

Exercises for dairying – Milking cattle

1. What are the main hazards associated with milking cattle?
2. What are the risks associated with these hazards?
 - a. Assess the potential impact of the hazard
 - b. Assess the probability of it occurring
 - c. Assess the level of exposure to the hazard
3. Calculate the risk assessment for each hazard

Scales to be used:

W – Weight/Impact/harm

1,0	Minor	Harm without loss of working time
3,0	Significant	Harm with loss of working time
7,0	Serious	Harm with permanent disabilities
15	Dangerous	A fatal accident /1 person/
40	Catastrophic	A fatal accident /more than 1 person/

P – Probability

0,1	Hard to notice
0,5	Low possible
1,0	Possible in limited cases
3,0	Low probability
6,0	Moderate probability
10	High probability

E - Exposure frequencies

0,5	Too low	Less than 1 hour per month
1,0	Very low	Up to 1 hour per month
2,0	Low	Up to 1 hour per day
3,0	Average	Up to 1/3 of working time
6,0	High enough	Up to ½ of working time
10	High	All of working time

Completed example:

Dairy farming		Workplace evaluation		Duration of exposure: <i>Variable – depends on time of year and task</i>		
Farmer						
Work system component	Risk factor type	Work process description: Milking cattle Activities and tasks	Potential impact	Probability	Exposure	Risk assessment
Work methods	Mechanical	Moving cattle from fields to milking parlour and back to fields, moving along public road, moving through cattle crush and cattle race	7	10	3	210
		Attaching milking machine to cattle	3	10	2	60
	Electrical	Operating electrically powered milking machines	3	3	3	9
	Chemical	Cleaning milking parlour	3	10	2	60
		Cleaning milk storage vessels	3	10	2	60
		Cleaning cattle	3	10	3	90
	Biological	Cleaning milking parlour	7	10	2	140
Cleaning cattle		7	10	3	210	
Clearing slurry		15	10	2	300	
Work environment	Physical factors	Cold (no heating in milking parlour)	1	3	3	9
		Bad weather (moving cattle)	1	3	2	6
		Damp conditions in housing and milking parlour	1	6	2	12
Work tasks and organisation	Psychosocial factors	Time pressure	3	10	3	90
		Repetitive movements	3	10	3	90
		Machine breakdowns				

		Long hours	3	3	2	18
			3	10	10	300
Worker factors		Fatigue	3	6	6	108
		Age	1	3	3	9
		Lack of training	3	6	10	180

Exercises for dairying – Producing silage

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 - b. Assess the probability of it occurring
 - c. Assess the level of exposure to the hazard
3. Calculate the risk assessment for each hazard

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Dairy farming		Workplace evaluation	Duration of exposure: <i>Variable – depends on time of year and task</i>			
Farmer			Evaluation team: Farmer			
Work system component	Risk factor type		Work process description: Harvesting fodder Activities and tasks	Potential impact	Probability	Exposure
Work methods	Mechanical	Attaching grass mower to PTO	7	1	8	56
		Clearing blockages in grass mower	7	1	8	56
		Attaching grass turner to PTO	7	1	8	56
		Attaching and using grass baler	7	1	8	56
		Attaching and using grass collector	7	1	8	56
		Transporting and stacking silage bales	7	1	8	56
		Transporting and compressing silage ¹	7	1	8	56
		Repairing machinery	3	3	2	18
	Electrical	Overhead wires on farm	15	6	2	180
	Chemical	Silage additives	3	1	1	3
	Biological	Cutting grass	3	10	10	300
		Turning grass	3	10	10	300
		Baling grass	3	10	10	300
Compressing grass		7	3	10	210	
Work environment	Physical factors	Working in hilly fields/terrain	7	6	6	252
		Sitting in tractor cab - constrained posture	1	10	10	100

¹ Both baled silage (n plastic) and compressed silage (in a silage pit) is produced on the farm

		Manoeuvring heavy farm machinery	3	10	3	90
		Hot weather	1	6	6	36
Work tasks and organisation	Psychosocial factors	Long working hours – c. 15 hours per day	1	10	10	100
		Repetitive work	1	6	10	60
Worker factors		Fatigue	3	10	6	180
		Level of training	3	10	10	300
		Working with inexperienced workers	3	6	6	108
		Working with older workers	3	6	6	108

Exercises for risk assessment

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3. Calculate the risk assessment for each hazard
4. Propose measures for at least the top 5 risk factors.

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