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Occupational Injuries and Sick Leave in the Swedish Mining and Mineral Industry 2009

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1. Main Statistics of the Mining and Mineral Industry

All employees (excl. contractors)	2009	2008
Total Number of Occupational Injuries	90	110
Lost Day Injury Frequency Rate, LDIFR	10.0	10.6
(number of occupational injuries per one million		
working hours)		
Number of Days of Sick Leave per Injury	17	18
Number of Fatalities	1	0
Occupational Diseases	36	17
Commuting Accidents	25	25
Number of Days of Sick Leave per Injury	4	1.5
(commuting accidents)		
All employees incl. contractors		
Number of Occupational Injuries	136	157
Lost Day Injury Frequency Rate, LDIFR	13.3	13.7
Contractors		
Total Number of Occupational Injuries	46	57
Lost Day Injury Frequency Rate, LDIFR	39.1	28.1
Number of Fatalities	0	1
Sick Leave		
Total Sick Leave (percentage of regular number of	3.2	3.5
working hours)	3.2	3.3
Short term sick leave (≤ 14 days)	1.7	1.7
Long term sick leave (\geq 14 days)	1.5	1.8
- G	0	1.0

2. Scope of the Statistics

Occupational Injuries

The following mining companies reported statistics on occupational injuries to SveMin: Boliden Mineral AB, LKAB, Zinkgruvan Mining AB, Björkdalsgruvan AB, Dragon Mining (Sweden) AB, Lovisagruvan AB, Nordkalk AB, Cementa AB and SMA Mineral AB..

The statistics on occupational injuries includes all employees on all levels (blue-collar and white-collar staff) of the mining and mineral companies listed above.

The number of occupational injuries and lost day injury frequency rate (LDIFR) for contractors are based on figures from the mining companies, as are the estimated working hours.

Sick Leave

The following mining companies reported statistics on sick leave to SveMin: Boliden Mineral AB, LKAB, Zinkgruvan Mining AB, Björkdalsgruvan AB, Dragon Mining (Sweden) AB, Lovisagruvan AB, Cementa AB, Nordkalk AB and SMA Mineral AB.

The statistics on sick leave include <u>all employees</u>. Contractors are not included.

3. Definitions

Lost Day Case A sudden unforeseen incident leading to personal injury

resulting in at least one day of sick leave.

Lost Day Injury

Frequency Rate, LDIFR

Number of Lost Day Injuries per one million working hours.

Occupational Injury per

1, 000 employees

A frequency measure used in the official Swedish statistics by Statistics Sweden and the Working Environment Authority. (It may, however, be rather difficult to obtain information on the

number of full-time employees.)

Severe Accident Accident resulting in a fatality, disability or at least 30 days sick

leave.

Occupational Diseases Number of occupational diseases reported to the Social

Insurance Agency.

Commuting Accident Traffic accident on way to and/or from work.

Zero Injury Case Accident at work resulting in an injury, but not in absence from

work.

Near Misses Accidents not resulting in any injury, but which could have.

Total Sick Leave Includes all sick leave periods as a percentage (%) of the regular

working hours.

Regular Working Hours Regular working hours consist of working hours according to

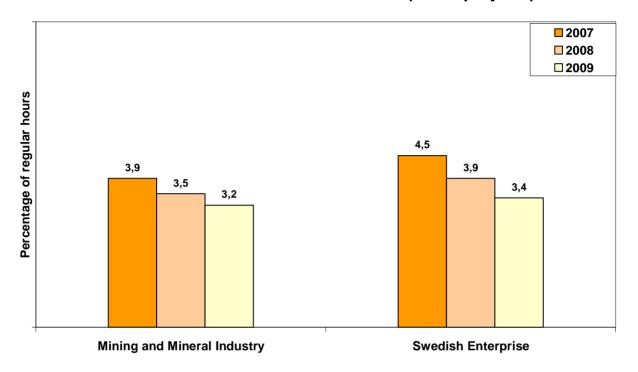
the contract of employment (hours worked + sick leave + leave of absence) *and* vacation. Overtime is not included in the regular

working hours. This definition is also used in the Time

Allocation Survey of the Confederation of Swedish Enterprise.

4. Sick Leave 2007-2009

Total Sick Leave 2007 - 2009 (all employees)



5. Occupational Injuries in the Mining and Mineral Industry 2000-2009

Number of Working Hours

The working hours reported include the working hours of supervisors and blue-collar and white-collar staff. The working hours of contractors are not included in the following tables.

Number of Employees

The number of employees has been calculated to represent the number of full-time, whole-year employees.

The figures in the tables do not include contractors. For contractors see chapter 10.

 $\underline{\text{Total 2000-2009}}$. Employees, working hours, lost day injuries, frequency, days of sick leave.

				Lost day	Lost day		
			Number of	injury	injuries per	Number of	Days of
	Number of	0	lost day	frequency	1,000	days of sick	sick leave
Year	employees	hours	injuries	rate	employees	leave	per injury
2000	4 856	7 467 458	128	17.1	26	3483	27.2
2001	4 869	8 007 360	152	19.0	31	3 289	21.6
2002	4 980	7 521 996	162	21.5	33	4 289	26.5
2003	4 753	7 598 857	126	16.6	27	2 859	22.7
2004	4 933	7 888 132	89	11.3	18	1 629	18.3
2005	5 156	8 183 606	113	13,8	21	1 577	14,0
2006	5 482	8 836 215	126	14.3	23	2 359	18.9
2007	5 771	9 085 587	117	12.9	20	2 025	17.3
2008	5 351	9 402 873	100	10.6	19	1 854	18.5
2009	6 264	8 974 503	90	10.0	14	1 483	16.7

<u>Underground 2000-2009.</u> Working hours, lost day injuries, frequency, days of sick leave.

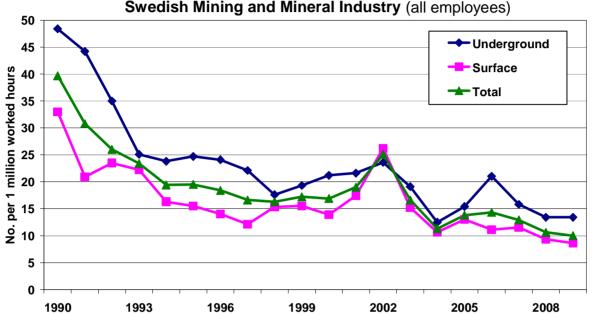
		Number of	Lost day	Number of	Days of	Number	
	Working	lost day	injury	days of sick	sick leave	of	Fatality
Year	hours	injuries	frequency	leave	per injury	fatalities	frequency
2000	3 306 489	70	21.2	2 178	31.1	0	0.00
2001	3 008 702	65	21.6	1 386	21.0	0	0.00
2002	2 801 878	62	22.1	2 283	36.8	1	0.36
2003	2 726 160	52	19.1	1 036	19.9	0	0.00
2004	2 710 190	34	12.5	916	26.9	0	0.00
2005	2 735 940	42	15,4	631	15,0	0	0,00
2006	2 815 077	59	21.0	1 149	19.5	1	0.4
2007	2 910 032	46	15.8	740	16.1	0	0
2008	2 049 076	41	13.4	848	20.7	0	0
2009	2 684 660	36	13.4	596	16.6	0	0

Surface 2000-2009. Working hours, lost day injuries, frequency, days of sick leave.

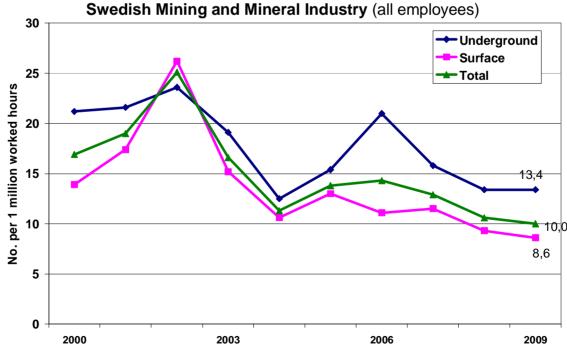
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		Number of	Lost day	Number of	Days of sick	Number	
	Working	lost day	injury	days of sick	leave per	of	Fatality
Year	hours	injuries	frequency	leave	injury	fatalities	frequency
2000	4 160 969	58	13.9	1 305	22.5	0	0
2001	4 998 657	87	17.4	1 903	21.9	0	0
2002	4 720 118	100	21.2	2 006	20.1	0	0
2003	4 872 697	74	15.2	1 823	24.6	0	0
2004	5 177 942	55	10.6	713	13.0	0	0
2005	5 447 666	71	13,0	946	13,3	0	0
2006	6 021 138	67	11.0	1 210	18.1	0	0
2007	6 175 565	71	11.5	1 285	18.1	0	0
2008	6 353 797	59	9.3	1 006	17.1	0	0
2009	6 289 843	54	8.6	887	16.7	1	0.16

Lost Day Injury Frequency Rate

Occupational Accidents Lost Day Injury Frequency Rate 1990-2009 Swedish Mining and Mineral Industry (all employees)

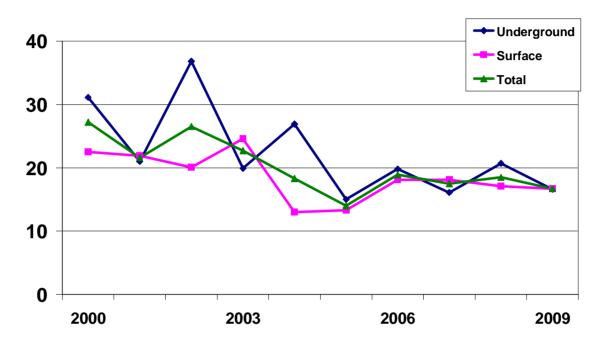


Occupational Accidents
Lost Day Injury Frequency Rate 1990-2009
edish Mining and Mineral Industry (all employees



Days of Sick Leave per Injury

Days of Sick Leave per Injury 2000-2009 (all employees)



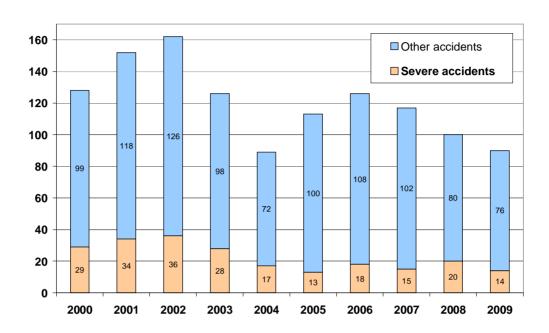
6. Occupational Injuries – Severe Accidents

Severe accident = accident resulting in a fatality, disability or at least 30 days sick leave.

Severe Accidents

	Severe accidents compared to the total number of accidents 2000–2009										
	Total Lost day cases	Severe accidents		Underground Lost day cases	Surface Lost day cases						
2000	128	29	22.7	11	18						
2001	152	34	22.4	12	22						
2002	162	36	22.2	20	16						
2003	126	28	22.2	9	19						
2004	89	17	19.1	10	7						
2005	113	13	11,5	8	5						
2006	126	18	14.3	10	8						
2007	117	15	12.8	5	10						
2008	100	20	20.0	8	12						
2009	90	14	15.6	7	7						





Type of activities during which severe occupational injuries occur, 2005-2009.

Type of activity/injury	No. of Accidents					
	2009	2008	2007	2006	2005	
Scaling	0	0	1	1	1	
Falling rock	0	2	1	0	1	
Walking, jumping, sliding/slipping	1	7	8	4	3	
Service and maintenance	6	10	3	3	2	
Traffic	1	1	1	2	0	
Blasting gas	0	0	0	0	0	
Squeeze injuries	4	0	0	2	2	
Miscellaneous	1	0	1	6	4	
Total	13	20	15	18	13	

Fatalities

The Swedish mining industry has had few occupational accidents with fatal outcome during the last 15 years.

The figures below do not include contractors. For contractor, see chapter 10.

Number of fatalities 2000-2009

The fatality frequency rate is the number of fatalities per one million working hours.

Year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
No.	0	0	1	0	0	0	1	1	0	1

7. Zero Injury Cases and Near Misses

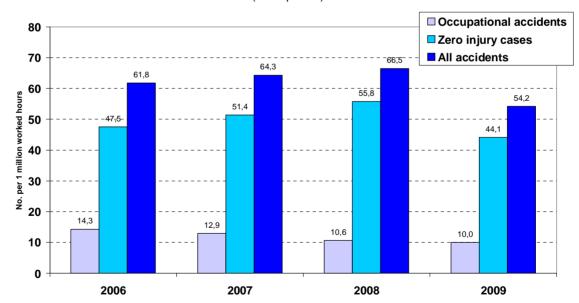
The development of working environment issues can be best followed, if <u>all</u> accidents and near misses are recorded and investigated. By gaining knowledge from zero injury cases and near misses, it becomes possible to engage in preventive actions, which results in an improved working environment.

These are the statistics for 2009:

	Number	Frequency
Occupational accidents (lost day cases)	90	10.0
Zero injury cases	396	44.1
All accidents	486	54.2
Near misses	2 241	249.7

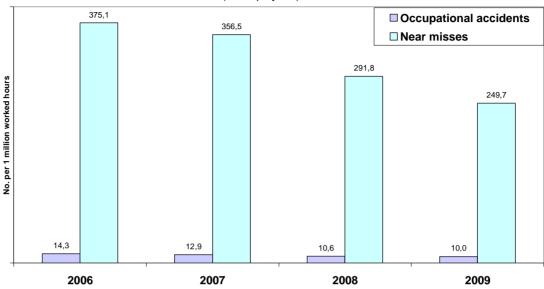
Comparison Frequency Rates 2006-2009

(all emploees)



Comparison Frequency Rates OCCUPATIONAL ACCIDENTS AND NEAR MISSES 2006-2009

(all employees)



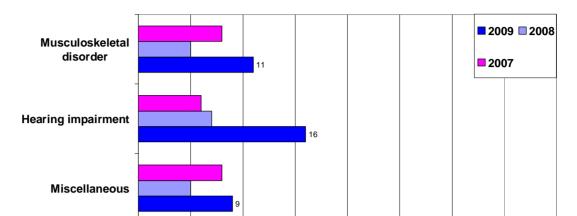
8. Occupational Diseases

The table below shows the number of occupational diseases reported to the Social Insurance Agency.

	2009	2008	2007	2006
Musculoskeletal disorder	11	5	6	22
Hearing impairment	16	7	8	3
Miscellaneous	9	5	8	10
TOTAL	36	17	22	35

Frequency rate for 2009: 5.7 occupational diseases per 1,000 employees. Frequency rate for 2008: 3.2 occupational diseases per 1,000 employees. Frequency rate for 2007: 3.9 occupational diseases per 1,000 employees.

40



15

20

25

30

35

OCCUPATIONAL DISEASES 2007-2009

9. Commuting Accidents

TOTAL

0

5

Commuting accidents are traffic accidents occurring on the way to and from work. As a consequence, these accidents do not directly involve work and work assignments. Nevertheless, commuting accidents are included in the social insurance system and entitle to financial compensation, etc.

10

2009	25 commuting accidents	4 days of absence from work on average
2008	25 commuting accidents	1,5 days of absence from work on average
2007	30 commuting accidents	6 days of absence from work on average

10. Accidents of Contractors Working for Mining Companies

Accidents and near misses are not always reported by contractors, or in varying degrees, for the mining and mineral companies. However, the cooperation between companies and contractors regarding this matter improves every year. The increase of number of accidents and near misses as shown in the table below does not necessary mean that the actual number has increased; it is likely that the contractors are reporting more.

Number of	2009	2008	2007	2006
Lost day cases	46	57	52	37
Fatalities	0	1	1	0

Estimated working hours for contractors working for mining companies:

2009	1 125 948
2008	2 026 000