



Agricultural Safety and Health News

Department of Agricultural and Biological Engineering

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PA Farm Fatalities Spike in 2008



In This Issue...

- * PA Farm Fatalities Spike
- * Using Fatality Data
- * With Youth in Mind
- * New Cancer Network Serves PA
- * Clean Hands are Safer Hands
- * 2008 Summary Fatal Farm Incidents

Agricultural Safety and Health News is produced bi-monthly. We welcome your comments.

Dennis Murphy, Editor
 Laura Coyne Steel, Writer
 Marsha Hull, Design & Layout

The year 2008 saw a dramatic rise in farm fatalities in the state of Pennsylvania. *The Summary of Fatal Farm Incidents for Pennsylvania, 2008*, has been published and is included in this newsletter. There were 44 fatal incidents in 2008, up from 29 fatalities in 2007. That is an almost 52% increase. While farming itself accounted for just over one-third of the reported fatalities (38.6%), rural-living activities (e.g. driving a motor vehicle, operating an ATV, cutting down trees, etc.) proved fatal as well.

The start of the work week proved to be more dangerous for farmers than the rest of the week. Monday and Tuesday were the most dangerous days, with Wednesday and Saturday following after that. In terms of months, April and July showed the most fatalities.

Just over 55 % of the 2008 fatalities (25 incidents, 56.8%) were to victims not actively engaged in production agriculture work at the time of the fatal incident. The majority of these victims were nonworking children exposed to work hazards, as well as people ages 65 and older who may have been working, but not in a production agricultural activity. In a consistent trend, more males died from farming than females (38 males vs. 6 females).

Continued on page 2

Using Fatality Data for Ag Progress Days

Included with this newsletter is the *Summary of Fatal Farm Incidents, Pennsylvania, 2008*, as well as another article, *PA Farm Fatalities Spike in 2008*, which provides more details about specific groups of victims and types of incidents. A type of incident that was up in 2008—and has been increasing in recent years—is using the farm tractor in the woods for land clearing activities.

Safely using farm tractors in the woods, along with chain saw safety, will be the focus for our safety demonstrations this year at Ag Progress Days, August 18-20, at Rock Springs, PA. Although specific demonstrations are not yet finalized, we expect to demonstrate what can happen when a log is dragged by a farm tractor, and what can happen when logs are not safely cut. Safer methods for dragging logs and protection against falling tree limbs will also be featured. These demonstrations will occur on Tuesday and Thursday. On Wednesday, rescue techniques involving overturned tractors and fallen trees will be demonstrated.

On Wednesday, 4-H and FFA teams will compete in the semifinals of the Pennsylvania Farm Safety & Health Quiz Bowl. Winners will advance to the State Finals at the 2010 Farm Show. Cargill, Inc. will once again sponsor a safety area for kids. We hope to see you at any or all of our events.

Dennis J Murphy



Tractors still most common source of death

As in previous years, tractors were the single most common source of death, with 27.3% of the total. Fatal injuries resulted from side and rear overturns where the tractor rolled onto the victim, as well as an extra rider who fell from a tractor. In another case, a victim was pinned between a tractor and wheeled-loader while changing a tire.

Studies have shown that Pennsylvania is among a handful of states with the highest rates of tractor overturn fatalities in the nation. There are several reasons to explain this: smaller and older equipment that does not have a ROPS; slopes and steep terrain in the Pennsylvania landscape; and using tractors for logging activities, which is not their intended use. There were 5 deaths related to logging, which represents 11.4% of the total deaths. In general, victims were crushed by falling trees during land clearing.

Kids and older farmers continue to be at risk

The large jump in fatalities from 2007 is spread over several age groups but most notably to victims 4 years of age and younger (2 in 2007; 6 in 2008) and victims 55 to 64 years of age (6 in 2007; 12 in 2008).

Agricultural and garden machinery represented the source for 18.2% of the fatalities. Several of these deaths were children ages 14 and younger. Drowning was especially troublesome for those kids ages birth to age 4. Of the 8 children who died, 7 were male with 1 female. Here is how children tragically died:



Two children drowned in a watering trough while one drowned in a silage seepage puddle.

Three children died from agricultural and garden machinery. A child was run over by equipment operated by an 11-year-old. Another child became entangled in a PTO stub shaft of an idling tractor. And a third child's head was caught in hay-wrapping equipment.

A child was run over by a farm truck.

A child was killed by a falling block during a building demolition.

Older persons, those age 65 and older, continue to be an at-risk population as well. These older people, both farmers and non-farmers, may or may not have been engaged in a farm work activity at the time of the incident. In this age group, 8 farmers were killed.

Two victims were involved in highway vehicle crashes. A 73-year-old victim drove through a stop sign and collided with a farm dump truck. A 78-year-old victim struck farm equipment being towed by a farm pick-up truck.

Three people died as a result of tractors. A tractor rolled onto a 75-year-old victim who was mowing weeds near an embankment. In another incident, a snowplow became caught on a barn structure and threw an 81-year-old victim off and under the tractor. A 78-year-old victim connected a wagon to a corn picker, which was attached to a tractor. The tractor began to move, and when he attempted to stop it, he was run over.

A 75-year-old victim was overcome by smoke fighting an out-of-control brush fire.

A wind gust blew a tree onto a 77-year-old victim during land clearing.

For those working in agricultural safety and health, a review of these incidents can help focus your safety efforts. This annual report is just another reminder to create new and innovative ways to help keep farmers and their families safe.

For More Information

For the complete report, as well as previous years' reports, go to www.agsafety.psu.edu. Click on "Injury Data" and then on "Annual Statistics."

See the 3-page *Summary of Fatal Farm Incidents* at the end of this newsletter.

With Youth in Mind

Keep Kids Away From Tractors This Summer

The death this past spring of a 4-year-old child from Oklahoma and more recently the serious injury of another 4-year-old Idaho child, both of whom fell off a tractor and into the path of a trailed implement, has renewed focus on the deadly practice of children as extra riders on tractors.

“Keep Kids Away From Tractors” is a 30-second television public-service announcement featuring Country Western recording artist Michael Peterson, who is a spokesman for the Childhood Agricultural Safety Network. The posting is on YouTube, which you can view at www.youtube.com/nationalfarmmedicine.

Additional materials (posters and radio announcements) are available at www.childsafeag.org. Also, remember to visit www.agsafety.psu.edu for a variety of additional resources. Please help us all “Keep Kids Away from Tractors” this summer!

If you have any questions about the “Keep Kids Away From Tractors” campaign, please contact Regina Fisher at 800 662-6900 or at fisher.regina@mcrf.mfldclin.edu.

CO Detectors Save Lives!

Kids Saved When Detector Goes Off at Lancaster School

The Fire Chiefs Association of Lancaster County has been donating carbon monoxide detectors to Lancaster-area schools for the past two years. And their efforts are really paying off—and saving lives!

Kay Moyer, Extension Educator, Lancaster County Extension, was recently speaking to several Amish and Mennonite schools about the importance of carbon monoxide detectors. She found out that a CO detector went off at an Amish school last Spring after the Lancaster County Fire Chiefs Association had just donated a detector to the school. The teacher reported that she and the kids were feeling sick. They were nauseated, had headaches, could not focus, and were sleepy. When the CO detector suddenly went off, she knew there was a problem. The teacher aired out the room and called in someone to check their school propane stove, which was found to be malfunctioning. Moyer discusses the need for both fire alarms and CO detectors in schools as well as in homes when she conducts her outreach programs at area schools.

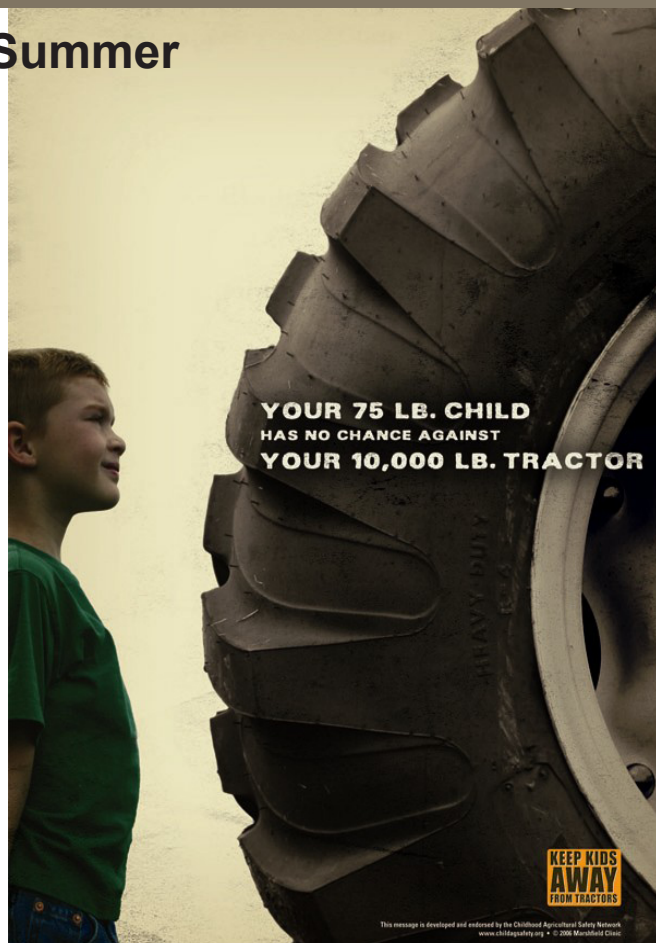
Carbon monoxide—called the silent killer

Carbon monoxide is often referred to as the “silent killer” because it is odorless and colorless. It’s a gas created when fuels (such as gasoline, wood, coal, natural gas, propane, oil and methane) burn incompletely. Many schools use gas and propane to heat their buildings. People mistakenly think that they will “smell something” when there is CO poisoning. CO poisoning mimics the flu; symptoms include:

- * shortness of breath
- * headache
- * lightheadedness
- * nausea
- * sleepiness

High levels of CO can be fatal, causing death within minutes. Go outside immediately if you suspect CO poisoning. Call the fire department as soon as the alarm goes off.

New schools will have a CO detector because the law and building codes require them. But as Moyer has discovered, many older schools lack a CO detector. “We saved 24 lives, and that makes all of our efforts, time, and the few dollars it takes to provide this program so worthwhile,” Moyer says.



A few more tips from the National Fire Protection Association
www.nfpa.org

- * You can purchase a battery operated CO detector at any hardware store. Choose a CO alarm that has the label of a recognized testing laboratory.
- * Follow the manufacturer’s instructions for placement and mounting height.
- * Test alarms at least once a month.
- * Consider purchasing a combined smoke alarm/CO detector, which are now available.
- * You need CO detectors on each level of your house, especially near the sleeping area of your home. You can also purchase interconnected alarms for your home. When one alarm goes off, they all go off.

For More Information

Kay Moyer, Penn State Extension
klm26@psu.edu (717) 394-6851

PA Cancer Education Network



New Cancer Education Network Serves All Pennsylvanians

The Pennsylvania Department of Health (PADOH) is pleased to announce the Pennsylvania Cancer Education Network (Network) as a new cancer control initiative in the commonwealth. The Network is designed to educate the public about colorectal, prostate, ovarian, and all types of skin cancers. In 2006, colorectal, prostate, ovarian and melanoma of the skin cancers accounted for approximately 30 percent of invasive cancers diagnosed in Pennsylvania.

In the May/June 2009 issue of *Agricultural Safety and Health News*, we featured an article about melanoma and how farmers are more at risk for this type of skin cancer. To find a copy of that article, go to www.agsafety.psu.edu.

Free, community-based education focused on the importance of cancer prevention and early detection is now available in all 67 counties. Presentations are arranged to fit your schedule and can range from brief 20-minute lectures to expanded seminars addressing one or more of these cancers. The Network's strong prevention message encourages risk reduction, healthy behaviors, and recommended screenings for early detection.

To speak with someone directly about Network programs, please contact Charlotte Greenawalt, Network Manager at (717) 787-5251 or one of the regional program managers listed at right.

Northeast

Allentown, MaryEllen Shiels (610) 437-7513
Bethlehem, Karrie Snyder (610) 865-4698
Northeast Regional Cancer Institute, Pat Lawless (570) 941-7984
Wilkes-Barre, Susan Kennedy (570) 208-4268

Southeast

Chester County, Katie Kuffner (610) 344-5340
Fox Chase Cancer Center, Kim LeMaitre (215) 214-3984
Montgomery County, Ashley Godshall (610) 278-5117 Ext. 6779
Philadelphia City, Jennifer Kroh-Teppe (215) 685-6769

North Central

Family Health Council of Central PA,
Deborah Ritchey (717) 761-7380 Ext. 3061

South Central

Penn State Cancer Institute, Betsy Aumiller (717) 531-0003
Ext. 287469
Pennsylvania Department of Health, Kaye Weiss (717) 787-8092
York City, Monica Green (717) 846-6730

Northwest

Erie County, Janet Vogt (814) 451-6769
Fox Chase Cancer Center, Kim LeMaitre (215) 214-3984

Southwest

Allegheny County, Jason Simonson (412) 247-7813
Fox Chase Cancer Center, Kim LeMaitre (215) 214-3984

For More Information

www.PACancerEducationNetwork.com

Clean Hands Are Safer Hands!



Infectious disease outbreaks such as the recent H1N1 (swine) flu underscore the importance of proper hand-washing. Whether it's a farm tour with schoolchildren, u-pick produce, petting zoos, or agricultural festivals, you can minimize the risk of disease transmission.

Make sure agritourism operations in your area are prepared for visits by the public by sharing the *Agritourism Health and Safety Guidelines for Children* and the sections for Animals and Hand-washing in the new *Policies and Procedures* and the *Worksite Walkthrough* Checklists. These 10- page checklist guides were developed for use by agritourism owners, managers, and farm owners who host children and groups. The guides can assist in identifying deficiencies so that they can be corrected and infectious disease transmissions reduced.

Print copies from the website:

<http://marshfieldclinic.org/agritourism>. For hard copies or more information, contact the National Children's Center for Rural and Agricultural Health and Safety at nccrahs@mcrf.mfldclin.edu or (800) 662-6900.

For information on the CDC's hand-washing Ounce of Prevention Campaign, visit <http://www.cdc.gov/ounceofprevention/>.

Don't forget to look for us at
Ag Progress Days 2009
August 18-20
Rock Springs, PA

The Pennsylvania State University is committed to the policy that all persons shall have equal access to programs, facilities, admission, and employment without regard to personal characteristics not related to ability, performance, or qualifications as determined by University policy or by state or federal authorities. It is the policy of the University to maintain an academic and work environment free of discrimination, including harassment. The Pennsylvania State University prohibits discrimination and harassment against any person because of age, ancestry, color, disability or handicap, national origin, race, religious creed, sex, sexual orientation, or veteran status. Discrimination or harassment against faculty, staff, or students will not be tolerated at The Pennsylvania State University. Direct all inquiries regarding the nondiscrimination policy to the Affirmative Action Director, The Pennsylvania State University, 328 Boucke Building, University Park, PA 16802-5901, Tel 814-865-4700/V, 814-863-1150/TTY.

SUMMARY OF FATAL FARM INCIDENTS, 44 INCIDENTS, PENNSYLVANIA, 2008

Page 1

Primary Source ¹	Secondary Source ²	Description of Incident	Number	Percent
Agricultural and garden machinery			8	18.2%
Other-horse drawn wagon		Victim fell from horse drawn wagon; struck head.		
Harvesting equipment		Child's head caught in hay wrapping equipment.		
Harvesting equipment	Tractor	Victim fell from wagon drawbar; runover by wagon.		
Harvesting equipment	Tractor	Victim fell from tractor; runover by hay rake.		
Other-horse drawn equipment		Victim fell from horse drawn equipment; died later.		
Other, unspecified		Child run over by equipment operated by 11-year old.		
Baler-tractor	Tractor	Victim left tractor to move bale. Tractor moved; baler ran over victim.		
Tractor		Child entangled in PTO stub shaft of idling tractor.		
Animals and animal products			3	6.8%
Cattle		Victim attacked by bull.		
Horses		Victim fell from horse in riding stable.		
Horses		Victim kicked in chest by horse.		
Building materials-solid elements			2	4.5%
Wood, lumber, unspecified		Victim fell during barn raising and barn beam fell on him.		
Building		Child killed by falling cinder block during building demolition.		
Hand tools, powered			1	2.3%
Chainsaw		Chainsaw kick-back as downed log was being cut by victim.		
Highway vehicles, motorized			5	11.4%
Farm truck		Child runover by farm truck.		
Motorcycle, moped	Tractor	Motorcyclist ran into farm tractor and was killed.		
Dump truck		Victim drove through stop sign and collided with farm dump truck.		
Pick-up truck	Corn stalk shredder	Victim struck farm equipment being towed by farm pick-up truck.		
Automobile	Combine	Victim ran under a farm combine on rural roadway.		
Machine, tool, and electric parts			2	4.5%
Power lines, transformers, converters	Scaffolding, staging	Scaffold came into contact with power lines, killing victim.		
Contact with overhead power lines	Truck	Feed truck auger contacted overhead power lines killing victim.		
Material handling equipment			1	2.3%
Forklift		Forklift lost traction, slid and overturned into tree crushing victim.		
Other			1	2.3%
Fire, flames, smoke		Victim overcome by smoke fighting an out of control brush fire.		
Plant and industrial powered vehicles-tractors			12	27.3%
Tractor		Tractor rolled onto victim.		
Tractor		Tractor rolled over onto victim 1 travelling to pull out stuck pick-up truck.		
Tractor		Tractor rolled over onto victim 2 travelling to pull out stuck pick-up truck.		
Tractor	Roadway	Extra rider fell from tractor fender onto road; struck head.		
Tractor		Tractor rolled onto victim while mowing near an embankment.		
Tractor		Tractor rolled onto victim while mowing a sloped area.		
Tractor	Wheeled loader	Victim pinned between tractor and wheeled-loader while changing a tire.		
Tractor		Tractor side overturn while mowing rural property.		
Tractor	Trees, logs	Tractor rear overturn while victim was dragging logs.		
Tractor		Tractor rolled over while pulling family SUV from ditch.		
Tractor	Corn picker	Victim runover by tractor while hitching machinery.		
Tractor	Snow plow	Snowplow caught on barn structure throwing victim off and under tractor.		

SUMMARY OF FATAL FARM INCIDENTS, 44 INCIDENTS, PENNSYLVANIA, 2008

Page 2

Primary Source ¹	Secondary Source ²	Description of Incident	Number	Percent
Plant and industrial powered vehicles				
Wheel loader	Field crops-hay	Mushroom farm worker runover by wheeled loader.	1	2.3%
Plants, trees, vegetation-not processed				
Trees, logs		Employee struck in head by falling tree during felling.	5	11.40%
Trees, logs	Bulldozer	Victim struck in head by tree limb during land clearing with bulldozer.		
Trees, logs	High winds, gusts	Wind blew tree onto victim during land clearing.		
Trees, logs		Victim crushed by falling tree.		
Trees, logs		Tree top rolled onto victim while cutting section stuck in ground.		
Steam, vapors, liquids				
Water	Field crops	Child drowned in silage seepage water puddle.	3	6.8%
Water	Trough	Child drowned in watering trough.		
Water	Trough	Child drowned in watering trough.		
Total			44	100%

¹ The primary source of injury or illness identifies the object, substance, bodily motion, or exposure which directly produced or inflicted the previously identified injury or illness.

² The secondary source of injury or illness identifies the object, substance, or person that generated the source of injury or illness or that contributed to the event or exposure.

Fatalities by age groups, month of incident and day of week of incident

Age	No. of fatalities	Age	No. of fatalities	Month of fatality	Day of week
0-4	5	60-64	6	January 1	Sunday 5
5-9	2	65-69	0	February 2	Monday 9
10-14	0	70-74	2	March 2	Tuesday 10
15-19	3	75-79	5	April 7	Wednesday 7
20-24	4	80-84	1	May 1	Thursday 2
25-29	0	85-89	0	June 6	Friday 5
30-34	2	90-94	0	July 7	Saturday 6
35-39	0			August 4	
40-44	3	Unknown	0	September 3	
45-49	4			October 4	
50-54	1			November 5	
55-59	6			December 2	

Fatalities By Farm And Agricultural Injury Code

The Farm and Agricultural Injury Classification (FAIC) Code is a classification scheme used in some states. The code provides a mechanism to separate out incidents not directly related to the work of production agriculture. The FAIC was introduced in Pennsylvania in 1992 and revised in 2000; therefore 2007 totals can only be compared with 2001-2006 totals.

<i>No. of Cases</i>	<i>FAIC Category</i>
17	FAIC-01. Farm Production Work
0	FAIC-02. Forestry and Logging
0	FAIC-03. Fishing, Hunting & Trapping
1	FAIC-04. Agricultural & Forestry Support Services
1	FAIC-05. Worksite Exposure: Workers, Outside Services
14	FAIC-06. Farm Hazard Exposure: Equipment, Tools and Products
6	FAIC-07. Farm Hazard Exposure: Structures & Landscape
1	FAIC-08. Farm Hazard Exposure: Animals
4	FAIC-09. Farm Hazard Exposure: Roadway Accident
0	FAIC-10. Undetermined. Cases which appear to be farm or agriculturally-related but which insufficient information exists to assign the case to a FAIC category.

Sectors of Agriculture			
Farm Production (FAIC 01)	17		
Other sectors	2		
Subtotal	19	(43.2%)	
Other Exposures			
Rural Living (FAIC 05-09)	25		
Undetermined (FAIC 10)	0		
Subtotal	25	(56.8%)	
Farm and Agriculturally-Related Total	44	(100%)	