



College of Agricultural Sciences • Cooperative Extension

Prepared by Dennis J. Murphy, professor, and Fokwa Ambe, research associate.

Issued in furtherance of Cooperative Extension Work, Acts of Congress May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture and the Pennsylvania Legislature. J.L. Starling, Director of Cooperative Extension, The Pennsylvania State University.

This publication is available in alternative media on request.

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. The Pennsylvania State University does not discriminate against any person because of age, ancestry, color, disability or handicap, national origin, race, religious creed, sex, sexual orientation, or veteran status. Direct all inquiries regarding the nondiscrimination policy to the Affirmative Action Director, The Pennsylvania State University, 201 Willard Building, University Park, PA 16802-2801; tel. (814) 863-0471; TDD (814) 865-3175.

© The Pennsylvania State University 1996

his publication is the third in a series of five-year Pennsylvania farm fatality summaries. The first two publications were Pennsylvania Farm Fatalities During 1980-84 (Special Circular 319) and Pennsylvania Farm Fatalities During 1985-89 (Extension Circular 390). The data summarized in this new publication come from death certificates and newspaper clippings. Information about some cases has been supplemented by other sources, including workers' compensation injury reports and police investigations. The data in this report cannot be compared directly with the data in previous reports because injury classification methods changed in 1990. These changes are explained below and in other sections of this report.

This publication introduces the Farm and Agricultural Injury Classification (FAIC) code to the general public as a way to categorize and describe fatal injury incidents associated with farms and agriculture. Because it uses the FAIC code, this report includes some cases that would have been excluded from earlier reports. For example, many cases in FAIC categories -05 to -11 would have been excluded from previous reports, even though they are of direct interest to many people concerned about preventing agricultural injury.

Classifying farm fatalities

Classifying unintentional agricultural fatalities is not an exact science. Because the term "agricultural" is sometimes used interchangeably with "rural" and "farm," classifying injury reports is a subjective task. Furthermore, since most farm residences are located at agricultural work sites, it often is hard to distinguish between work and nonwork injury cases, especially when the victim is a child. In addition, much of the work done on farms and in rural areas is not agricultural production, or farming. Finally, not all work on a farm is done by a farm worker. For example, an outside contractor erecting a building on a farm is certainly working on a farm, but the work is not production agriculture. It is construction work, and an injury to one

of the workers should be attributed to the construction industry, not the agricultural industry.

The Farm and Agricultural Injury Classification code has been established to ensure more consistency in coding injury incidents related to farms and agriculture in Pennsylvania. It provides a rationale for consistent categorization of occupational (e.g., farming/farm production work) and nonoccupational (e.g., nonfarm production work/farm lifestyle) fatalities associated with farms and agriculture. This helps to identify situational exposures that are unique to farming and farm lifestyles. Table 1 identifies FAIC code categories and provides the number of fatality cases in each category from 1990-94. FAIC code categories are explained in the Appendix. Forty fatality cases could not be categorized because of a lack of information.

Table 1. Fatalities by farm and agricultural injury classification code inPennsylvania 1990-94

NO. OF CASES	FAIC CATEGORY
103	FAIC-01. Farm production work
1	FAIC-02. Agricultural services
0	FAIC-03. Forestry
1	FAIC-04. Fishing, hunting, trapping
18	FAIC-05. Farm tractors, machines, tools, equipment, etc., not being used for farm production
27	FAIC-06. Nonwork work site
3	FAIC-07. On-farm outside services
7	FAIC-08. Farm home
8	FAIC-09. Farm leisure
2	FAIC-10. Rural traffic—farm hazards
0	FAIC-11. Nonwork-related work interruption
40 related	Undetermined. Cases which appear to be farm or agriculturally-
	but which insufficient information exists to assign the case to a FAIC category

Occupational		
Farm production work (FAIC-01)	. 103
Agri. services; forestry; fishing, hunting, trapping (FAIC-02-04)		2
	Subtotal	105
Nonoccupational/farm lifestyle		
(FAIC-05-11)		65
Undetermined		40
Ondetermined		+0
	Grand total	210

There were 210 farm-related fatality incidents in the 1990-1994 period. Table 1 shows that fatal injuries associated with the occupation of farming (Farm Production Work, FAIC-01) represent nearly all the cases, 103 of 105, associated with agriculture as an industry (FAIC codes -01-04). However, agricultural occupational work incidents account for only about one-half (103 of 210) of the total cases associated with farms and farm lifestyles. The remaining cases for which a FAIC designation could be made (65 of 105) are distributed throughout the categories that represent the overlap between farms as work sites, residences, and recreational areas (FAIC-05 to -11). The two categories with the majority of the remaining assigned cases (45 of 65) are associated with using farm machines, tools, buildings, etc., for nonfarm production purposes (FAIC-05, 18 cases), and with children and others being exposed to farm work site hazards (FAIC-06, 27 cases). A common FAIC-05 incident might involve a person, living on a farm or in a rural area, using a farm tractor and wagon to cut and haul firewood for personal use. A common FAIC-06 incident might involve a young child falling from a tractor while being carried as an extra rider, or a child falling through a floor opening while playing in a barn.

Farm work fatality rates

Previous reports computed the number of deaths per 10,000 farms in order to monitor progress in reducing the rate of fatal agricultural injury. As noted earlier, the recent introduction of the FAIC code prevents direct comparison between the data in this report and the data in previous reports. Therefore, this report also introduces other changes in data presentation. While deaths per number of farms is a good monitoring indicator, deaths per land in farms (LIF) is better because it more accurately reflects hazard exposures associated with farming. Table 2 presents fatalities per million acres of land in farms. The number of deaths and the death rate per million acres of LIF varied over the fiveyear period. As Table 2 illustrates, a oneyear decrease or increase in deaths or the death rate does not indicate a trend.

Fatalities by cooperative extension region

Penn State Cooperative Extension has divided the Commonwealth into four administrative regions. Figure 1 shows the counties in each region and the percentages of farm and agricultural fatalities and LIF in each region. The Southeast and West regions have slightly higher percentages of deaths than they do LIF. The largest differential is in the Central region, where the percentage of deaths was 6.7 percent less than the percentage of LIF. Tables 3 through 6 list counties by region and show the percentages of deaths and LIF that each county contributes toward the regional total. These tables show that some counties contribute a greater number of fatalities toward their region's totals than others. For example, in counties with at least 10 fatalities, York County in the Southeast region and Butler and Westmoreland counties in the West region had approximately twice the percentage of their region's fatality cases as they did their region's LIF (Tables 5 and 6). The data also show that when a county has a large percentage of cases, it doesn't mean that the county has had more than its share of incidents. For example, Lancaster County had 18.8 percent of the cases in the Southeast region, the second highest percentage in that region, but it also had the highest percentage of the LIF in the region, with 17.3 percent of the regional total (Table 5).

Figure 1. Pennsylvania counties by region, percentage of farms, and percentage of deaths

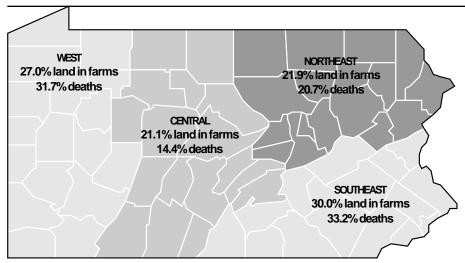


Table 2. Farm work death rates per million acres of land in farms (LIF)

YEAR	LAND IN FARMS (MILLIONS)	DEATHS	DEATH RATE PER MILLION ACRES LIF
1990	7.9	47.0	5.9
1991	8.0	47.0	5.9
1992	8.1	33.0	4.8
1993	7.9	48.0	6.1
1994	7.8	35.0	4.5
Average 1990-94	7.9	42.0	5.3

General descriptive data

Nearly all fatal injury incidents generate information that can be used to describe general trends and enhance understanding of when, where, how, and to whom farm and agricultural injury occurs. Such details as the victim's age, the activity he or she was engaged in, and the time the incident occurred are necessary for effective injury prevention planning. Several tables and figures are presented to give readers an overall picture of Pennsylvania farm and agricultural fatality incidents.

Figure 2 combines age groups of victims with the FAIC code categories. Appropriate information was available for 209 of the 210 cases. The graph shows the diversity of farm and agricultural fatal injury incidents while also illustrating how some types of incidents largely affect specific age groups. For instance, children 0 to 4 years of age and 5 to 9 years of age were most often killed (21 of 27 incidents) by exposure to farm work site hazards even though they were not actively engaged in farm work at the time (FAIC-06). More than twice as many senior farmers, 70 to 74 years of age, were killed during farm production work than were members of any other age group. Twenty-three farmers 70 to 74 years of age were killed during farm production work; victims 25 55 to 59 years of age had the next highest number of fatalities, with 11 cases. Figure 2 also shows that a substantial number of the FAIC-05 incidents, 11 of 18 cases, involved people age 60 and over.

1990-94

Fatalities

Table 3. Central region deaths andnumber of acres by county

COUNTY I	NO. DEATHS	% DEATHS	NO. ACRES (1,000)	% ACRES
Bedford	2	6.7	223	13.3
Blair	1	3.3	87	5.2
Cambria	3	10.0	86	5.2
Cameron	0	0.0	3	0.2
Centre	4	13.3	151	9.0
Clearfield	2	6.7	62	3.7
Clinton	2	6.7	47	2.8
Elk	1	3.3	19	1.1
Fulton	0	0.0	100	6.0
Huntingdo	n 5	16.7	137	8.2
Jefferson	3	10.0	86	5.2
Juniata	1	3.3	93	5.6
McKean	1	3.3	45	2.7
Mifflin	1	3.3	89	5.3
Perry	1	3.3	114	6.8
Potter	1	3.3	97	5.8
Somerset	2	6.7	232	13.9
Total *Rounding e	30	99.9*	1,671	100.0

Table 4. Northeast region deaths
and number of acres by county

		-		
COUNTY	NO. DEATHS	% DEATHS	NO. ACRES (1,000)	% ACRES
Bradford	9	20.9	342	19.7
Carbon	0	0.0	22	1.3
Columbia	1	2.3	111	6.4
Lakawanna	3	7.0	42	2.4
Luzerne	0	0.0	59	3.4
Lycoming	5	11.6	142	8.2
Monroe	3	7.0	26	1.5
Montour	3	7.0	43	2.5
Northumber 7.3	land	3	7.0	126
Pike	0	0.0	6	0.3
Snyder	2	4.7	92	5.3
Sullivan	1	2.3	31	1.8
Susquehan	na 3	7.0	192	11.0
Tioga	5	11.6	226	13.0
Union	3	7.0	66	3.8
Wayne	1	2.3	139	8.0
Wyoming	1	2.3	72	4.1
Total	43	100.0	1,737	100.0

5

*Rounding error



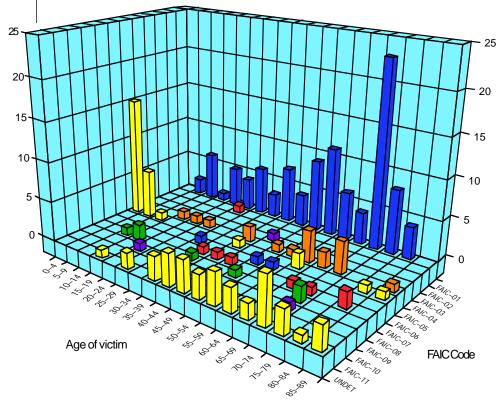


Table 5. Southeast region deathsand number of acres by county

COUNTY	NO. DEATHS	% DEATHS	NO. ACRES (1,000)	% ACRES
Adams	2	2.9	189	7.9
Berks	5	7.3	245	10.3
Bucks	4	5.8	86	3.6
Chester	5	7.3	192	8.0
Cumberlar	nd 1	1.4	155	6.5
Dauphin	4	5.8	102	4.3
Delaware	1	1.4	8	0.3
Franklin	6	8.7	257	10.8
Lancaster	13	18.8	412	17.3
Lebanon	4	5.8	118	5.0
Lehigh	4	5.8	97	4.1
Montgome	ry 0	0.0	56	2.3
Northampt	on 2	2.9	88	3.7
Philadelph	ia 0	0.0	0	0.0
Schuylkill	3	4.4	98	4.1
York	15	21.7	280	11.8
Total	69	100	2383	100

Table 7. Fatalities by time and day of the week

		DAY/FATALITIES							
TIME	MON	TUE	WED	THUR	FRI	SAT	SUN	% TOTAL	
6:00 а.м9:00 а.м.	5	2	0	1	2	2	3	7.1	
9:01 а.м12:00 р.м.	3	9	9	1	4	7	6	18.6	
12:01 р.м.—3:00 р.м.	5	6	11	5	4	6	9	21.9	
3:01 р.м.—6:00 р.м.	8	8	7	8	8	2	5	21.9	
6:01 р.м.—9:00 р.м.	2	2	4	3	7	8	1	12.9	
9:01 р.м12:00 а.м.	0	0	1	2	2	1	1	3.3	
Undetermined	7	4	3	3	6	3	4	14.3	
% Total	14.3	14.8	16.7	10.9	15.7	13.8	13.8	100.0	

Figure 3. Fatalities by month of the year

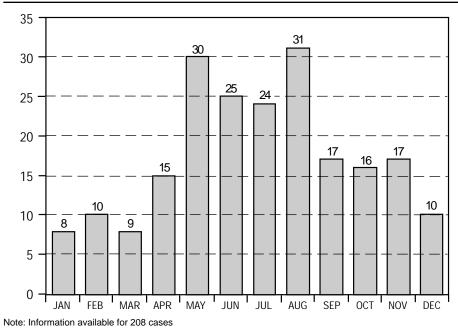


Table 7 shows the number of farm fatalities by three-hour intervals and by the days of the week, as well as the percentages that each contributed to the total number of incidents. Nearly twothirds of the incidents, 62.4 percent, occurred between 9:00 A.M. and 6:00 P.M. This is not surprising. When viewed in combination with the day of week data, this appears to suggest that no particular time of day or day of the week clearly stands out as a prime time for fatal injury incidents. However, combining the data from Table 7 with the data from Figure 3 brings the picture into better focus. Figure 3 shows fatality

cases by the month in which they occurred. The majority of cases, 52 percent of the total, occurred during the late spring and summer months of May through August. This is the season when children and adolescents are out of school and are more exposed to farm hazards. These months also are a peak time for farm field work. The combined data from Table 7 and Figure 3 suggest that fatal injuries are most likely to occur between 9:00 A.M. and 6:00 P.M. any day of the week between May and August. Injury prevention programs, strategies, and messages should target this time period.

Table 6. West region deaths and number of acres by county

COUNTY	NO. DEATHS	% DEATHS	NO. ACRES (1,000)	% ACRES
	DEATING	DEATHO	()	
Allegheny	6	9.1	42	2.0
Armstrong	4	6.1	125	5.8
Beaver	5	7.6	60	2.8
Butler	10	15.2	145	6.8
Clarion	2	3.0	104	4.8
Crawford	5	7.6	237	11.0
Erie	4	6.1	186	8.7
Fayette	3	4.5	117	5.5
Forest	0	0.0	6	0.3
Greene	2	3.0	97	4.5
Indiana	5	7.6	165	7.7
Lawrence	2	3.0	97	4.5
Mercer	3	4.5	183	8.5
Venango	1	1.5	64	3.0
Warren	2	3.0	80	3.7
Washington	2	3.0	221	10.3
Westmorela	nd10	15.2	167	7.8
Total	66	100	2,145	100

			RUNOVERS			ENTANGLEMENTS				
	OVERTURNS	RIDERS	OPERATORS	BYSTANDER, ON-GROUND HELPER	рто	CROP/ PRODUCT INTAKE, PROCESSING AREA	MISC.	OTHER	UNDETERMINED	TOTAL
Tractor	72	5	21	3				9	3	113
Bulldozer, etc	3							1		4
Skid-steer, payloader, etc.	. 1							4		5
Combine, self-propelled harvesters, mowers, etc.	1									1
Nonpowered wagons, trailers, carts, etc.		3		1				1		5
Powered wagons, spreaders, mixers, etc.				1	2	3				6
Towed field machines		1		2	1	5	1	2		12
Stationary farmstead machines					1			1		2
Machines, other								1		1
Machines, undetermined					3	1				4
Total	77	9	21	7	7	9	1	19	3	153

Table 8. Tractor and machinery fatal injuries by type of incident

Table 8 contains data for the 153 cases that were related to tractors and machinery, which accounted for 72.9 percent of the total number of incidents (210). Tractors were the major source of injury in 73.9 percent (113) of the 153 tractor and machinery incidents. The remaining 26.1 percent (40) involved a wide variety of other self-propelled and towed machines, or could not be specifically identified. Overturns accounted for nearly two-thirds of tractor-related fatalities (72 of 113, or 63.7 percent). Twenty-nine tractor incidents involved people being run over; almost three-fourths of these cases (21 of 29, or 72.4 percent) involved tractor operators who were run over by the tractor they were operating. The majority of these cases occurred during attempts to jump-start the tractor, or when the tractor rolled after the operator dismounted for some reason. There were no tractor power take-off (PTO) stub or other types of entanglement injuries. Nine cases (8 percent) fell into the Tractor, Other category. Three cases

could not be categorized due to a lack of detailed information.

As Table 8 shows, a broad array of self-propelled and towed machines are involved in a wide variety of fatality incidents on farms and in agriculture. However, bunching some cases reveals significant information for people interested in injury prevention. Eight of 16 incidents (50 percent) involving runovers by towed wagons and field machines happened either to riders on the equipment or to bystanders. Six of these eight cases (75 percent) involved children under 10 years of age, with four of the six victims between one and three years of age. The largest grouping of nontractor incidents (17 of 40, or 42.5 percent) involved machine entanglement. Nearly all the entanglements were associated with the machine's PTO shaft (seven of 17, or 41.2 percent) or with the machine's crop/material intake or processing area (nine of 17, or 52.9 percent). Another 25 percent (10) of nontractor incidents fell into the Other category, a catch-all group of incidents.

The most frequent incident in this group was injury associated with the bucket on skid-steer loaders (three cases).

Table 9 contains data for the 57 incidents unrelated to tractors and machinery, which accounted for 27.1 percent of the total number of incidents. No single category stands out as involved most often in these incidents, and the data show that there are a number of different ways to be fatally injured. A farm structure such as a pond or silo was mentioned most often as the thing involved in the fatal incident (10 cases. or 17.5 percent). This was closely followed by buildings; animals; and miscellaneous farm objects, materials, or products, each of which had 8 cases (14 percent). Four of the eight falls (50 percent) associated with buildings were falls off of a roof. Two of the remaining falls (25 percent) involved small children falling through barn hay drop openings. Eight of the 10 incidents (80 percent) involving farm structures were drownings, all occurring in farm ponds. Six of the eight (75 percent) animal-

	FALL OFF/FROM	OTHER FALLS	DROWNING	BURIED BY	EXPLOSION	POISONED BY	STRUCK BY	BURNED	OTHER	TOTAL
Buildings (barns, sheds, etc.)	4	4								8
Structures (ponds, silos, manure storages, etc.)	2		8							10
Motor vehicles (cars, trucks, etc.)						1	5			6
Trees	1						3			4
Fire								2		2
Chemicals (substances, gases)					1	3		2		6
Animals	2						6			8
Misc. farm objects, materials, products, etc.	1	1		3	1		2			8
Other		1					1		3	5
Total	10	6	8	3	2	4	17	4	3	57

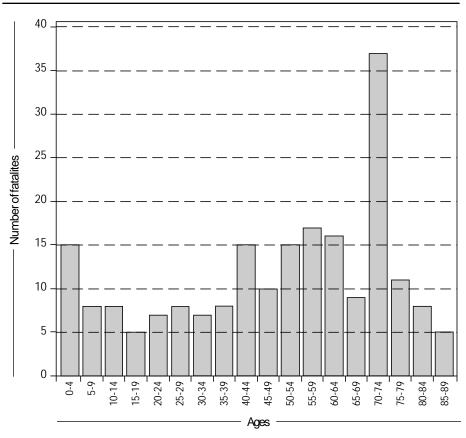
Table 9. Non-tractor and machinery fatal injuries by type of incident

related incidents were attacks and kicks by animals, including bulls (two), cows (two), a horse, and a mule. The other two incidents (25 percent) were falls from horses.

The five Motor vehicle/Struck by incidents include one vehicle/train crash; a raised truck bed falling on the victim; one crash involving two vehicles; and two farm truck drivers who had stopped along a roadway, stepped out of their trucks, and then were struck by other vehicles. Each victim was engaged in farm production work at the time of the incident. There probably are many more farm production work fatality incidents that involve motor vehicles, but go unreported.

Figure 4 shows fatal incidents by age groups. The data are consistent with, though not directly comparable to, previous summary reports showing that children age 14 and under and farm workers age 65 and over accounted for nearly 50 percent of the total number of cases. The two age groups accounted for 47.7 percent of the total during 1990-94; 49.7 percent during 1985-89; and 41.3 percent during 1980-84. Children age 14

Figure 4. Fatalities by age groups



and under and workers age 65 and over usually are not found in other hazardous occupations. Children age 14 and under often are untrained, inexperienced, not closely supervised, and emotionally and physically immature. On the other hand, the ability of aged workers to respond to danger often is limited as some effects of aging, such as slower reactions or decreased physical mobility, begin to have a pronounced influence on risk and hazard avoidance. On the surface, it appears that the risk of injury increases significantly at about age 70.

Fatal injuries to at-risk groups

Table 10 has fatalities occurring to youth age 14 and under and senior farmers age 65 and over by type of incident. Tractors and machinery were associated with 19 of 31 (61.3 percent) incidents involving youth and 59 of 70 (84.3 percent) incidents involving senior farmers. While tractor and machinery incidents were the primary cause of fatal injury for both age groups, each group was affected by quite different types of tractor and machinery incidents. Only two overturn incidents involved young operators, accounting for 10.5 percent of their total tractor and machinery incidents. However, senior farmers were involved in 30 overturn incidents, accounting for 50.8 percent of their total tractor and machinery incidents.

Tractor runover incidents also varied considerably by age group. Youth age 14 and under were run over while being a rider in six of 14 cases (42.9 percent) or while being a bystander or on-the-ground helper in eight cases (57.1 percent). Senior farmers, on the other hand, almost always were run over while working with or around the tractor as the operator, a scenario that occurred in 14 of 16 cases, or 87.6 percent of the runover cases for their age group. In many of these cases, an operator was trying to jump-start a tractor while standing on the ground, thinking that the tractor was out of gear. There also were a number of incidents in which the tractor rolled as a senior farmer attempted to hook or unhook equipment to the tractor. In some cases the tractor was left in neutral, in others the brakes reportedly did not hold.

The three youth group incidents

	14 ANI	D UNDER	65 AI	ND OVER
	NO.	%	NO.	%
Tractor and Machinery	19	61.3	59	84.3
Overturns	2	10.5	30	50.8
Runover				
Riders	6	31.6	1	1.7
Operators	0	0.0	14	23.7
Bystanders	8	42.1	1	1.7
Entanglements				
PTO	0	0.0	4	6.8
Intake/processing area	2	10.5	3	5.1
Other areas	1	5.3	0	0.0
Other, undetermined	0	0.0	10	10.2
Remaining Types	12	38.7	10	14.3
Animals	1	8.3	1	10.3
Drownings	3	25.0	0	0.0
Buildings	2	16.7	0	0.0
Miscellaneous	6	50.0	9	90.0
Unknown	0	0.0	1	1.4
Total all accident types	31	100.0	70	100.0

involving machinery other than tractors were entanglements with the machine; however, none of the entanglements involved the machine's PTO shaft. The same is not true for senior farmers. Four of seven (57.1 percent) nontractor machinery incidents involving senior farmers were entanglements with the PTO shaft. The other three incidents (42.9 percent) were entanglements in the crop/product intake or processing area. In six cases involving senior farmers, there was insufficient information to determine the specific type of machinery in the incident.

There were 12 incidents unrelated to tractors and machinery among the youth group, accounting for 38.7 percent of their total. There were 10 of these incidents among senior farmers, accounting for 14.3 percent of their total. Three of the 12 (25 percent) incidents involving youth were drownings in farm ponds. One child was trampled by a cow and two children fell through a barn hay drop opening. The rest of the fatalities were spread among a variety of other incident types. Nine of the 10 (90 percent) incidents unrelated to tractors and machinery involving senior farmers were spread among a variety of types. An animal was involved in only one case, in which the victim was kicked by a horse. The remaining case involving a senior farmer lacked detailed information.

For more information

The College of Agricultural Sciences and the Department of Agricultural and Biological Engineering offer many fact sheets, extension circulars, videotapes, and educational programs to help prevent and control the types of fatal injury incidents described in this report. Most of these are available through the Penn State Cooperative Extension office in your county; from the College of Agricultural Sciences' Publications Distribution Center, 112 Agricultural Administration Building, University Park, PA 16802; or from the Department of Agricultural and Biological Engineering, 246 Agricultural Engineering Building, University Park, PA 16802.

9

Appendix: Farm and agricultural injury code

FAIC-1. Farm production work

Victim engaged in a work activity related to agricultural production (SIC* 01 or 02). Examples include persons engaged in the operation of tractors or machinery in farm operations; use of ATVs or horses for farm work; use of cars or trucks in a farm work activity (including transport of produce, delivery of products, traveling to purchase supplies, etc.); use of farm structures (excluding the home in most instances—see classification category 8); construction or maintenance of farm machines or structures (excluding hired contractors—see classification category 7); working with farm animals; cutting or clearing trees, brush, logs, etc., to prepare land for production or to sell timber or firewood (if farm operator or worker); working on fish, frog, or other aquacultural farms; working on nursery products farms. Includes farm-related work done in the home, such as farm office or farm shop work. Also includes farm-related work-related activity. Excludes contractors who are contracted for specific agricultural production work—see classification category 2.

FAIC-2. Agricultural services

Victim engaged in a work activity related to agricultural services (SIC 07). Examples include contractors hired to perform specific agricultural production tasks (custom-hired); persons employed by firms offering specific agricultural services as listed under SIC 07. Includes intentional injuries occurring during occupational work-related activity. Excludes persons employed for nonagricultural services see classification category 7.

FAIC-3. Forestry

Victim engaged in a work activity related to commercial forestry production (SIC 08). Examples include persons engaged in the operation or management of timber tracts, tree farms, or forest nurseries; forest fire fighting; collecting maple sap. Includes intentional injuries occurring during occupational work-related activity. Excludes lumberjacks and others engaged in commercial logging operations, which are classified as part of manufacturing and not agricultural.

FAIC-4. Fishing, hunting, trapping

Victim engaged in a work activity related to commercial fishing, hunting, or trapping (SIC 09). Examples include the operation of fish hatcheries and fish and game preserves. Includes intentional injuries occurring during occupational work-related activity. Excludes fish, frog, and other aquacultural farms—see classification category 1.

FAIC-5. Farm tractors, machines, tools, equipment, etc., not being used for farm production

Victim engaged in an activity involving agricultural machines, equipment, tools, etc., but not related to farm production operations. Examples include persons using tractors to pull a stranded motorist from a ditch; operating tractors for a hayride; restoring old farm machines or tractors; operating a tractor at a tractor pull or county fair; using a tractor to pull vehicles at a mud bog race or other recreational activity; operating farm tractors for highway construction; using a tractor or a chain saw to pull, drag, or cut miscellaneous trees, brush, logs, or to obtain firewood for the home. Excludes victims associated with a business or service who were providing services at the time of injury—see classification category 7.

FAIC-6. Nonwork work site

Victim not actively engaged in a work activity but injured *as a result of* exposure to a farm work site hazard. Examples include children playing on or around farm machinery, structures, or animal pens; children riding as extra riders on farm machinery (excludes extra riders actively working—see classification category 1); church youth groups playing in barns or on hay stacks; children and aged persons unintentionally falling into farm ponds; persons watching a farm work activity (bystanders).

FAIC-7. On-farm outside services

Victim was associated with a business or service and was injured on a farm while providing services to the farm. Examples include farm machinery repairmen, silo and grain bin erectors, builders and construction workers, electricians, feed salesmen, firemen, EMTs, etc. Excludes persons custom-hired for agricultural production work—see classification category 2.

FAIC-8. Farm home

Victim was engaged in either nonagricultural work, leisure, recreational, or other miscellaneous activity involving a farm residence, including the interior or exterior of the house, garden, driveway, and yard around the house. Also includes nonagricultural shop work. Excludes persons working in the barnyard or yard areas around farm structures, and persons engaged in office or shop work relating to farm production, agricultural services, etc., which would be considered agricultural work—see classification categories 1 to 4.

FAIC-9. Farm leisure

Victim engaged in recreational or leisure activity on a farm. Examples include victims who were riding horses, riding ATVs, hunting, swimming, camping, or playing organized games, or taking part in leisure activities not connected with the industry of agriculture. Excludes children at play who were injured by farm-related hazards, such as farm machinery or structures—see classification category 5 or 6.

FAIC-10. Rural traffic—farm hazards

Victim was an operator or passenger in a motor vehicle (car, truck, motorcycle), on an ATV, a pedalcycle, or was a pedestrian, and involved in a roadway collision with farm machinery, farm animals, or other farm-associated hazards. Excludes persons using motor vehicles for farm work activities—see classification category 1.

FAIC-11. Non-work-related work interruption

Victim was a farmer, farm worker, or a farm resident, and was injured during a "work interruption." An example is a farmer who stops field work, crosses a fence to aid a stranded motorist, and is then stuck by another vehicle. Excludes persons who may be walking or pedaling on public roads as a part of a work activity—see classification categories 1 to 4.

**Standard Industrial Classification Manural*, 1987. This is the official U.S. document for defining and describing industrial establishments. Division A of the manual is Agriculture, Forestry, and Fishing, and includes five major groups (01, 02, 07, 08, 09).