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# Dairy Safety Survey, 2012

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## *Executive Summary*

This survey was designed to gather information about the safety practices of members of the Professional Dairy Producers of Wisconsin (PDPW) and their interest in professional development opportunities with respect to safety on dairy farms.

From late February to mid-March, 2012, approximately 900 PDPW members received three emails inviting them to participate in an on-line survey asking about their farm, their safety practices, and their preferences for receiving information on dairy safety. A total of 153 usable responses were received. A sample of 153 from a population of 900 should provide estimates that are accurate to within plus or minus 7.2 percent with 95 percent confidence.

About two-thirds of the respondents in the sample were male, which aligns well with the overall farm population in Wisconsin. The age profile of respondents is slightly younger than the overall farm population in Wisconsin, but is fairly similar to the 2007 Census. Respondents were drawn from across Wisconsin, though there were few in the northern tier of counties. The sample was evenly split between respondents who said they are the farm owner and those who said they are both the owner and manager.

The “average” farm in this sample has the following structure:

- 2.6 owners, 2.4 family workers and 13.8 non-family workers for a total of 18.2 people involved in the operation
- on 90 percent of these operations, non-family workers outnumber family workers
- 807 milking cows, 106 dry cows, 550 heifers, 3 dairy bulls, for a total of 1,466 total animal units
- 85% have a conventional milking parlor, with 11% having a flat parlor or a stanchion/tie stall barn
- in terms of storage facilities, about two-thirds of the respondents have a commodity shed and a bunker silo, about half have other large bale storage, a gravity flow bin and liquid storage capacity
- 90% use an outdoor storage facility for their manure

Sixty percent of the farms in the sample expect to expand within five years. Those expecting to expand within one year expect to add an average of 200 cows and those expanding within 5 years expect to add an average of nearly 500 cows.

The results of this survey indicate that job responsibilities are divided between farm employees and contractors in fairly consistent patterns:

- **Farm employees** were primarily responsible for operating skid steers, TMRs, tractors and other equipment on public roads, packing silage bunkers or piles, and hauling manure
- **Contractors** were primarily responsible for applying crop protectants, operating combines, operating large balers, and applying anhydrous for farms using this product
- **Responsibilities were shared** roughly equally between employees and contractors for operating forage harvesters, pumping manure, and applying fertilizers other than anhydrous

- Relatively **few farms reported using** a managed composting system or an anaerobic digester
- On one-third of the farms, both employees and contractors were involved in hauling manure

A majority of farms in the sample (70%) reported that they have a training program for new employees. However, only 82% of farms with new employee training programs included safety-focused topics. This indicates that about 40% of farms in this sample do not appear to include safety training for new employees. Farms with larger non-family workforces were more likely to include safety topics in their employee training programs. Nearly 80% of all employee training programs are 20 hours or less in duration.

A large majority (80%) of the farms in this sample carry worker's compensation insurance. More than half the farms reported having at least one work injury in the previous year. Sixty percent said they lost no work-days because of injury on their farms and only 20% reported more than one work-week worth of days lost because of injuries. Only 1% of the farms said they had ever been inspected by the Occupational Safety and Health Administration (OSHA).

There is interest in a wide variety of safety training information. Approximately two-thirds of the respondents said they are interested in sample safety policies or other materials for a safety manual. About half said they were interested in an OSHA compliance checklist (59%), safety training videos (56%), how to develop an employee safety program (55%), how to control specific farm hazards (53%), training guides or lesson plans on safety topics (52%), how to develop a farm inspection guide (52%), and a train the trainer program for someone from their farm to become qualified to provide safety training to others on their farm (47%). The only item of relatively little interest was on how to organize and use a farm safety committee (35%).

Most respondents have adopted a DIY (do it yourself) approach to farm safety; few are paying for safety information. Nearly two-thirds use their County Extension office or do their own research on these topics in the farm media (magazines, newspapers, radio) or on the internet. Fewer than one in five hire a consultant or purchase materials from a commercial company.

The internet is the preferred means of getting safety information for the largest proportion of respondents (43%), with roughly one-third still preferring paper copies and one-quarter preferring CD/DVD copies. Respondents are universally interested in training materials in English and almost all (83%) would also like them in Spanish.

The biggest barrier to safety training and to making safety improvements on this set of dairy farms is a lack of knowledge; not knowing what to do or how to do it. About half the respondents said they lacked the needed time to implement safety training or improve safety on their farms. Language barriers and financial constraints were substantially less important impediments for this set of dairy farmers.

In sum, the results of this survey indicate both a need for and a receptivity to safety outreach efforts.

## *Survey Purpose*

This survey was designed to gather information about the safety practices of members of the Professional Dairy Producers of Wisconsin (PDPW) and their interest in professional development opportunities with respect to safety on dairy farms. The results will inform the development and delivery of educational offerings for Wisconsin's dairy producers.

## *Survey Methods*

From late February to mid-March, 2012, approximately 900 PDPW members received three emails inviting them to participate in an on-line survey asking about their farm, their safety practices, and their preferences for receiving information on dairy safety. A total of 153 usable responses were received. A sample of 153 from a population of 900 should provide estimates that are accurate to within plus or minus 7.2 percent with 95 percent confidence.

Any survey has to be concerned with “non-response bias.” Non-response bias refers to a situation in which people who do not return a questionnaire have opinions that are systematically different from the opinions of those who return their surveys. **Based upon a standard statistical analysis that is described in Appendix A, the Survey Research Center (SRC) concludes that non-response bias is unlikely to be a concern for this sample.**

In addition to the numeric responses, respondents provided additional written comments that were compiled by the SRC from the surveys. **Appendix B to this report contains the complete compilation of comments.**

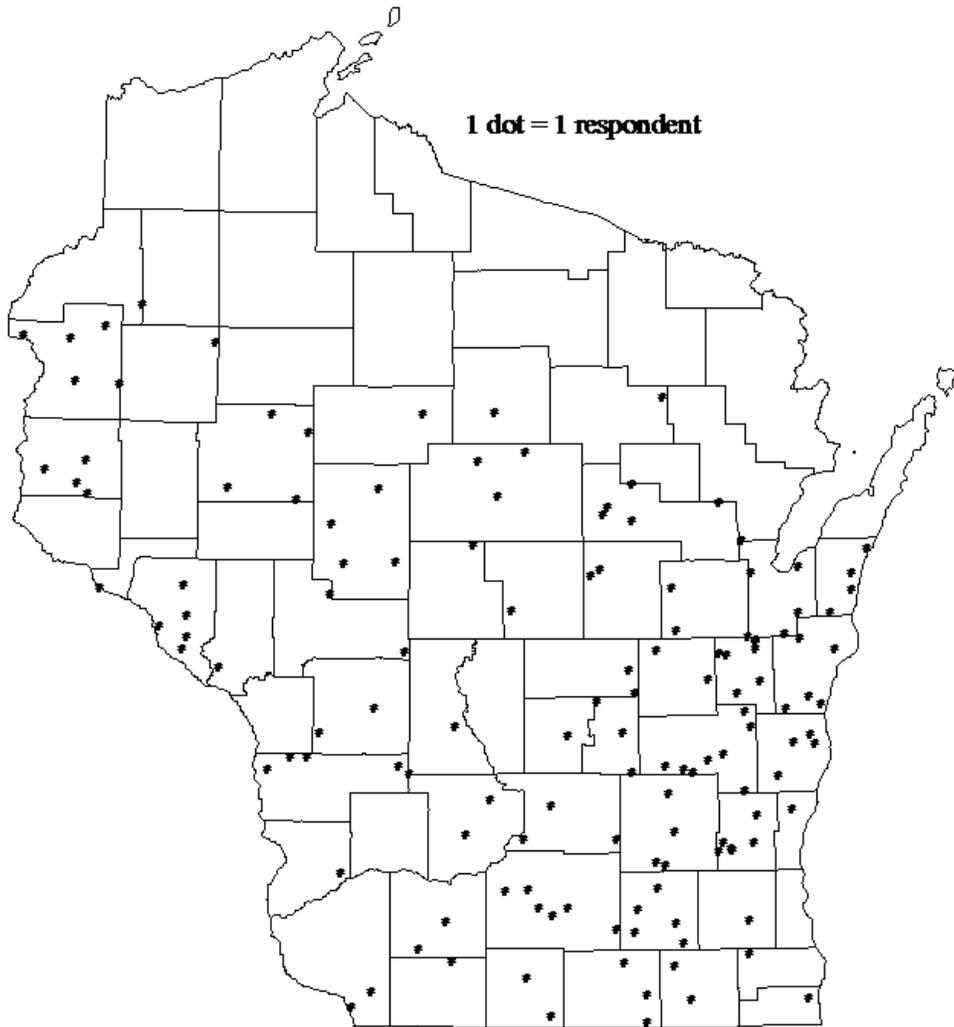
**Appendix C contains a copy of the survey questionnaire with a quantitative summary of responses by question.**

## *Profile of Respondents*

Table 1 summarizes the demographic profile of respondents to this survey. Where available, a comparable figure for Wisconsin as a whole, based on the 2007 Census of Agriculture is provided. About two-thirds of the respondents in the sample were male, which aligns well with the overall farm population in Wisconsin. The age profile of respondents is slightly younger than the overall farm population in Wisconsin, but again, is fairly similar to the 2007 Census. Not surprisingly, most of the respondents (90%) were from Wisconsin; in addition to Minnesota and Iowa, respondents hailed from Illinois, Kansas, Michigan, Vermont, Pennsylvania and New York. Figure 1 shows the geographic distribution by county for respondents from Wisconsin – the dot does not represent the actual location of a participating farm. Clearly, respondents are broadly distributed around Wisconsin. Finally, the sample is evenly split between respondents who said they are the farm owner and those who said they are both the owner and manager.

Table 1: Demographic Profile of Respondents							
<b>Gender</b>	<b>Count</b>	<b>Male</b>	<b>Female</b>				
Sample	150	68%	32%				
All Wisconsin Farms	120,934	69%	31%				
<b>Age</b>	<b>Count</b>	<b>Under 25</b>	<b>25 - 34</b>	<b>35 - 44</b>	<b>45 - 54</b>	<b>55 - 64</b>	<b>65+</b>
Sample	153	3%	13%	21%	33%	26%	4%
Wisconsin Dairy Farms	13,477	1%	8%	18%	37%	24%	11%
<b>State</b>	<b>Count</b>	<b>Wisconsin</b>	<b>Minnesota</b>	<b>Iowa</b>	<b>Other</b>		
Sample	145	90%	5%	1%	4%		
<b>Position</b>	<b>Count</b>	<b>Owner</b>	<b>Manager</b>	<b>Both</b>			
Sample	82	46%	10%	43%			

Figure 1: Geographic Distribution of Wisconsin Respondents



## *Profile of Respondents' Farms*

In the first portion of the survey, we gathered a number of facts about the respondent's farm (e.g. number of employees, number of milking cows, expansion plans, type of milking facility, storage facilities, manure storage options, etc.). This section of the report will summarize these features.

Table 2 summarizes the data with respect to number of owners and employees on the dairy farms in the sample. The "average" dairy farm in this sample has 2.6 owners, 2.4 non-owner family workers and 13.8 non-family workers, for a total of 18.2 people involved in the operation. Beyond these average figures, however, Table 2 suggests that there is a good deal of variation with respect to the number and structure of employment on these dairy operations. The number of owners ranged from 1 to 11, the number of family workers from 0 to 34, and the number of non-family workers from 0 to 75, and total employment on these farms ranged from 2 to 76. The data summarized in Table 2 also reflect the changing employment structure of dairy farms in Wisconsin. Thirty percent of the respondents have no family (non-owner) workers in their operation compared to only 7 percent who have no non-family workers. In addition, on 90 percent of these operations, non-family workers outnumber family workers. It is no longer the case that dairy farm families in Wisconsin provide the bulk of the labor on those operations.

<b>Table 2: Number of Workers on Dairy Farms</b>									
	<b>Count</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5+</b>		
Number Owners	152	1%	16%	40%	25%	12%	7%		
	<b>Count</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5+</b>		
Number Family Workers	153	30%	17%	22%	15%	7%	9%		
	<b>Count</b>	<b>0</b>	<b>1 - 3</b>	<b>4 - 5</b>	<b>6 - 10</b>	<b>11 - 15</b>	<b>16 - 20</b>	<b>21 - 30</b>	<b>30+</b>
Number Non-Family Workers	153	7%	10%	6%	29%	17%	12%	10%	8%
	<b>Count</b>	<b>0</b>	<b>1 - 3</b>	<b>4 - 5</b>	<b>6 - 10</b>	<b>11 - 15</b>	<b>16 - 20</b>	<b>21 - 30</b>	<b>30+</b>
Total Workers	153	0%	4%	5%	16%	28%	14%	17%	15%

When we discuss the safety issues and professional development interests, we will look for and discuss any significant differences based on number of owners and number of non-family workers. For example, we will look to see if farms with more complex ownership structures (e.g. those saying there are more than two owners involved in the dairy) or with more workers, have stronger interests in safety issues and/or professional development focused on these topics.

The average farm in this sample has the following profile in terms of animal units:

- 807 milking cows
- 106 dry cows
- 550 heifers
- 3 dairy bulls
- 1,466 total animal units

According to the 2007 Census of Agriculture, the average Wisconsin farm with dairy cows had 90 cows and heifers. So, the PDPW farms are considerably larger than average. Table 3 indicates that fewer than 6 percent of the respondents were of a size comparable to the average Wisconsin dairy farm (fewer than 100 milking cows). At the other end of the spectrum, about one in five farms in the sample had more than 1,000 milking cows. In subsequent sections, we will compare the responses from farms with more than 500 milking cows to those with fewer cows.

Table 3 shows the number of dry cows on these farms broken into several categories. In the survey, respondents entered the exact number of cattle in each of the categories shown in Table 3. For ease of discussion, the SRC placed them into the ranges shown in the table. Looking at dry cows as a percentage of milking cows, the average is 14% and there is relatively little variation across these farms – for nearly 80 percent of farms in the sample dry cows were between 10% and 20% of total milking cows on the farm.

<b>Table 3: Number of Animals on Sample Farms</b>									
	<b>Count</b>	<b>0</b>	<b>1 - 100</b>	<b>101 - 250</b>	<b>251 - 500</b>	<b>501 - 750</b>	<b>751 - 1000</b>	<b>1,001 - 2,000</b>	<b>2,001+</b>
Milking Cows	150	1%	6%	15%	28%	18%	11%	13%	7%
	<b>Count</b>	<b>0</b>	<b>1 - 25</b>	<b>26 - 50</b>	<b>51 - 75</b>	<b>76 - 100</b>	<b>101+</b>		
Dry Cows	150	1%	18%	21%	18%	14%	27%		
	<b>Count</b>	<b>0</b>	<b>1 - 100</b>	<b>101 - 250</b>	<b>251 - 500</b>	<b>501 - 750</b>	<b>751 - 1000</b>	<b>1,001 - 2,000</b>	<b>2,001+</b>
Heifers	151	5%	13%	21%	28%	12%	8%	9%	5%
	<b>Count</b>	<b>0</b>	<b>1</b>	<b>2 - 5</b>	<b>6-10</b>	<b>11 - 25</b>	<b>26+</b>		
Bulls	143	65%	7%	19%	3%	4%	1%		
	<b>Count</b>	<b>0</b>	<b>1 - 100</b>	<b>101 - 250</b>	<b>251 - 500</b>	<b>501 - 750</b>	<b>751 - 1000</b>	<b>1,001 - 2,000</b>	<b>2,001+</b>
Total Animals	151	0%	1%	6%	13%	15%	16%	30%	19%

With respect to the number of heifers on the sample farms, there is a strong correlation with the number of milking cows on that farm. While there are a few farms in the sample that seem to

specialize in raising replacement heifers, it appears that most of the farms in the sample are raising most of their own replacement cows.

As noted, only about one-third of the farms in the sample have bulls on their farms. There is no statistical relationship between the number of milking cows on these farms and the number of bulls they have. Smaller farms, for example, are no more likely to have bulls on their farm than are larger farms.

Sixty percent of the respondents said that they plan to expand their herd within the next five years. Though not statistically significant, younger operators and males reported that they expect to expand within five years in higher proportions than did older operators and women.

If the respondent said they expect to expand, the subsequent questions asked them to indicate the number of cows they expect to add in the next one and five years. Table 4 summarizes these responses. The 60 respondents who expect to expand their herd in the next year expect to expand by an average of about 200 cows. As Table 4 indicates, most of the expansions expected to occur within one year are relatively modest in size; more than three-quarters of the respondents expect to increase their herd by 100 cows or less. However, there is a large range (from five to 3,600) in the anticipated number of cows to be added to the herd within the next year. Because of this skewed distribution the median (half the observations smaller and half larger) expansion is only 50 cows.

<b>Table 4: Expansion Plans within 1 and 5 Years</b>								
	<b>Count</b>	<b>1 - 50</b>	<b>51 - 100</b>	<b>101 - 250</b>	<b>251 - 500</b>	<b>501 - 1,000</b>	<b>1,001 -2,000</b>	<b>2,001+</b>
Within 1 Year	60	62%	17%	13%	3%	0%	3%	2%
Within 5 Years	84	8%	14%	36%	24%	12%	1%	5%

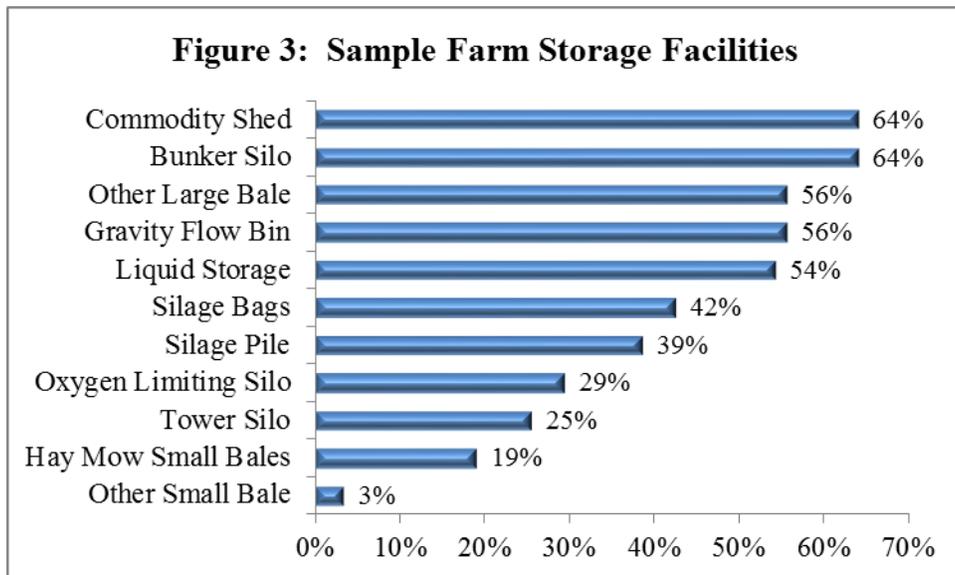
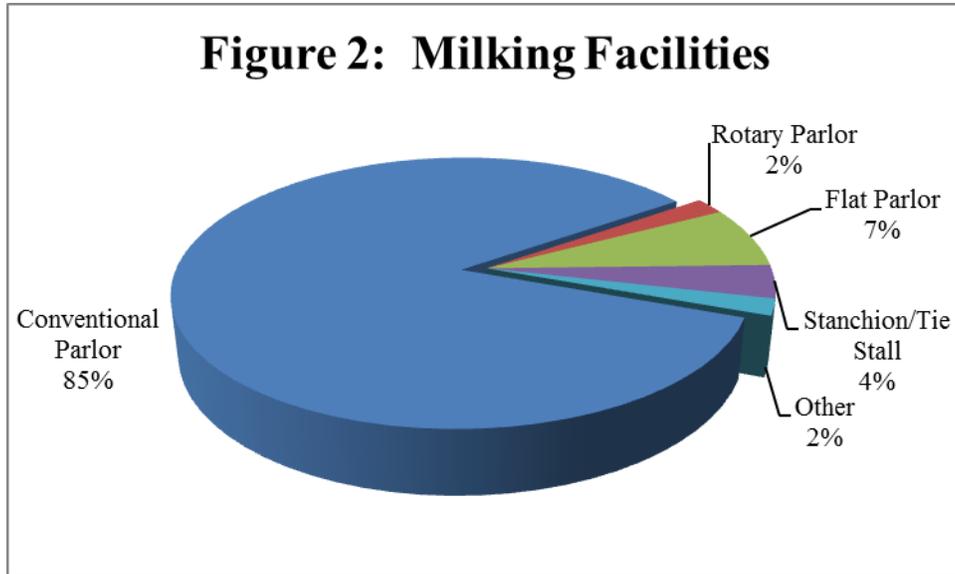
The 84 respondents who said they will expand within 5 years expect, on average, to add nearly 500 cows to their herds. More than three-quarters of those who expect to expand within 5 years will add more than 100 cows to their herd and 4 expect to add more than 2,000. Again, because there are a few farms planning very large expansions, the median sized expansion (225) is much smaller than the average sized expansion (490).

The next section of the survey asked about the physical facilities on these dairy farms.

As Figure 2 (next page) indicates, a large majority (85 percent) of farms in the sample have a conventional parlor. One of the 3 farms included in the “Other” slice in Figure 2 has both a conventional and a rotary parlor. As one would probably expect, there is a strong statistical relationship between the number of cows on the farm and the type of milking facility. In particular, stanchion/tie stall barns and flat parlors tend to be on farms with smaller herds and rotary parlors on the very largest farms.

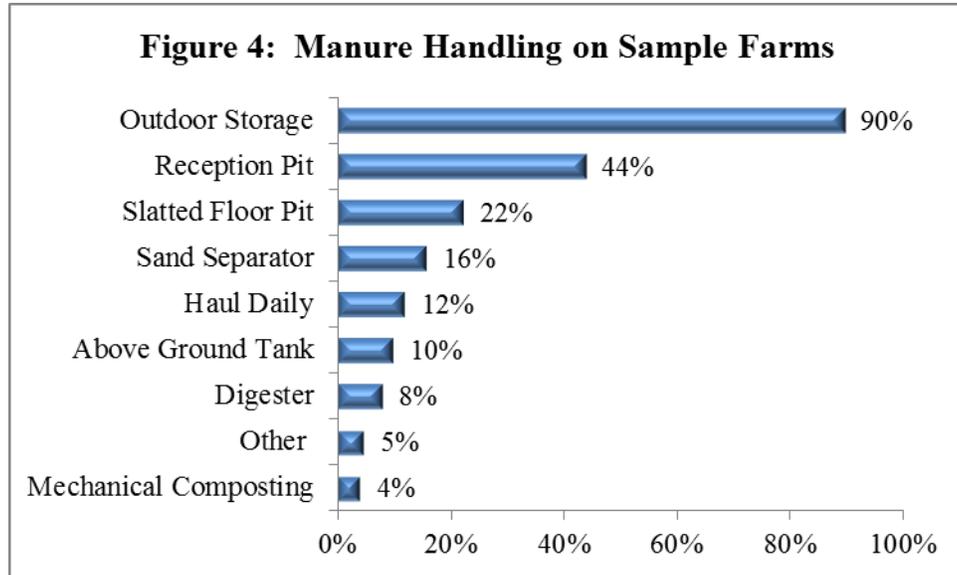
Figure 3 (next page) indicates the proportion of farms in the sample with varying types of feed storage facilities. Nearly two-thirds of all farms said they have commodity sheds and bunker silos. “Other large bale” storage, located on slightly more than half of all respondents’ farms,

included a number of sheds/pole barns (including machinery sheds), hay mows, and 3-sided/open-front buildings. Approximately half the respondents also reported having gravity flow bins and liquid storage capacity on their operations. Overall, the average respondent listed 4.5 different storage facilities on their farms.



In terms of the relationship between size of herd and storage facilities, farms with fewer than 500 cows were significantly more likely to report that they use a tower silo, silage bags, and hay mows for small bales, while larger farms were significantly more likely to report using silage bunkers and commodity sheds.

Figure 4 (next page) indicates that most of the farms in the sample use an outdoor earthen or concrete storage facility for their manure. Nearly half report using a smaller reception pit before pumping manure to a larger storage facility. The other manure handling options shown in Figure 4 were used by fewer than one-quarter of the respondents. Overall, the average dairy farm uses two of the options included in Figure 4, about one-quarter use three or more of these options. Larger operations, those with 500 or more milking cows, were significantly more likely to say they use outside storage, a reception pit, a sand separator, and a manure digester than were smaller farms. Farms with less than 500 milking cows were more likely to report that they haul manure daily.



<b>Table 5: Who Does Different Jobs on Farm</b>					
	<b>Count</b>	<b>Self</b>	<b>Contractor</b>	<b>Shared</b>	<b>NA</b>
Operate Skid Steer	153	99%	1%	1%	0%
Operate TMR	152	99%	1%	1%	1%
Operate Tractors on Roads	152	84%	15%	16%	1%
Pack Silage Bunker/Pile	130	63%	24%	14%	13%
Haul Manure	153	58%	42%	34%	0%
Operate Forage Harvester	151	51%	48%	7%	1%
Pump Manure	146	47%	49%	16%	4%
Apply Other Fertilizers	148	43%	54%	22%	3%
Apply Crop Protectants	149	39%	59%	10%	2%
Operate Combine	134	33%	55%	3%	12%
Operate Large Baler	121	27%	52%	1%	21%
Compost Management	40	24%	3%	0%	73%
Apply Anhydrous	69	11%	36%	3%	53%
Anaerobic Digester	17	6%	7%	1%	87%

Table 5 shows the number of respondents who responded to questions about these tasks (Count), the proportion of all farms who assign the task to their employees (Self), the proportion who pay a contractor to do it (Contractor), the proportion that said both “own employees” and “contractor” were involved (Shared), and the percent that don’t engage in that activity (NA). The results in Table 5 indicate that there are fairly distinct patterns of job responsibilities on farms included in the sample.

- **Farm employees** were primarily responsible for operating skid steers, TMRs, tractors and other equipment on public roads, packing silage bunkers or piles, and hauling manure
- **Contractors** were primarily responsible for applying crop protectants, operating combines, operating large balers, and applying anhydrous for farms that report using this product
- **Responsibilities were shared** roughly equally between employees and contractors for operating forage harvesters, pumping manure, and applying fertilizers other than anhydrous
- Relatively **few farms reported using** a managed composting system or an anaerobic digester
- On one-third of the farms, both employees and contractors were involved in hauling manure

Farms with more than 500 milk cows were significantly more likely to pay a contractor to haul manure and those with fewer than 500 milk cows were significantly more likely to contract for combining services.

### *Safety Training Programs*

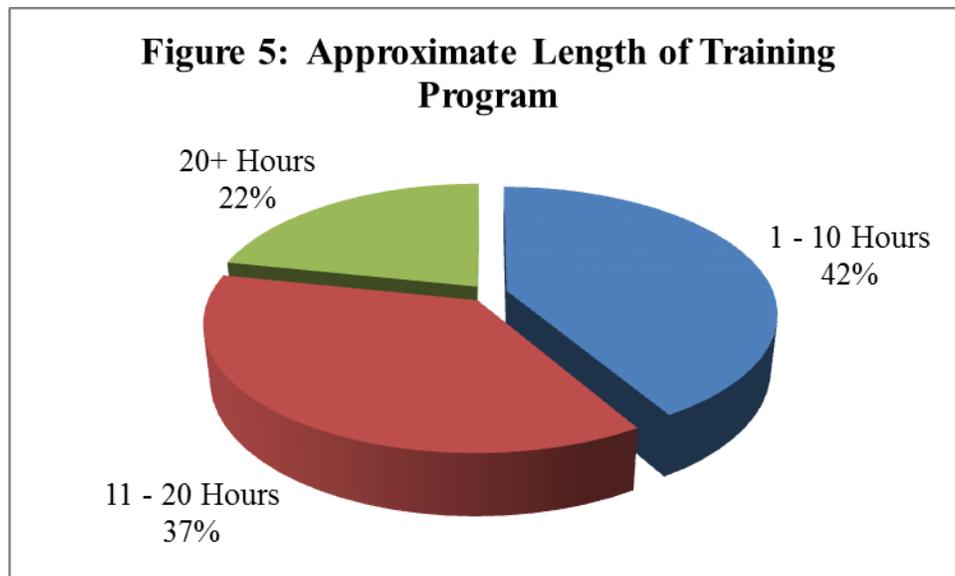
Seventy percent of the 153 farmers who answered this question said that their farm has a training program for new workers. The probability that a farm has a training program for new employees increases with the number of milk cows on the farm – larger farms are significantly more likely to have such programs than are smaller farms. Further, if a farm reported having had a workman’s compensation claim, it is significantly more likely to have an employee training program. Interestingly, there is not a statistically significant difference in the probability that safety will be included in the training program of farms that report having had a workman’s compensation claim compared to farms that have not had such a claim.

<b>Table 6: Content and Delivery of New Employee Training Programs</b>				
	<b>Count</b>	<b>Yes</b>	<b>No</b>	<b>Don't Know</b>
Verbal Instruction	107	99%	1%	
Hands-On Training by Co-Worker	106	96%	4%	
Task-Focused	107	93%	5%	2%
Post-Training Observation by Supervisor	105	90%	10%	
Hands-On Training by Supervisor	105	87%	12%	1%
Safety-Focused	105	82%	14%	4%

Farms with training programs for new employees were asked about the nature of those programs (Table 6). Large majorities of these dairy farms' training programs include all of the items included in Table 6. Ninety percent or more said that their training involved verbal instruction, hands-on training by co-workers or mentors, task focused training such as proper milking procedures, and post training observation by supervisors.

Given this study's focus on safety issues on dairy farms, it is interesting to note that safety-focused training, such as safe milking procedures, was the topic covered least frequently in training programs (Table 6). Combining the 46 farms that reported that they don't have a new employee training program with the 15 farms that said they don't cover safety in their training program or don't know if they do, means that overall about **40 percent of the farms in this sample do not appear to include safety training for new employees**. Older farmers were more likely to report that their training program included safety-focused elements. Farms with more than 10 workers were somewhat more likely to include safety topics in their employee training programs.

Figure 5 shows the distribution of the approximate length of new worker training programs as reported by the sample farms. About 40 percent of these dairy farms train their workers for between one and ten hours and a similar proportion train them for 11 to 20 hours. Only about one in five provide more than 20 hours of training during their workers' first three months of employment. Interestingly, farms with fewer than 10 non-family workers were slightly more likely to have longer training programs than those with a larger number of non-family workers.



Half the farms with training programs have a written employee manual. Of those with written employee manuals, roughly 70 percent include information on both work procedures and on safety practices.

Eighty percent of the dairy farms in the sample said they carry worker’s compensation insurance. There are a number of factors associated with the probability that a farm will have worker’s compensation insurance:

- Those with more non-family workers (10+) are more likely to carry this insurance
- Those with more complex ownership structures (3+ owners) are more likely to carry this insurance
- Those with more cows (500+ milking cows) are more likely to carry this insurance
- Male respondents were more likely to report having worker’s compensation insurance
- Younger respondents were more likely to report having worker’s compensation insurance

In Table 7 we have summarized the number of worker injuries respondents said they had on their farm in the past year and the number of work-days lost because of those worker injuries. Approximately half the respondents had no injuries and more than half lost no work-days because of these injuries. The maximum number of injuries reported was 11 and the maximum number of work-days lost because of injury was 300 – these maximum values were not, by the way, on the same farm. About 80 percent of the respondent farms reported losing less than one work-week because of on-farm injuries.

<b>Table 7: Work Injuries During Last Year</b>						
	<b>Count</b>	<b>None</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4+</b>
Number Work Injuries Last Year	147	46%	29%	10%	9%	7%
	<b>Count</b>	<b>None</b>	<b>1 - 2</b>	<b>3 - 5</b>	<b>6 - 25</b>	<b>26+</b>
Number Work-Days Lost to Injuries	146	60%	10%	11%	8%	12%

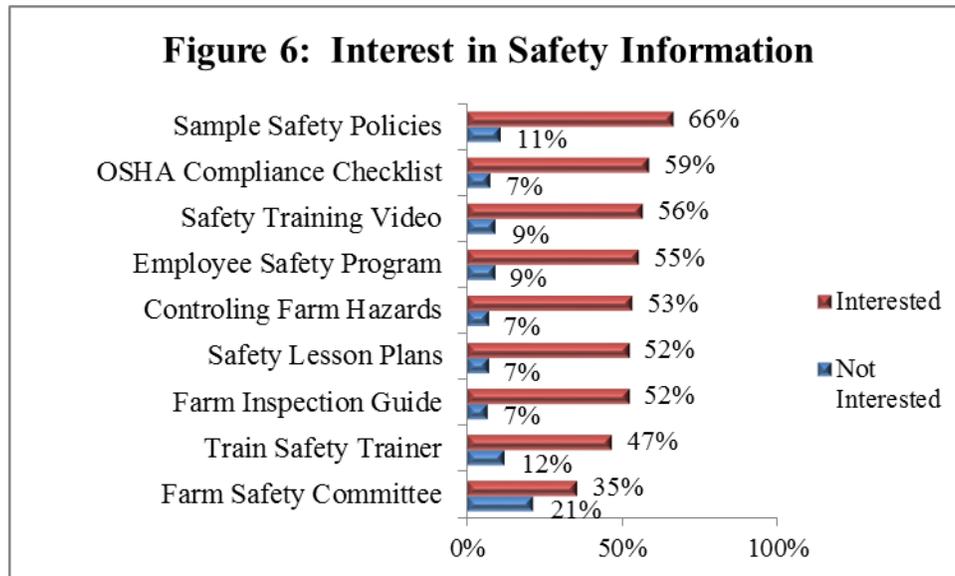
Only 1 percent of the farms (2 farms) said that the Occupational Safety and Health Administration (OSHA) had ever inspected their dairy. So, the training programs that currently exist have not, for the most part, been driven by regulatory enforcement actions.

### ***Safety Information Preferences***

The final section of the survey asked respondents about their interest in a variety of safety topics, their preferred sources of farm safety information, the means by which they prefer to receive safety information, and barriers they feel they face with respect to safety training and implementation.

There is a fair amount of interest in a wide variety of safety training information. Respondents could say they were “interested,” “somewhat interested,” “not interested” or that they “didn’t know” if they were interested in the topics shown in Figure 6. Very few chose the “don’t know” option and we have reported only the “interested” (top bar) and “not interested” (bottom bar) options in Figure 6. Approximately two-thirds of the respondents said they are interested in sample safety policies or other materials for a safety manual. About half said they were

interested in an OSHA compliance checklist (59%), safety training videos (56%), how to develop an employee safety program (55%), how to control specific farm hazards (53%), training guides or lesson plans on safety topics (52%), how to develop a farm inspection guide (52%), and a train the trainer program for someone from their farm to become qualified to provide safety training to others on their farm (47%). The only item for which there was relatively little interest was for information on how to organize and use a farm safety committee (35%).



While there are a few differences based on gender or age (men are more interested in training guides/lesson plans and in an OSHA compliance checklist, as are younger respondents), the big difference is with respect to expansion plans. **Those who report that they plan to expand within the next 5 years were significantly more interested in information** on how to develop an employee safety program, how to control specific farm hazards, how to form/use a safety committee, sample safety policies/materials, a farm inspection guide, training guides/lesson plans, training videos, train the trainer programs, and an OSHA compliance checklist. It seems as though when farms are contemplating significant organizational changes, they are also more open to operational changes focused on safety. Further, **larger operations (500+ cows, 10+ non-family workers) are significantly more interested** in all the informational items included in Figure 6 than are smaller operations.

Figure 7 suggests that relatively few respondents are paying for safety information at the moment. Nearly two-thirds use their County Extension office or do their own research on these topics in the farm media (magazines, newspapers, radio) or on the internet. Only about one-third use information from local technical colleges and fewer than one in five hire a consultant or purchase materials from a commercial company.

There were a number of statistically significant differences in how different groups of farms accessed safety information:

- farms with more than 500 milking cows were more likely to report using the farm media and consultants for safety information than were owners of smaller operations
- farms with 10 or more non-family workers were also more likely to report using consultants for safety information than were those with fewer such workers
- operations that have experienced a farm-related injury are more likely to report getting safety information from a company – several respondents noted that they received safety information from their insurance company, which may be related to these experiences.
- men were more likely than women to say they get safety information from a consultant but women were more likely to use the farm media than were men
- farms that expect to expand over the next 5 years were more likely to report accessing safety information on the internet

In all cases, the statistical differences across groups weren't as great as the differences across the information sources noted in Figure 7. For example, farms with 10 or more workers were significantly more likely to report using consultants than were farms with fewer workers. However, only 24% of farms with 10+ workers reported using consultants for safety information (vs. only 8% of farms with fewer than 10 workers) but 61% of these farms got such information from Extension.

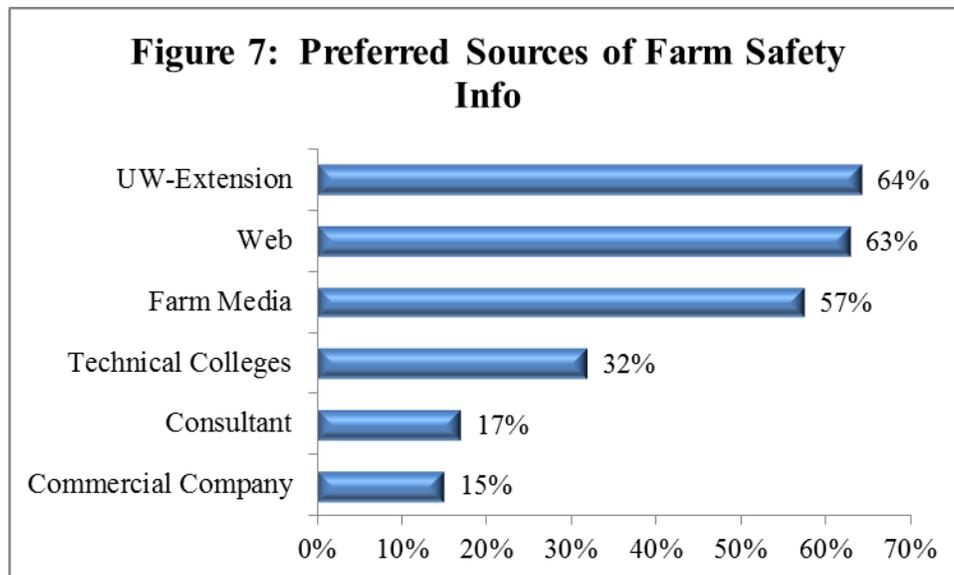


Figure 8 indicates that the internet is the preferred means of getting safety information for the largest proportion of respondents (43%), with roughly one-third still preferring paper copies and one-quarter preferring CD/DVD copies. Interestingly, there were few differences across different subgroups of respondents (gender, number of non-farm workers, number of milking cows, etc.) with respect to their preferred means of getting safety information. Somewhat surprisingly, there were no differences in preferred information delivery based on the age of the respondent. The only statistically significant difference was between those planning to expand (more likely to prefer internet delivery) and those who aren't (more likely to prefer paper copies).

We asked respondents if they needed training materials in English, Spanish, Hmong, Russian, or other languages. All 147 of those who answered this question said they would need training materials in English and 83% said they would be needed in Spanish. None said they needed materials in Hmong or Russian but one requested training materials in German.

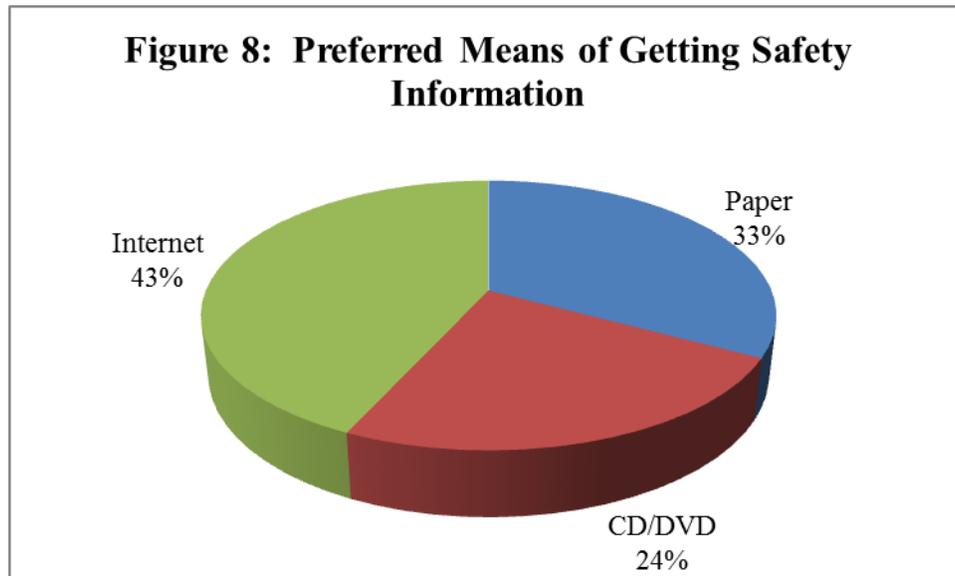


Table 8 indicates that the biggest barrier to safety training and to making safety improvements on this set of dairy farms is a lack of knowledge; not knowing what to do or how to do it. About half the respondents said they lacked the needed time to implement safety training or improve safety on their farms. Language barriers and financial constraints were substantially less important impediments for this set of dairy farmers.

<b>Table 8: Barriers to Safety Training and Improvements</b>		
	<b>Training Barriers</b>	<b>Improvement Barriers</b>
Lack Money	27%	37%
Lack Translation	42%	35%
Lack Time	56%	47%
Lack Knowledge	72%	66%

Farms with fewer than 500 cows were more likely to say that dollars inhibit their ability to offer safety training or make safety improvements on their farm than were larger operations. Operations with more than 3 owners were likely to cite a lack of translation as a barrier to safety training or making safety improvements compared to farms with fewer than 3 owners.

Compared to men, women were more likely to say that a lack of time prevented them from offering safety training and that lack of money impeded implementing safety improvements.

Respondents were asked if they had any additional questions or comments about safety issues. Many of these responses indicate an interest in more outreach efforts focused on dairy farm safety. Some representative comments included:

*“Many people are saying many things and sometimes contradicting each other. Would love to have more of a farm safety program similar to a milk inspection, where they come and tell you what you need to correct so farm energy is pointed where needed. Sometimes energy is well intended but is actually being spent on the wrong issues.”*

*“Safety training is really important and we are thankful that UW River Falls is taking the lead and that dairy farm families will have great access to information due to River Falls' work and UW Extension. This is an excellent role for Extension -- to utilize Extension's local and county infrastructure.”*

*“The written requirements of OSHA would be our biggest hurdle.”*

*“We have begun to start the process and have found that the Ohio State website has a lot of information on it. We also have received a list of areas from The Wisconsin Dairy Business Assn., and from other publications. We are putting a packet together for all employees to review and take a test to verify if they learned anything. We are trying to be proactive on the issue.”*

## ***Conclusions***

This report has summarized the results of a survey of PDPW members conducted during February and March of 2012. PDPW members are somewhat younger than the typical Wisconsin farmer and operate significantly larger farms. Many of these farms expect to become even larger over the next five years.

The survey found that even among these larger operations, safety training appears to be absent in about 40% of the farms. We also found that farms that are expecting to expand seem to be more interested in or receptive to safety training opportunities. Perhaps this is because they are expecting to be modifying so many of their operations as a result of their expansion and because they will likely be more reliant on non-family labor.

Whatever the cause, the results of this survey indicate that dairy producers see the importance of safety training on a modern dairy farm. These producers are interested in training on a wide

variety of topics and are fairly eclectic in their preferred means of delivering that training (internet, cd/dvd, and paper). UW-Extension is well positioned to deliver that training as it is one of the key sources for this sort of information that these producers currently use.

It is relatively clear that there is interest in safety training and awareness among dairy farmers and that their biggest challenge is not knowing what or how to implement training or safety improvements on their farms. The results also suggest that programs to address this gap will need to be designed to use dairy producers' time efficiently, given that their lack of time is seen as the second biggest challenge they face in improving safety on their farms.

## *Appendix A – Non-Response Bias Test*

Any survey has to be concerned with “non-response bias.” Non-response bias refers to a situation in which people who do not return a questionnaire have opinions that are systematically different from the opinions of those who return their surveys. For example, suppose almost none of the non-respondents to this survey have a written employee manual whereas most of those who returned their questionnaire do have one. In this case, non-response bias would exist and the raw results would overstate the proportion of PDPW farms with written employee manuals.

A standard way to test for non-response bias is to compare the responses of those who responded to the first invitation to take the questionnaire to those who responded to subsequent invitations. Those who respond to subsequent invitations are, in effect, a sample of non-respondents (to the first invitation), and we assume that they are representative of that group. In this survey, 79 people responded to the first invitation and 74 responded to subsequent invitations.

We found no variables with statistically significant differences between the mean responses of these two groups of respondents out of 93 tested. We only tested responses when a respondent had an opinion (don’t know and no opinion responses were not included in the standard T-Test). **The Survey Research Center (SRC) concludes that there is no evidence that non-response bias is not a concern for this sample.**

**Appendix B: Dairy Farm Safety Grant 2012 Survey Summary of Open-Ended Comments**

**Q3 In which state is your principal farm located? Other (7 Responses)**

- Illinois (2x)
- Michigan
- Pennsylvania
- Kansas
- Vermont
- New York

**Q6 How many of each of the following owners/workers do you have on your dairy farm? Owners (152 Responses)**

- 2 (61x)
- 4 (18x)
- 11 (2x)
- 3 (38x)
- 5 (5x)
- 0
- 1 (24x)
- 6 (2x)
- 9

**Q6 How many of each of the following owners/workers do you have on your dairy farm? Family Workers Non-Owners (137 Responses)**

- 2 (33x)
- 4 (11x)
- 8
- 0 (30x)
- 5 (7x)
- 9
- 1 (26x)
- 7 (2x)
- 11
- 3 (23x)
- 6
- 34

**Q6 How many of each of the following owners/workers do you have on your dairy farm? Non Family Workers (150 Responses)**

- 10 (11x)
- 15 (5x)
- 22
- 6 (10x)
- 30 (5x)
- 23
- 9 (9x)
- 14 (4x)
- 24
- 12 (9x)
- 1 (3x)
- 26
- 3 (8x)
- 5 (3x)
- 27
- 7 (8x)
- 13 (3x)
- 33
- 0 (7x)
- 19 (3x)
- 34
- 8 (7x)
- 21 (3x)
- 37
- 20 (7x)
- 25 (3x)
- 40
- 4 (6x)
- 17 (2x)
- 50
- 18 (6x)
- 32 (2x)
- 60
- 2 (5x)
- 35 (2x)
- 70
- 11 (5x)
- 16
- 75

**Q7 How many of the following types of cattle do you have on your dairy farm? Milking Cows (150 Responses)**

- |             |             |       |        |
|-------------|-------------|-------|--------|
| • 500 (9x)  | • 950 (2x)  | • 215 | • 575  |
| • 900 (5x)  | • 1000 (2x) | • 220 | • 580  |
| • 250 (4x)  | • 1050 (2x) | • 230 | • 610  |
| • 60 (3x)   | • 1550 (2x) | • 270 | • 630  |
| • 180 (3x)  | • 1850 (2x) | • 273 | • 652  |
| • 650 (3x)  | • 2200 (2x) | • 285 | • 690  |
| • 750 (3x)  | • 2400 (2x) | • 294 | • 770  |
| • 800 (3x)  | • 2600 (2x) | • 300 | • 790  |
| • 1200 (3x) | • 3000 (2x) | • 310 | • 850  |
| • 1650 (3x) | • 0         | • 311 | • 975  |
| • 110 (2x)  | • 40        | • 320 | • 990  |
| • 200 (2x)  | • 52        | • 325 | • 1009 |
| • 340 (2x)  | • 58        | • 330 | • 1100 |
| • 380 (2x)  | • 85        | • 360 | • 1250 |
| • 390 (2x)  | • 90        | • 370 | • 1300 |
| • 400 (2x)  | • 100       | • 385 | • 1350 |
| • 410 (2x)  | • 130       | • 405 | • 1525 |
| • 430 (2x)  | • 135       | • 420 | • 1950 |
| • 460 (2x)  | • 149       | • 425 | • 2000 |
| • 550 (2x)  | • 150       | • 440 | • 2800 |
| • 600 (2x)  | • 160       | • 485 | • 6800 |
| • 625 (2x)  | • 170       | • 490 | • 7800 |
| • 660 (2x)  | • 190       | • 510 |        |
| • 700 (2x)  | • 195       | • 525 |        |
| • 730 (2x)  | • 210       | • 560 |        |

**Q7 How many of the following types of cattle do you have on your dairy farm? Dry Cows**  
*(150 Responses)*

- |             |            |            |        |
|-------------|------------|------------|--------|
| • 50 (14x)  | • 25 (4x)  | • 250 (2x) | • 52   |
| • 100 (13x) | • 45 (4x)  | • 400 (2x) | • 53   |
| • 20 (8x)   | • 60 (4x)  | • 500 (2x) | • 58   |
| • 40 (8x)   | • 30 (3x)  | • 3        | • 104  |
| • 150 (8x)  | • 65 (3x)  | • 5        | • 175  |
| • 15 (7x)   | • 80 (3x)  | • 6        | • 180  |
| • 75 (7x)   | • 85 (3x)  | • 12       | • 220  |
| • 55 (5x)   | • 125 (3x) | • 23       | • 225  |
| • 200 (5x)  | • 0 (2x)   | • 24       | • 800  |
| • 300 (5x)  | • 10 (2x)  | • 27       | • 1400 |
| • 70 (5x)   | • 90 (2x)  | • 35       |        |
| • 120 (5x)  | • 110 (2x) | • 36       |        |

**Q7 How many of the following types of cattle do you have on your dairy farm? Heifers** *(151 Responses)*

- |             |             |       |        |
|-------------|-------------|-------|--------|
| • 200 (10x) | • 920 (2x)  | • 240 | • 635  |
| • 0 (7x)    | • 1000 (2x) | • 245 | • 670  |
| • 500 (7x)  | • 1450 (2x) | • 260 | • 715  |
| • 100 (5x)  | • 1800 (2x) | • 275 | • 720  |
| • 150 (5x)  | • 2400 (2x) | • 283 | • 740  |
| • 300 (5x)  | • 2500 (2x) | • 295 | • 754  |
| • 450 (5x)  | • 10        | • 307 | • 805  |
| • 400 (4x)  | • 20        | • 320 | • 890  |
| • 600 (4x)  | • 45        | • 330 | • 900  |
| • 50 (3x)   | • 63        | • 340 | • 1050 |
| • 350 (3x)  | • 74        | • 345 | • 1100 |
| • 60 (2x)   | • 75        | • 360 | • 1130 |
| • 90 (2x)   | • 80        | • 370 | • 1260 |
| • 130 (2x)  | • 114       | • 390 | • 1300 |
| • 175 (2x)  | • 140       | • 420 | • 1350 |
| • 250 (2x)  | • 160       | • 440 | • 1400 |
| • 310 (2x)  | • 168       | • 475 | • 1550 |
| • 380 (2x)  | • 180       | • 532 | • 1840 |
| • 650 (2x)  | • 195       | • 550 | • 2200 |
| • 750 (2x)  | • 210       | • 560 | • 3000 |
| • 800 (2x)  | • 212       | • 590 | • 3850 |
| • 850 (2x)  | • 225       | • 625 |        |

**Q7 How many of the following types of cattle do you have on your dairy farm? Breeding Age Dairy Bulls (143 Responses)**

- 0 (93x)
- 2 (12x)
- 1 (10x)
- 4 (6x)
- 3 (5x)
- 5 (4x)
- 6 (2x)
- 10 (2x)
- 8
- 12
- 15
- 17
- 18
- 20
- 25
- 27
- 150

**Q9 By how many cows do you expect to expand your herd? Within 1 year (83 Responses)**

- 0 (23x)
- 50 (18x)
- 100 (9x)
- 20 (6x)
- 200 (5x)
- 25 (4x)
- 15 (3x)
- 40 (3x)
- 5 (2x)
- 2000 (2x)
- 30
- 60
- 150
- 160
- 250
- 400
- 500
- 3600

**Q9 By how many cows do you expect to expand your herd? Within 5 years (86 Responses)**

- 200 (13x)
- 100 (10x)
- 500 (9x)
- 50 (7x)
- 150 (7x)
- 250 (7x)
- 300 (6x)
- 400 (4x)
- 4000 (4x)
- 600 (3x)
- 700 (2x)
- 800 (2x)
- 1000 (2x)
- ?
- 0
- 75
- 80
- 120
- 130
- 175
- 450
- 650
- 2,000

**Q10 Which of the following best describes your milking facility? Other, specify (4 Responses)**

- No milking
- Robots
- Rotary & conventional
- We have 60 tie stalls and the rest are free stalls, milking in a tie stall barn

**Q11 Which of the following types of feed storage facilities do you use on your dairy farm? Other small bale storage, specify (5 Responses)**

- Hay storage shed
- Kept on racks unload as needed
- Old sheds good roofs
- Semitrailer
- Shed and barn floor

**Q11 Which of the following types of feed storage facilities do you use on your dairy farm?**

**Large bale storage, specify (76 Responses)**

- Shed (21x)
- Pole Shed (9x)
- Hay shed (4x)
- Barn (3x)
- 3 sided building (2x)
- Haymow (2x)
- Old barn (2x)
- Open front hay shed (2x)
- Open sided shed (2x)
- Stacked in shed (2x)
- 14 foot high shed
- 4X4X8
- 700-100 pound bales
- BARNS SHEDS
- Covered metal building
- Flat barn
- Hay /straw shed open on East side
- Hay mow, shed
- Hay shed - pole building
- Hay shed-open on one side
- Hoop barn
- In commodity shed
- Inside machine shed
- Interior commodity building
- Machine shed, outside
- Machine sheds and up stairs of barn
- Old barns, hay sheds
- Shed, barn
- Storage shed with walls
- Straw bales
- Straw bales & corn fodder bales in shed
- Straw bales- 4 high
- Tarp stacks
- Three sheds
- Under roof
- Unloaded into shed & haymow
- Wrap and stack outside

**Q12 Which of the following manure handling and storage options do you use on your dairy farm? Other, specify (7 Responses)**

- Sand lanes (2x)
- Loose piling
- Pile before hauling
- Plastic lined
- Solid separator with composter
- Solid Separator

**Q20 During the past year approximately how many worker injuries have you had on your farm? (148 Responses)**

- 0 (67x)
- 1 (42x)
- 2 (15x)
- 3 (13x)
- 4 (2x)
- 5 (3x)
- 6 (3x)
- 8
- 9
- 11

**Q20 During the past year approximately how many work-days were lost because of these worker injuries? (146 Responses)**

- 0 (87x)
- 2 (10)
- 3 (9x)
- 4 (5x)
- 1 (4x)
- 30 (3x)
- 60 (3x)
- 1-2 (2x)
- 5 (2x)
- 7 (2x)
- 10 (2x)
- 21 (2x)
- 90 (2x)
- 8
- 9
- 14
- 15
- 20
- 36
- 40
- 75
- 100
- 120
- 170
- 180
- 300

**Q22 How interested are you in the following safety information? Other, specify (8 Responses)**

- 3rd party safety inspection
- Animal Handling - finer points never get enough of this!
- Information in Spanish also
- Material in Spanish
- Safety videos should be in Spanish
- Simple, short skid loader training program, simple LOTO, simple Hazmat
- While we don't have employees, safety is important to our family
- Written requirements

**Q23 What are your preferred sources of farm safety information? Other, Specify (14 Responses)**

- Insurance Companies (5x)
- PDPW (3x)
- Common sense
- Language Links
- Operator Manuals
- PDPW provides most of our higher level education - we also work with our county agent, well available
- PDPW, DBA
- State Lab Hygiene Wisconsin program

**Q24 What is your preferred means of getting farm safety information? (1 Response)**

- In person -- however our agent does go on farm

**Q25 If you implemented a safety training program, in which of the following languages would you need the training materials? Other, specify (1 response)**

- German

**Q26 Are any of the following a serious barrier to: a) implementing a safety training program? b) making desired farm safety improvements? Other, specify (5 Responses)**

- Lack farm specific materials
- Lack of material
- MSDS in Spanish
- Taking the time to do it
- Too many sources of information sometimes conflicting with each other

**Q27 Do you have any additional comments or questions about farm safety and health? (45 Responses)**

**Ideas/Improvements (10 Responses)**

- I believe any help that would be available we would be interested in, one day seminars, but best are dvds and cds as I can use them at the farm and go through .
- I can't get basic booklets from Gemplers or Lab Safety in Spanish. This is important to us! I can't believe they don't have it or carry it. We have meetings and translator, but I still feel unsure about comprehension they get from meetings. There is so much we need yet and we have done all we can to prepare. It is truly an on-going effort. Confined spaces plan was a big hurdle and again, keeping that current and training current and equipment running properly is time consuming. We have no one person on staff that can do this so 2 -3 of us "share" responsibilities. We are trying to make this a part of employee sign up and then do meetings 2-3 times a year to emphasize how important this overall safety program. Keeps YOU our staff, SAFE.
- Just that we need to keep up to standards on safety, since we work in a very dangerous occupation. Sometimes we take for granted what we have. We need to thank God that he keeps us safe on a daily basis.
- Many people are saying many things and sometimes contradicting each other. Would love to have more of a farm safety program similar to a milk inspection, where they come and tell you what you need to correct so farm energy is pointed where needed. Sometimes energy is well intended but is actually being spent on the wrong issues.
- Most farmers want to hire people with experience and a lot of younger kids with out experience get passed by because of no experience. If there would be a training class that these kids could take in high school that would give them a little taste of farming jobs , I think more farmers would hire them if that was possible. Maybe even if an Ag teacher would take on that opportunity to train the younger generation, just an idea.
- My dad taught us all to be safe on the farm by setting a good example and using opportune moments to remind us to be careful. The most common injuries occur due to animal behavior which is uncontrollable. Considering how bad things could be, I think we all do a remarkable job of staying safe. The government does not need to get involved except when it comes to employees, in my opinion.
- Need templates for safety manuals

- We are very concerned about the many small things that "we have always done that way" like ladders in haymows, barrier bumps instead of walls on agitation pits, height and operations for feed pits etc. and OSHA regulations concerning the realities of farm operations.
- We targeted developing a Safety plan for our farm this year. We have assigned one of our family owners as the project leader. Your timing is perfect. In developing programs, please check with Tom Wall, Language Links. He has already put a couple videos together. No need to duplicate these items if they meet the standards.
- We would like to have ideas of how to implement procedures that the employee will be able to understand & take seriously.

### **Appreciation (9 Responses)**

- Excellent and important use of resources!
- Excellent topic and we all need help on this topic
- Safety training is really important and we are thankful that UW River Falls is taking the lead and that dairy farm families will have great access to information due to River Falls' work and UW Extension. This is an excellent role for Extension -- to utilize Extensions local and county infrastructure.
- Thank You for doing this. This is important to our businesses. We just started our safety program but need a lot of help
- Thank You for taking time to ask these questions, hopefully you can help us make our work places safer
- Thanks
- The health & safety are very important to us & our employees
- This is important, but often overlooked area on our farms. Thank you and PDPW for your interest in helping us improve the safety of our most important asset, people.
- Way to go

### **Negative Comments (3 Responses)**

- I can't wait to have more forms and files to fill out and keep soon I will need another person just to develop and manage all of the crap that really comes down to common sense
- Not really interested in this as I feel we are doing a good job already, not because it is unimportant.
- We unfortunately, see the employees take too many shortcuts

### **Challenges (2 Responses)**

- Our two weakest areas: Chemical safety, records, references on hand, and animal handling - moving.
- The written requirements of OSHA would be our biggest hurdle

**Past Experience (2 Responses)**

- We did a Wisconsin program audit, very helpful. Would still like a follow-up visit by them to be sure we are 100% ready for OSHA. He stopped to talk with us but had no appt. and we couldn't meet with him - Dick Lentz. Fellow farmers are asking us for advice. This is very individualized and hard to tell them what they have to do because there is so much to fix, complete and then KEEP UP WITH, just labeling transfer gallon containers has been a hassle to keep labels readable.
- We have begun to start the process and have found that the Ohio State website has a lot of information on it. We also have received a list of areas from The Wisconsin Dairy Business Assn. And from other publications. We are putting a packet together for all employees to review and take a test to verify if they learned anything. We are trying to be proactive on the issue.

**Miscellaneous (19 Responses)**

- No (17x)
- An owner was injured and missed 3 weeks of work but it was not turned into Workmen's Comp
- Common Sense can go a long way!



**Q5 Which of the following best describes your position? (N =152)**

46% Owner                      10% Manager                      43% Both

**Q6 How many of each of the following owners/workers do you have on your dairy farm?**

	Number						
	0-5	6-10	11-15	16-20	21-25	26-30	31+
Owners (N = 152)	96%	3%	1%	0%	0%	0%	0%
Family workers (non owners) (N=137)	94%	4%	1%	0%	0%	0%	1%
Non-family workers (N=150)	21%	30%	17%	13%	6%	5%	9%

**Q7 How many of the following types of cattle do you have on your dairy farm?**

	Number					
	0-150	151-250	251-500	501-1000	1001-2000	2001+
Milking cows (N = 150)	11%	11%	28%	29%	13%	8%
Dry Cows (N = 150)	85%	7%	7%	1%	1%	0%
Heifers (N = 151)	23%	15%	28%	20%	9%	5%
Breeding-age dairy bulls (N = 142)	100%	-	-	-	-	-

**Q8 Do you expect to expand your herd within the next 5 years? (N = 152)**

60% Yes                      40% No

**Q9 By how many cows do you expect to expand your herd?**

	Number					
	0-100	101-300	301-500	501-1000	1001-2000	2001+
Within 1 year (N = 60)	83%	10%	2%	0%	4%	1%
Within 5 years (N = 84)	23%	42%	16%	12%	1%	6%

**Q10 Which of the following best describes your milking facility? ((N = 151)**

85% Conventional parlor  
 2% Rotary parlor  
 7% Flat parlor  
 3% Stanchion/tie stall barn  
 3% Other (please describe) See Appendix B

**Q11 Which of the following types of feed storage facilities do you use on your dairy farm? (Check all that apply) (N = 153)**

- 25% Conventional tower silo
- 29% Oxygen-limiting tower silo
- 42% Silage bags
- 64% Bunker silo
- 39% Silage pile
- 56% Gravity flow bin
- 19% Haymow for small bales
- 64% Commodity shed/barn
- 54% Liquid storage (e.g. for molasses, whey, etc.)
- 3% Other small bale storage (please describe) See Appendix B
- 56% Large bale storage (please describe) See Appendix B

**Q12 Which of the following manure handling and storage options do you use on your dairy farm? (Check all that apply) (N = 153)**

- 90% Outdoor, earthen or concrete manure storage
- 10% Above-ground storage tank
- 44% Reception pit used before pumping to larger storage facility
- 22% Pit beneath slatted floor
- 16% Sand Separator
- 8% Anaerobic digester
- 4% Mechanical composting
- 12% No storage, haul daily
- 5% Other (please describe) See Appendix B

**Q13 Who does the following jobs on your dairy farm? (check all that apply if responsibilities are split)**

	You/Your Employees	Contracted out	Not Applicable
Pumping manure	55%	57%	5%
Hauling manure	78%	56%	54%
Operating forage harvester	54%	52%	1%
Packing silo bunker or pile	72%	27%	14%
Operating large baler (round or square)	27%	53%	22%
Operating a combine	34%	57%	12%
Operating a TMR mixer	99%	1%	1%
Operating a skid-steer loader	100%	1%	0%
Operating tractors or other equipment on public roads	99%	17%	1%
Applying crop protectants	43%	65%	3%
Applying anhydrous ammonia	11%	37%	54%
Applying other fertilizers	52%	66%	3%
Compost management	23%	3%	70%
Anaerobic digester	6%	7%	83%

**Q14 Does your farm have a training program for new workers? (N = 153)**

70% Yes                      30% No

If No Is Selected, Then Skip To Do you carry worker's compensation in...

**Q15 Does your training program for new workers include: (n = 107)**

	Yes	No	Don't Know
Task-focused training (e.g. tractor operations, milking)?	93%	5%	2%
Safety-focused training (e.g. using tractor seat belt, safe milking practices)?	82%	14%	4%
Verbal instruction/training?	99%	1%	0%
Hands-on training by co-workers/mentor?	96%	4%	0%
Hands-on training by supervisor?	87%	12%	1%
Post-training observation by supervisor?	90%	10%	0%

**Q16 Approximately how many hours do you spend training new workers during first 3 months of employment? (N = 106)**

0% Less than 1 hour

42% 1 - 10 hours

37% 11-20 hours

22% 20+ hours

0% Don't Know

**Q17 Do you have a written employee manual? (N = 105)**

50% Yes                      50% No

If No Is Selected, Then Skip To Do you carry worker's compensation in...

**Q18 Does your employee manual include: (N = 52)**

	Yes	No
Information on work procedures	73%	27%
Information on safety procedures	69%	31%

**Q19 Do you carry worker's compensation insurance? (N = 145)**

80% Yes                      20% No

**Q20 During the past year:**

Approximately how many worker injuries have you had on your farm? (N=147)						
Number Claims	0	1	2	3	4	5+
Farms	46%	29%	10%	9%	1%	6%
Approximately how many work-days were lost because of these worker injuries? (N=146)						
Number Days	0	1 - 2	3 - 5	6 - 25	26 - 100	101+
Farms	60%	10%	11%	8%	8%	4%

**Q21 Has Occupational Safety and Health Administration (OSHA) ever inspected your dairy? (N = 151)**

1% Yes                      97% No                      2% Don't Know

**Q22 How interested are you in the following safety information? (N = 148)**

	Interested	Somewhat Interested	Not Interested	Don't Know
How to develop an employee safety program	55%	36%	9%	0%
How to control specific farm hazards	53%	40%	7%	0%
How to organize and use a farm safety committee	35%	41%	21%	2%
Sample safety policies/materials for an employee manual	66%	22%	11%	1%
How to develop a farm inspection guide	52%	40%	7%	1%
Training guides/Lesson plans on safety topics	52%	41%	7%	0%
Safety training videos	56%	35%	9%	0%
Train the trainer programs (someone from your farm receives training on providing safety training to the rest of your farm's employees)	47%	40%	12%	2%
OSHA inspection compliance checklist	59%	33%	7%	1%
Other (please specify)	17%	0%	24%	59%

**Q23 What are your preferred sources of farm safety information (check all that apply)? (N = 148)**

- 64% My County UW-Cooperative Extension Office
- 32% Wisconsin Technical Colleges (e.g. Farm Business and Production Management Program)
- 57% Farm media (magazines, newspapers, radio)
- 63% Internet/Websites
- 15% Purchase materials from a commercial company
- 17% Hire a private safety consultant
- 9% Other (please specify) See Appendix B

**Q24 What is your preferred means of getting farm safety information? (N = 147)**

- 33% Paper copies
- 24% CD/DVD
- 43% Download from the internet
- 1% Other (please specify) See Appendix B

**Q25 If you implemented a safety training program, in which of the following languages would you need the training materials? (Check all that apply) (N = 147)**

100% English

84% Spanish

0% Hmong

0% Russian

1% Other (please specify) See Appendix B

**Q26 Are any of the following a serious barrier to: a) implementing a safety training program? b) making desired farm safety improvements? (N = 145)**

	a) Training Program Barriers		b) Farm Safety Improvement Barriers	
	Yes	No	Yes	No
Lack of time	56%	44%	47%	53%
Lack of money	27%	73%	37%	63%
Lack of needed translation	42%	48%	35%	65%
Lack of knowledge (what to do, how to do it)	72%	28%	66%	34%
Other (please specify) (See Appendix B)	33%	67%	27%	73%

**Q27 Do you have any additional comments or questions about farm safety and health?**  
(See Appendix B)