment and the pressures of the season. Going through the Farm Safety Plan will help keep it on the forefront and be a reminder of how important safety is."

— Eugene Matwishyn, Saskatchewan Producer

Current Research

at the Canadian Centre for Health and Safety in Agriculture

The research connection with CCHSA results in quality resources and programming. Projects are based on current needs of rural Saskatchewan and the results of CCHSA research. For example, the Farm Safety Plan program addresses the results of the rural injury study. Another example is the new respiratory safety DVD project in response to the long term effects of respiratory hazard effects on farmers. Here are just a few of the research projects that are taking place.

Rural and Remote Dementia Care

CCHSA faculty member Dr. Debra Morgan and members of the interdisciplinary Rural Dementia Care research team have been working together since 2003. Team members have traveled the breadth and width of Saskatchewan to better understand the needs of rural and remote people and have significant experience in providing care to people with dementia and studying how to improve dementia care in rural settings. In Saskatchewan a higher proportion of seniors live in rural communities than in urban centres. This research focuses on finding new ways to provide care and we draw on technologies such as telehealth to support our success.

Some projects and activities undertaken by team members include:

The Rural and Remote Memory Clinic focuses on diagnosis and management of atypical and complex cases of suspected dementia. The “one-stop” interdisciplinary clinic relies on the Saskatchewan TeleHealth network to reduce travel burden. Originally implemented as a research project, the Clinic now operates

through Saskatchewan Ministry of Health funding.

The Rural Dementia Action Research (RaDAR) project is focused on developing and evaluating innovative community-based primary healthcare and explores better models of care for provision of primary healthcare services for rural residents affected by mild cognitive impairment or dementia. The telehealth delivered frontotemporal dementia (FTD) caregiver support group is a videoconference based support group for family members providing care to those affected by FTD (a relatively rare form of dementia that typically affects people at a younger age than Alzheimer Disease). This group was developed, delivered, and evaluated by team members. The Alzheimer Society of Saskatchewan has now adopted this model to make the support group available province-wide and the team is helping to evaluate this process. This is another example of a research project that has ‘grown’ to become a service after the original research was completed.

A project examining the feasibility and acceptability of a telehealth delivered exercise intervention program for community-dwelling people with dementia and their caregivers has been undertaken by the team. The pilot study has been completed and the data analyzed, future plans are to “grow” this research.

You can learn more about the research

and the team on the rural dementia care website at: www.cchsa-ccsma.usask.ca/ruraldementiacare

Airways Research Project

The Airways Research Group, led by Dr. John Gordon and Dr. Don Cockcroft, has been funded by Saskatchewan Health Research Foundation the College of Medicine and the Ministry for the Environment from 2011-2014 to conduct a study on “The impact of airborne environmental contaminants on respiratory public health in Saskatchewan.” In order to better understand the elevated incidence of asthma and other chronic respiratory disease among the residents of Southern Saskatchewan, the Airways Research Group is looking into whether increases in respiratory symptoms are linked to changes in air composition and levels of pollutants in Estevan and Swift Current.

To do so, residents of Estevan and Swift Current, adults (>50 years old) with or without respiratory conditions, are recruited to participate on a voluntary basis in the study. Participants record their daily respiratory symptoms and measure their Forced Expiratory Volume (FEV1) across three 1-2 month periods (Nov-Dec, 2012; April-June 2013; and/or Oct-Dec 2013)

during which the team investigators are also monitoring the local air quality in both cities. Working in collaboration with SaskPower and the Southeast Saskatchewan Airshed Authority in Estevan and Saskatchewan Environment in Swift Current, organic matter (particulate matter of 2.5 and 10 µm diameter) and gaseous components (sulphur dioxide and nitrogen dioxide) are being monitored and dust is also being collected for mass spectroscopy and biological analysis of contaminants.



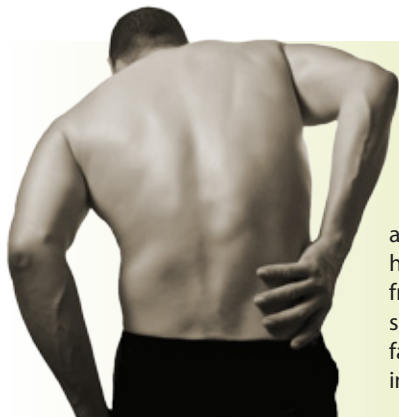
New Lab

The Mass Spectrometry (MS) Laboratory of the Canadian Centre for Health and Safety in Agriculture (CCHSA) Division in the Department of Medicine is part of the National Agricultural-Industrial Hygiene Laboratory, which was established with CFI and University of Saskatchewan matching funds, and is housed in the new Health Sciences Building, College of Medicine. The MS lab is equipped with state of the art instrumentation capable of environmental (e.g. air particulates, dust) and agricultural samples analysis, pesticide analysis, global proteomics (e.g. identification of proteins, analysis of protein modification, characterization of protein-protein interaction), quantitative proteomics for discovery and validation of biomarkers, small molecule (drugs) analysis, metabolomics and clinical proteomics. Dr. G. Katselis is the lead CCHSA faculty in research



programs focused on MS-based method development in the areas of agricultural and rural medicine, environmental and occupational health, clinical proteomics and metabolomics. His current research interests are: 1) Development of mass spectrometry-based techniques for the discovery, characterization, and validation of respiratory distress biomarkers in rural and agricultural populations. 2) Development

of mass spectrometry-based proteomic methods to detect biomarkers in serum, urine, and tissue samples from agricultural populations that have been exposed to pesticides in order to assess the effects of pesticides in health and develop methods of monitoring at risk populations. 3) Use of mass spectrometry-based techniques for the identification of biomarkers in various diseases such as cancer and diabetes.



Farm Injury Prevention Study

Dr. Catherine Trask, assistant professor with CCHSA, will lead a new five-year study examining how to prevent aches and pains from developing into more serious, long-term injuries for farmers and agricultural workers in Saskatchewan.

The study will examine the following questions: What is the prevalence and degree of low back disorder-related pain and disability experienced by Saskatchewan farmers? Are farmers able to access health care?

The study will also assess work exposures and determine patterns of vibration, awkward

posture, and manual handling.

She also wants to learn about self-made preventative measures that are used in farming, and what other opportunities there are for prevention, and ultimately develop easy-to-use, affordable strategies that can prevent back and other musculoskeletal injuries.

Thank You to the Following Organizations for Supporting the Network News:



From the Editors: Send your ideas, comments and suggestions to:

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