

STORYBUILDER INFORMATION SHEET

ALL ACCIDENT CONSEQUENCE RATIOS

ACCIDENTS ANALYSED

9142 reported investigated accidents of the Dutch Labour Inspectorate have been analysed. These accidents are distributed across 36 storybuilds (graphical structures in the software StoryBuilder).

For 03 Contact with falling objects not cranes, 03 Contact with falling objects - cranes, and 08.1 Contact with moving parts of machine, only accidents between 2002 to 2003 were analysed.

The rest of the analysed accidents occurred between 1998 and end February 2004.

CONSEQUENCE RATIOS

Some accidents have multiple victims and some have single victims. The tables below shows ratios of the accident consequences first on a victim frequency basis (numbers of victims in each category of death, permanent injury and recoverable injury) and in the second table on an accident frequency basis (number of accidents where there was death, permanent injury and recoverable injury)

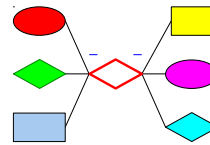
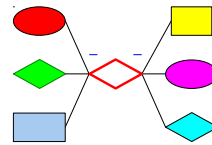


TABLE 1 CONSEQUENCE RATIOS BASED ON VICTIMS (numbers of victims in each category of death, permanent injury and recoverable injury)

Storybuild	Average Deaths per year	Average Permanent injuries per year	Average Recoverable injuries per year	Average Unknown injury type per year	RATIOS		
					Deaths	Permanents	Recoverable
0.1.1.1 Fall from height ladders	4.1	22.7	90.2	53.8	1	5.6	22.2
0.1.1.2 Fall from height scaffold	3.2	7.8	50.1	29.5	1	2.4	15.5
01.1.3 Fall from height - roof/platform/floor	12.3	21.4	79.8	65.8	1	1.7	6.5
01.1.4 Fall from height - hole in the ground	0.3	1.0	7.5	3.2	1	3.0	23.0
01.1.5.1 Fall from height - moveable platform	3.4	5.5	10.9	13.5	1	1.6	3.2
01.1.5.2 Fall from height - non-moving vehicle	1.1	4.9	14.8	12.6	1	4.3	13.0
01.1.5.3 Fall from height - working on height unprotected	1.0	5.7	23.0	17.0	1	5.8	23.7
01.2 Fall on same level	0.5	8.3	31.1	26.6	1	17.0	64.0
01.3 Fall down stairs or ramp	0.3	2.3	11.0	6.0	1	7.0	34.0
02 Struck by moving vehicle	7.5	18.3	30.5	32.8	1	2.5	4.1
03 Contact with falling objects – cranes	5.5	18.5	15.0	11.5	1	3.4	2.7
03 Contact with falling objects NOT cranes	10.0	43.0	70.5	48.5	1	4.3	7.1
04 Contact with flying/ ejected objects	1.5	25.0	14.3	22.4	1	17.1	9.8
05 Hit by rolling/sliding object and person	0.5	4.7	8.3	2.8	1	9.7	17.0
06 Contact with object used/ carried	0.2	16.9	8.8	14.1	1	104.0	54.0
07 Contact with handheld tools	0.0	11.5	12.5	13.9	0	1.0	1.1
08.1 Contact with moving parts of machine	5.0	286.0	53.0	54.5	1	57.2	10.6
08.2 contact with swinging/hanging objects	1.6	11.2	14.6	7.3	1	6.9	9.0
08.3 Trapped between/ against	2.4	25.0	12.3	10.5	1	10.3	5.1
09 Moving into an object	0.0	7.5	5.4	7.6	0	1.0	0.7
10 Buried by bulk mass	0.0	0.3	1.5	1.0	0	1.0	4.5
11 In or on moving vehicle with loss of control	6.0	14.9	35.4	26.9	1	2.5	5.9
12 Contact with electricity	3.1	3.7	14.9	11.2	1	1.2	4.8
13 Contact with extreme hot or cold surfaces or open flame	0.0	0.3	0.8	0.6	0	1.0	2.5
14.1 LoC's Open containments	0.0	4.7	17.5	5.0	0	1.0	3.7



Storybuild	Average Deaths per year	Average Permanent injuries per year	Average Recoverable injuries per year	Average Unknown injury type per year	RATIOS		
					Deaths	Permanents	Recoverable
14.2 Contact with hazardous substance without LOC	0.3	2.3	16.4	3.2	1	7.0	50.5
15 Loss of Containment from normally closed	0.6	9.1	30.8	6.5	1	14.0	47.5
17 Fire	0.5	4.9	19.5	4.9	1	10.0	40.0
20.1 Victim of Human Aggression	0.5	5.7	2.8	2.3	1	11.7	5.7
20.2 Victim of animal behaviour	0.3	1.5	1.6	1.8	1	4.5	5.0
22.1 Contact with hazardous atmosphere in confined space	1.8	0.5	5.0	0.6	1	0.3	2.8
22.2 Contact with hazardous atmosphere through breathing apparatus	0.3	0.0	1.0	0.2	1	0.0	3.0
23 Impact by immersion in liquid	3.4	0.2	0.8	1.3	1	0.0	0.2
24 Too rapid (de)compression	0.0	0.0	0.5	0.0	0	0.0	1.0
25 Extreme muscular exertion	0.0	1.3	2.1	2.8	0	1.0	1.6
27 Explosion	3.1	8.3	16.2	6.0	1	2.7	5.3

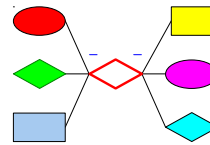
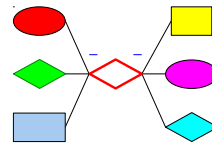


TABLE 2 CONSEQUENCE RATIOS BY ACCIDENT FREQUENCY (number of accidents where there was death, permanent injury and recoverable injury)

Storybuild	Average Deaths per year	Average Permanent injuries per year	Average Recoverable injuries per year	Average Unknown injury type per year	RATIOS		
					Deaths	Permanents	Recoverable
0.1.1.1 Fall from height ladders	4.1	22.7	89.9	53.8	1	5.5	22.2
0.1.1.2 Fall from height scaffold	2.6	7.5	47.2	29.2	1	2.9	18.2
01.1.3 Fall from height - roof/platform/floor	12.3	21.4	78.0	65.4	1	1.7	6.3
01.1.4 Fall from height - hole in the ground	0.3	1.0	7.5	3.2	1	3.0	23.0
01.1.5.1 Fall from height - moveable platform	3.1	5.4	10.5	12.6	1	1.7	3.4
01.1.5.2 Fall from height - non-moving vehicle	1.1	4.9	14.6	12.6	1	4.3	12.9
01.1.5.3 Fall from height - working on height unprotected	1.0	5.7	23.0	16.5	1	5.8	23.7
01.2 Fall on same level	0.5	8.3	31.1	26.6	1	17.0	64.0
01.3 Fall down stairs or ramp	0.3	2.3	11.0	6.0	1	7.0	34.0
02 Struck by moving vehicle	7.5	18.3	30.5	32.6	1	2.5	4.1
03 Contact with falling objects – cranes	5.0	18.5	15.0	11.5	1	3.7	3.0
03 Contact with falling objects NOT cranes	9.0	43.0	69.5	47.5	1	4.8	7.7
04 Contact with flying/ ejected objects	1.5	25.0	13.8	22.2	1	17.1	9.4
05 Hit by rolling/sliding object and person	0.5	4.7	7.9	2.8	1	9.7	16.3
06 Contact with object used/ carried	0.2	16.9	8.8	14.1	1	104.0	54.0
07 Contact with handheld tools	0.0	11.5	12.5	13.9	0	1	1.1
08.1 Contact with moving parts of machine	5.0	286.0	53.0	54.5	1	57.2	10.6
08.2 contact with swinging/hanging objects	1.6	11.2	14.6	7.3	1	6.9	9.0
08.3 Trapped between/ against	2.4	25.0	12.3	10.5	1	10.3	5.1
09 Moving into an object	0.0	7.5	5.4	7.6	0	1	0.7
10 Buried by bulk mass	0.0	0.3	1.5	1.0	0	1	4.5
11 In or on moving vehicle with loss of control	5.7	14.6	34.7	26.6	1	2.6	6.1
12 Contact with electricity	3.1	3.6	13.9	10.5	1	1.2	4.5
13 Contact with extreme hot or cold surfaces or open flame	0.0	0.3	0.8	0.6	0	1	2.5
14.1 LoC's Open containments	0.0	4.7	13.3	5.0	0	1	2.8



Storybuild	Average Deaths per year	Average Permanent injuries per year	Average Recoverable injuries per year	Average Unknown injury type per year	RATIOS		
					Deaths	Permanents	Recoverable
14.2 Contact with hazardous substance without LOC	0.3	2.3	9.4	3.1	1	7.0	29.0
15 Loss of Containment from normally closed	0.5	8.4	22.2	6.0	1	17.3	45.7
17 Fire	0.5	4.9	11.8	4.7	1	10.0	24.3
20.1 Victim of Human Aggression	0.5	5.4	2.6	2.3	1	11.0	5.3
20.2 Victim of animal behaviour	0.3	1.5	1.6	1.8	1	4.5	5.0
22.1 Contact with hazardous atmosphere in confined space	1.6	0.3	2.8	0.6	1	0.2	1.7
22.2 Contact with hazardous atmosphere through breathing apparatus	0.3	0.0	1.0	0.2	1	0	3.0
23 Impact by immersion in liquid	3.2	0.2	0.6	0.6	1	0.1	0.2
24 Too rapid (de)compression	0.0	0.0	0.5	0.0	0	0	1
25 Extreme muscular exertion	0.0	1.3	2.1	2.8	0	1	1.6
27 Explosion	2.4	7.1	10.9	5.4	1	2.9	4.5