



SHIFT Accident Statistics

2014 Reporting Year

Headline News 2014

<u>SHIFT Member data reported to CMF</u>	2014	2013	2012	2011	2010
Number of companies reporting (total) so far is	76	72	64	33	36
Giving a total number of employees covered as	9947	9595	8776	4387	4117
Total Number of Accidents Reported to SHIFT is	2376	2238	2270	1367	1323
Of which are RIDDOR reportable being	128	171	169	85	94
Giving an accident rate per 100 employees of	24	23	26	31	32
and a RIDDOR rate per 100,000 employees of	1287	1782	1926	1938	2283
Number of ferrous companies reporting so far is	40	42	38		
Number of non ferrous companies reporting so far is	36	30	26		
Number of small companies reporting data is	27	24	21		
Number of medium companies reporting data is	28	28	25		
Number of large companies reporting data is	21	20	18		
Number of sand casting foundries reporting data is	52	51	47		
Number of die casting foundries reporting data is	18	15	13		
Number of investment casting foundries reporting data is	6	6	4		
Number of near-misses reported so far is	744	293	490		
Number of members reporting near-misses is	29	24	18		
Number of lost days due to work related injury reported so far is	3487.3	4342	2894		
Number of members reporting work related injury lost days is	60	52	33		
Number of lost days due to work related ill-health reported so far is	42	518.8	219.5		
Number of members reporting work related ill-health lost days is	6	6	3		
Number of lost days due to non-work work related injury or ill-health reported so far is	15124	14593	13272		
Number of members reporting lost days is	41	30	23		
Number of new reportees to SHIFT is	10	11	23		
Number of returning reportees to SHIFT is	2	4	10		

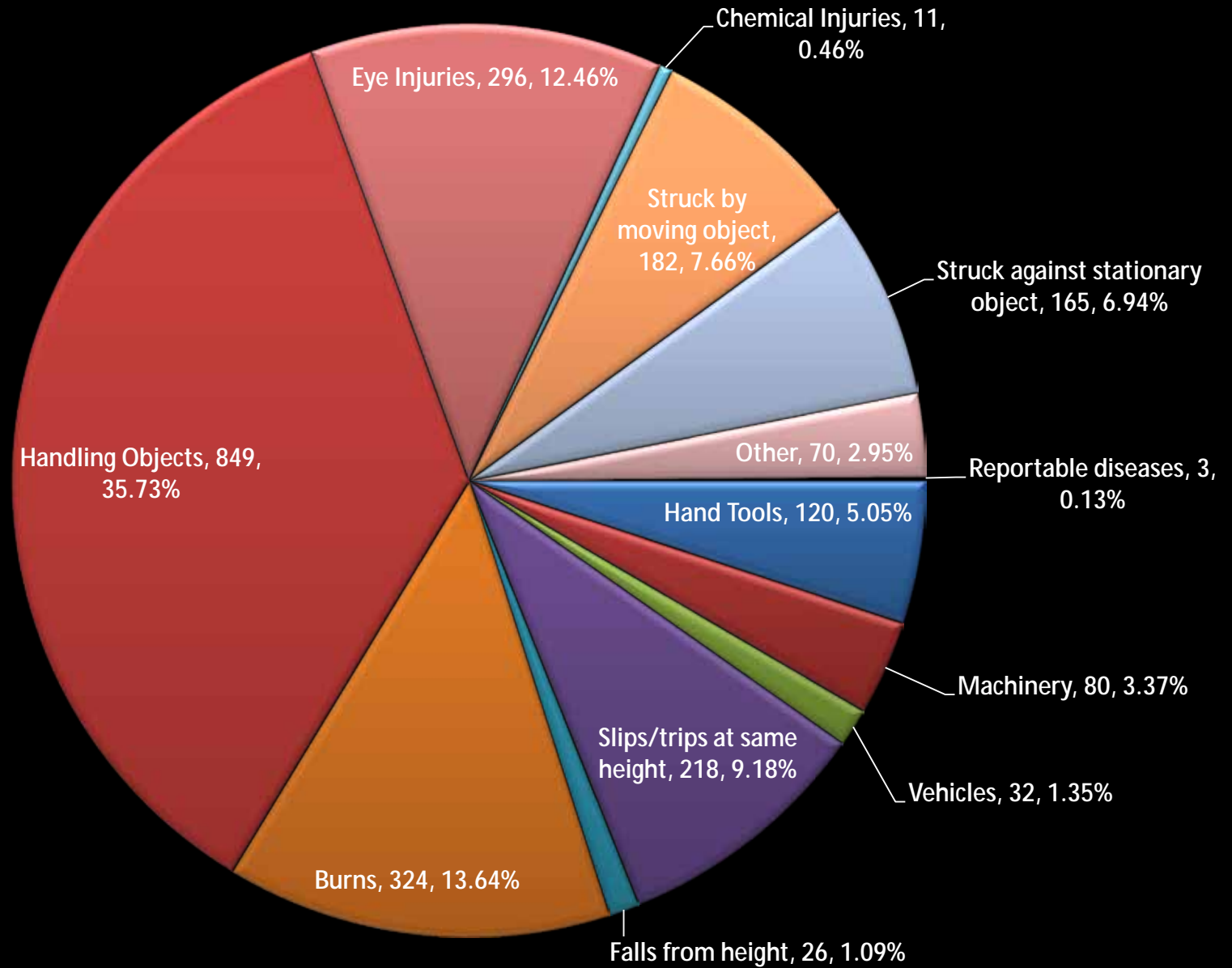
Reporting History (Last 4 years)

Date	Reporting Year	Number of Companies	Employees Covered
Oct 2012	2011	33 (includes 2 new entrants)	4387
Oct 2013	2012	64 (includes 23 new and 10 returning entrants)	8776
April 2014 (reporting window reset to close end of March each following year)	2013	72 (includes 11 new and 4 returning entrants)	9595
April 2015	2014	76 (includes 10 new and 2 returning entrants)	9947

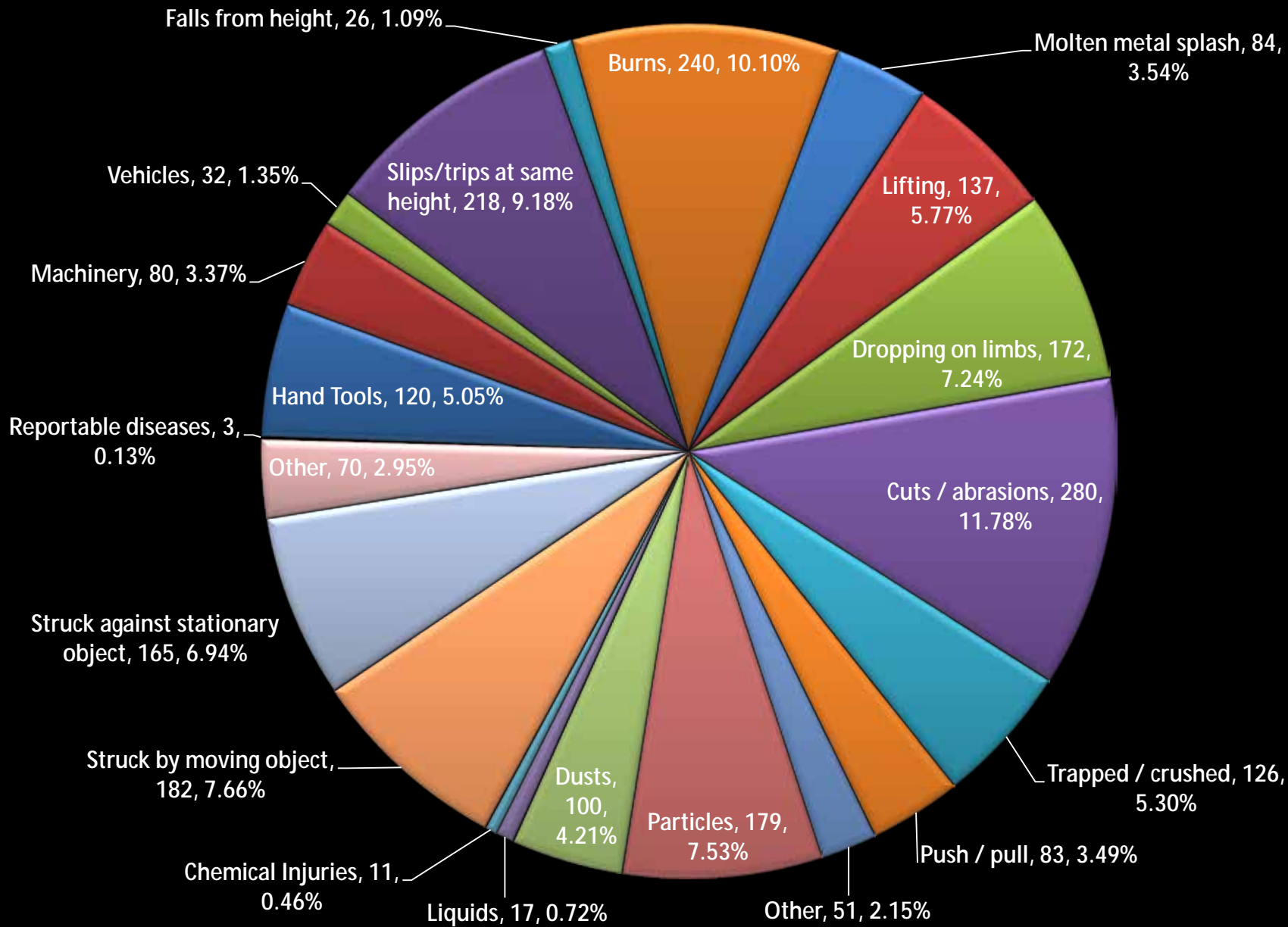
Phase II Reporting History (2012 on)

Key Headline Data	2014	Change against 2013	2013	2012
Companies reporting	76	+ 4	72	64
Employees covered	9947	+ 352	9595	8776
Fatal Injuries	0	0	0	0
Major Injuries	18	+ 1	17	30
Over 3 Day injuries (removed from RIDDOR in Dec 2013)	NA	NA	38	139
Over 7 Day injuries	109	- 7	116	
Other accidents	2249	+ 182	2067	2101
Total	2376	+ 138	2238	2270
Accident rate / 100 employees	24	+ 1	23	26
RIDDOR rate / 100K employees	1287	- 99 (against adjusted figure)	1386 (adjusted to remove >3 day injuries) 1782 including >3 day	1926

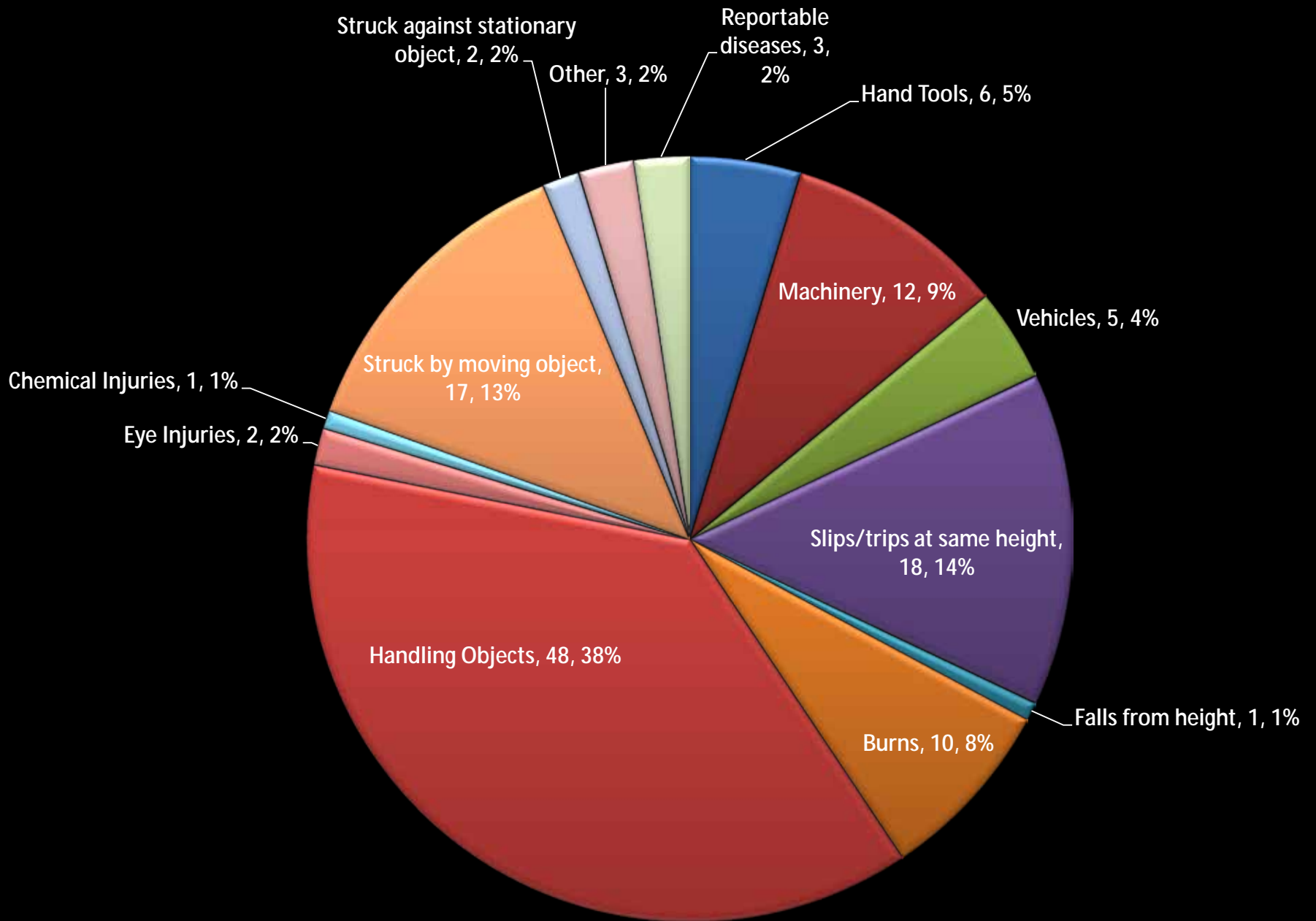
2014 Total Accident Breakdown - Macro



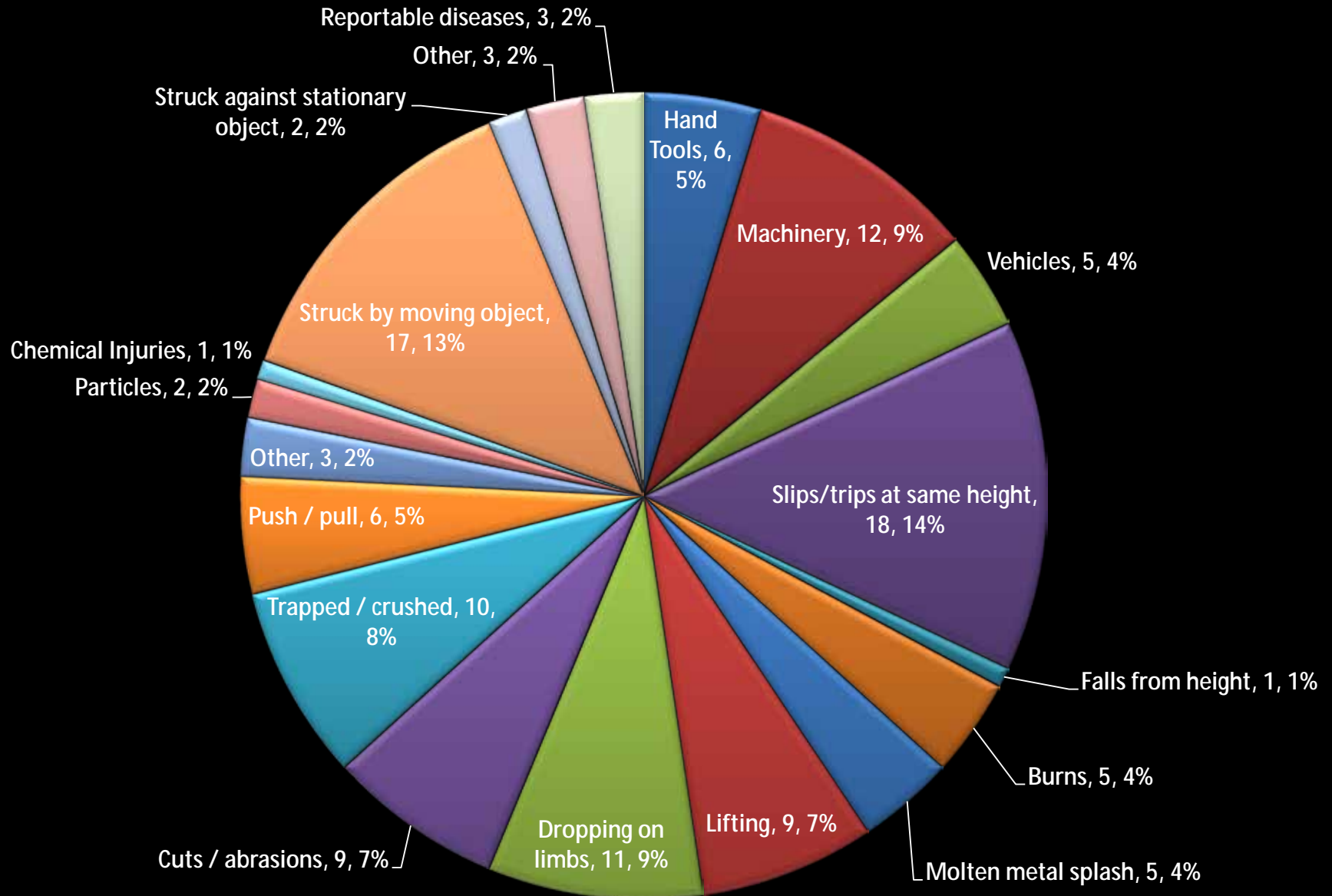
2014 Total Accident Breakdown - Micro



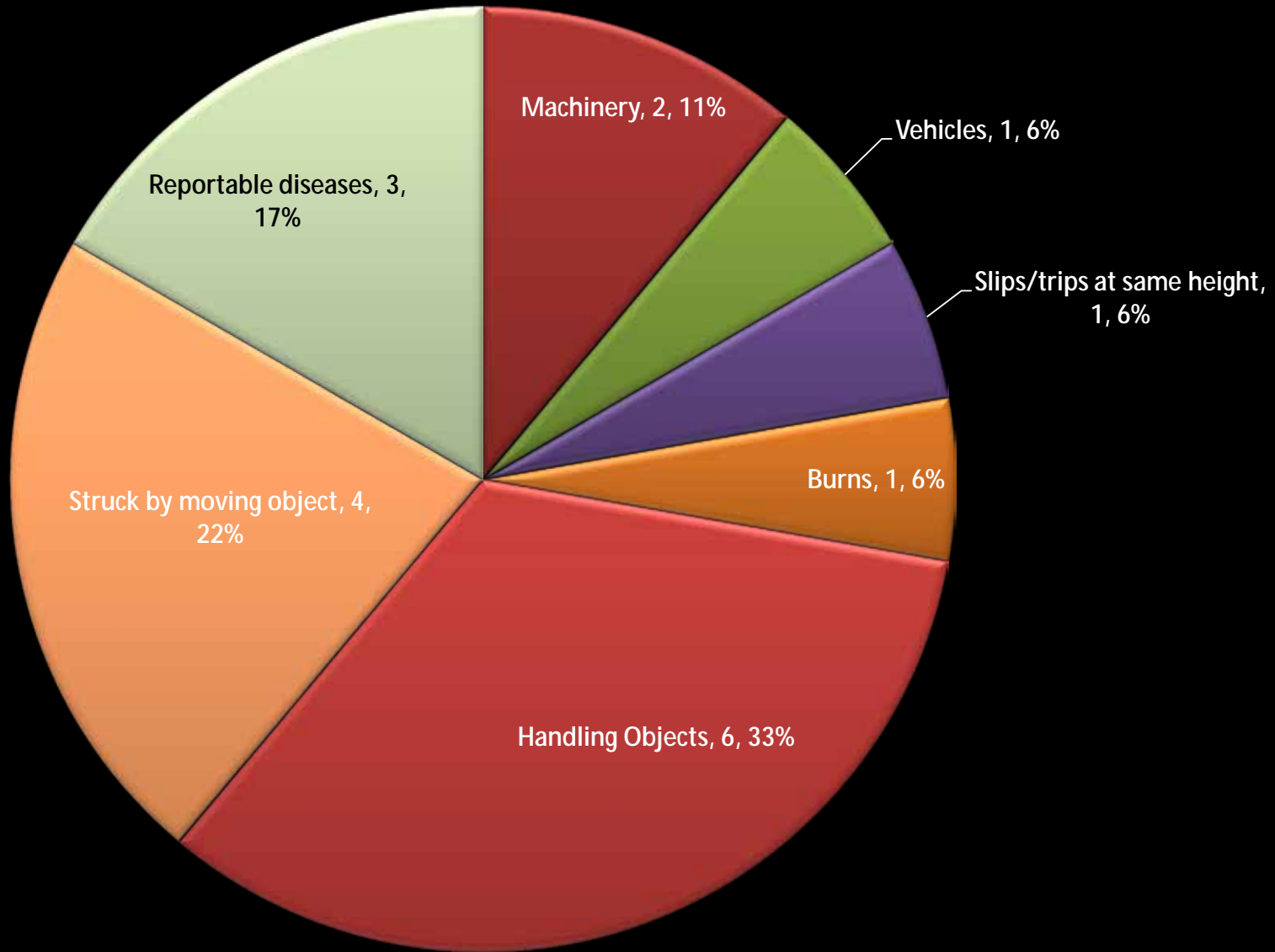
2014 Total RIDDOR Reportable Accidents - Macro



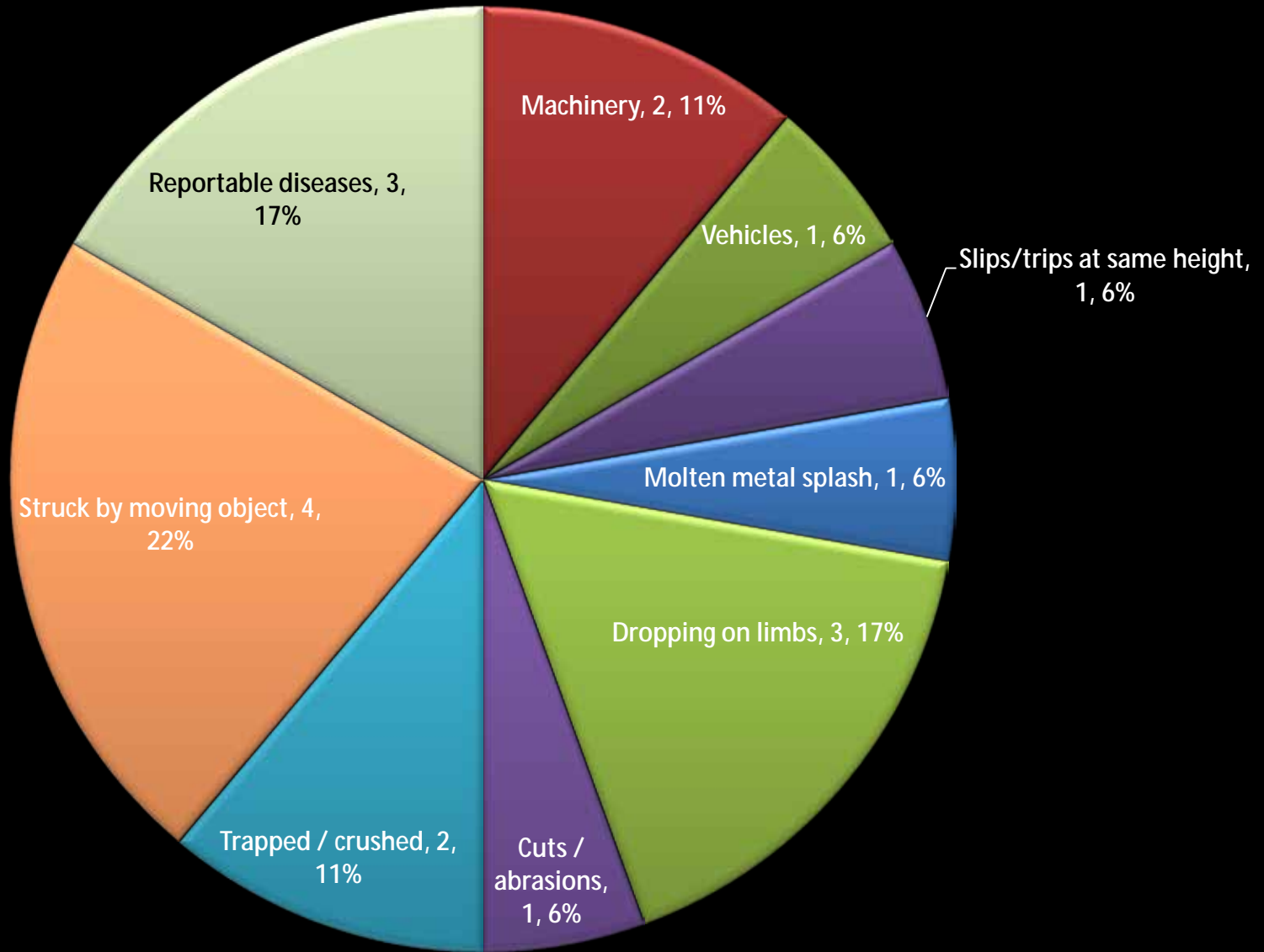
2014 Total RIDDOR Reportable Accidents - Micro



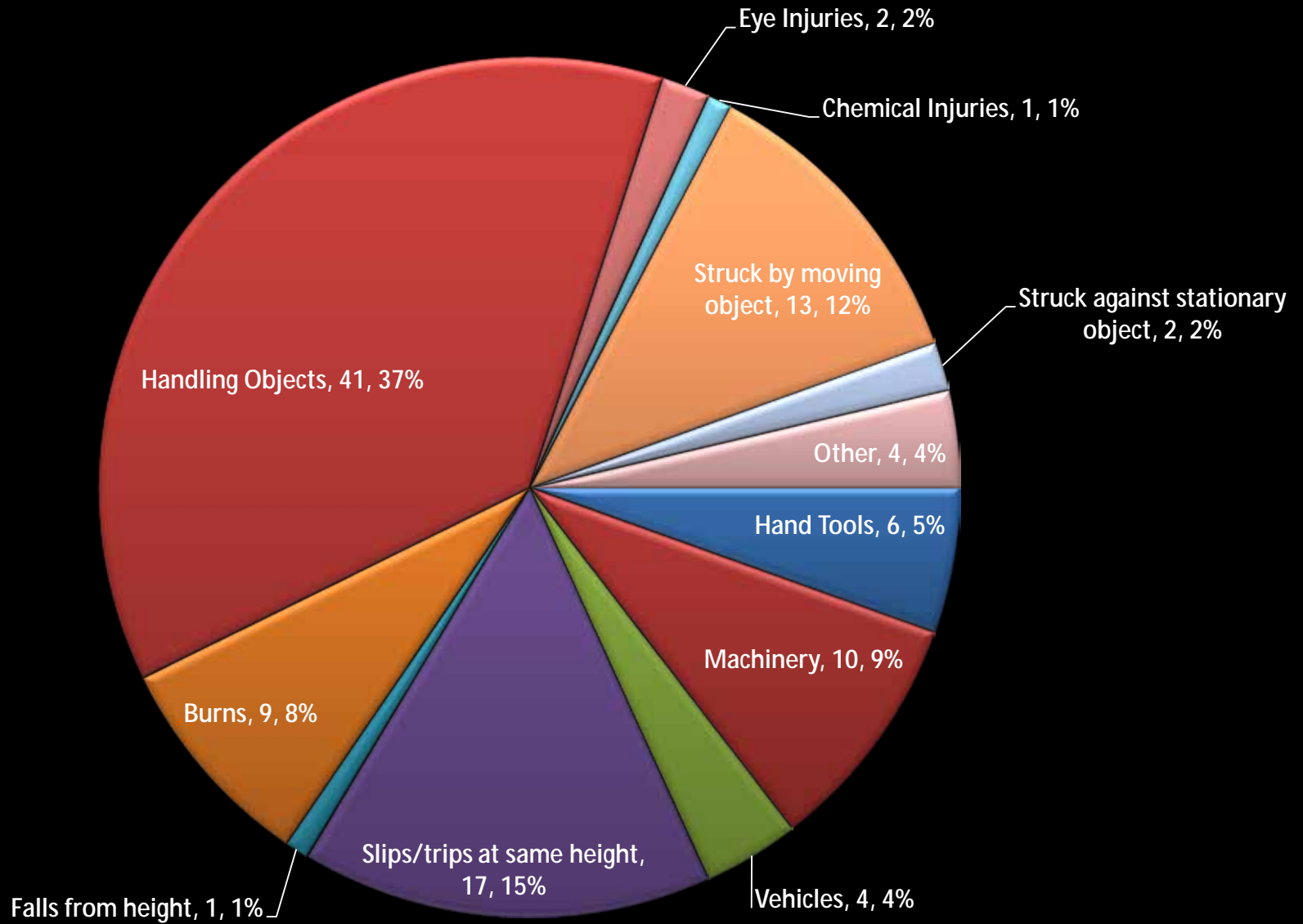
2014 Major Reportable Accidents - Macro



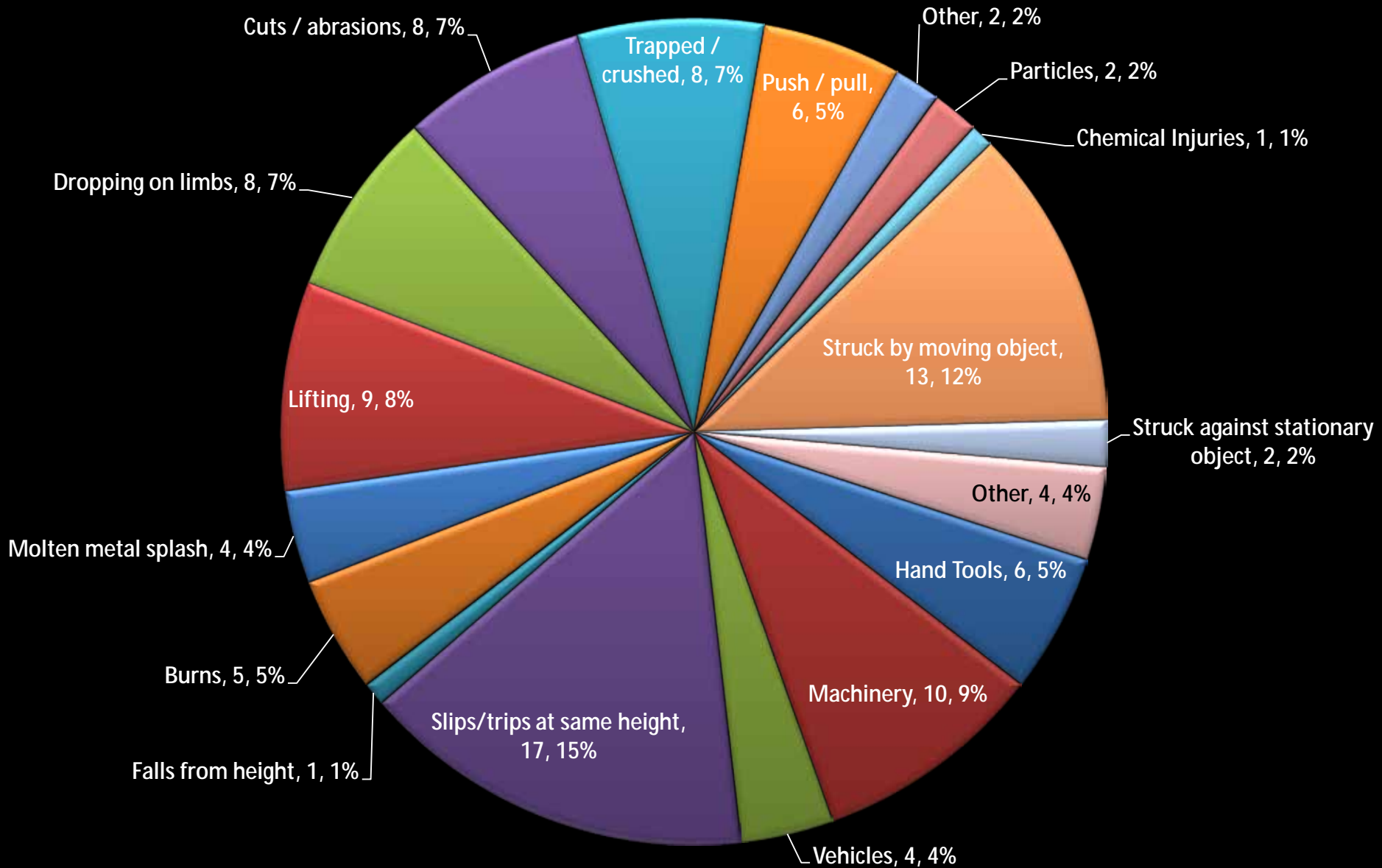
2014 Major Reportable Accidents - Micro



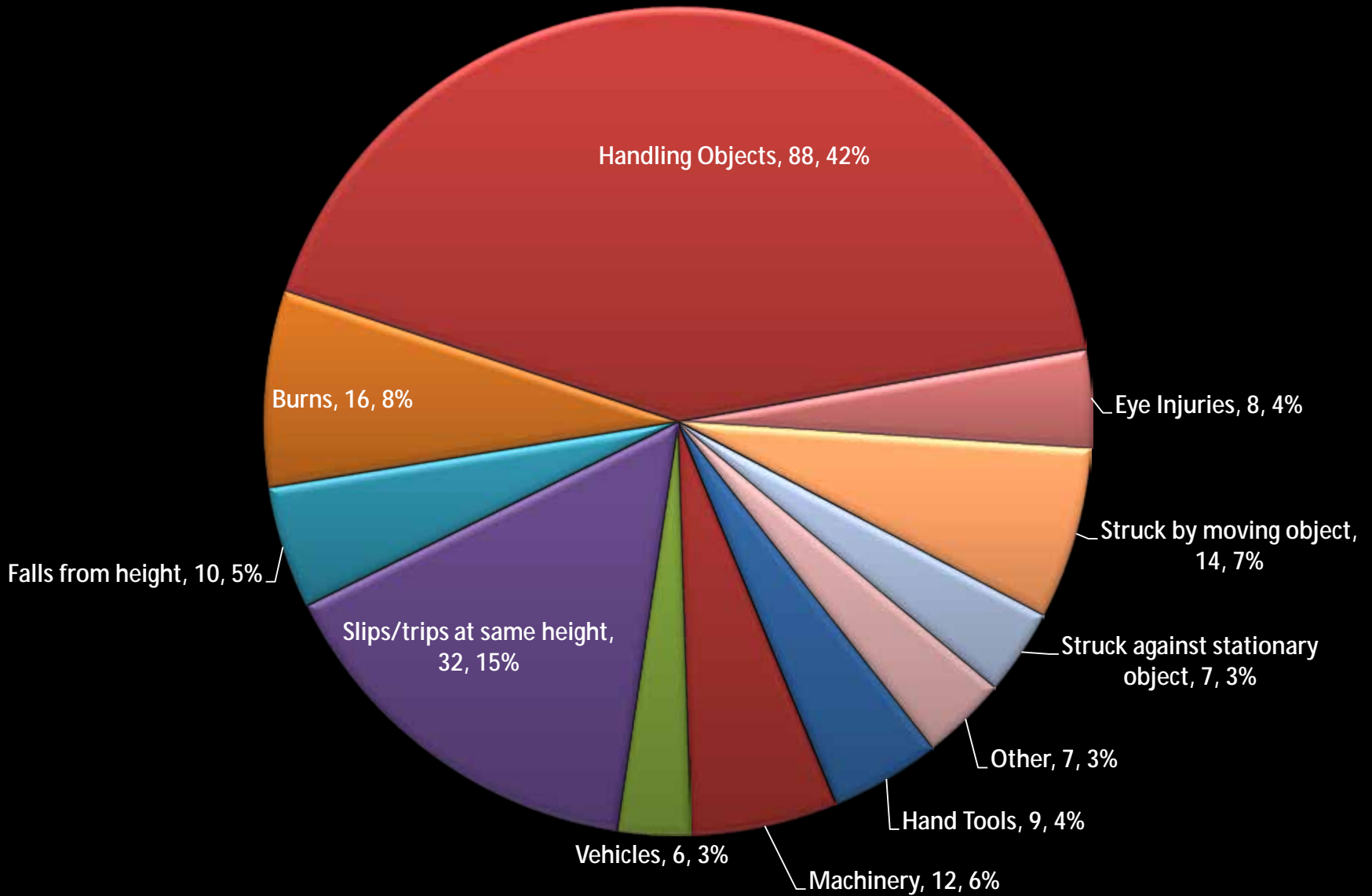
2014 Over 7 Day Accidents - Macro



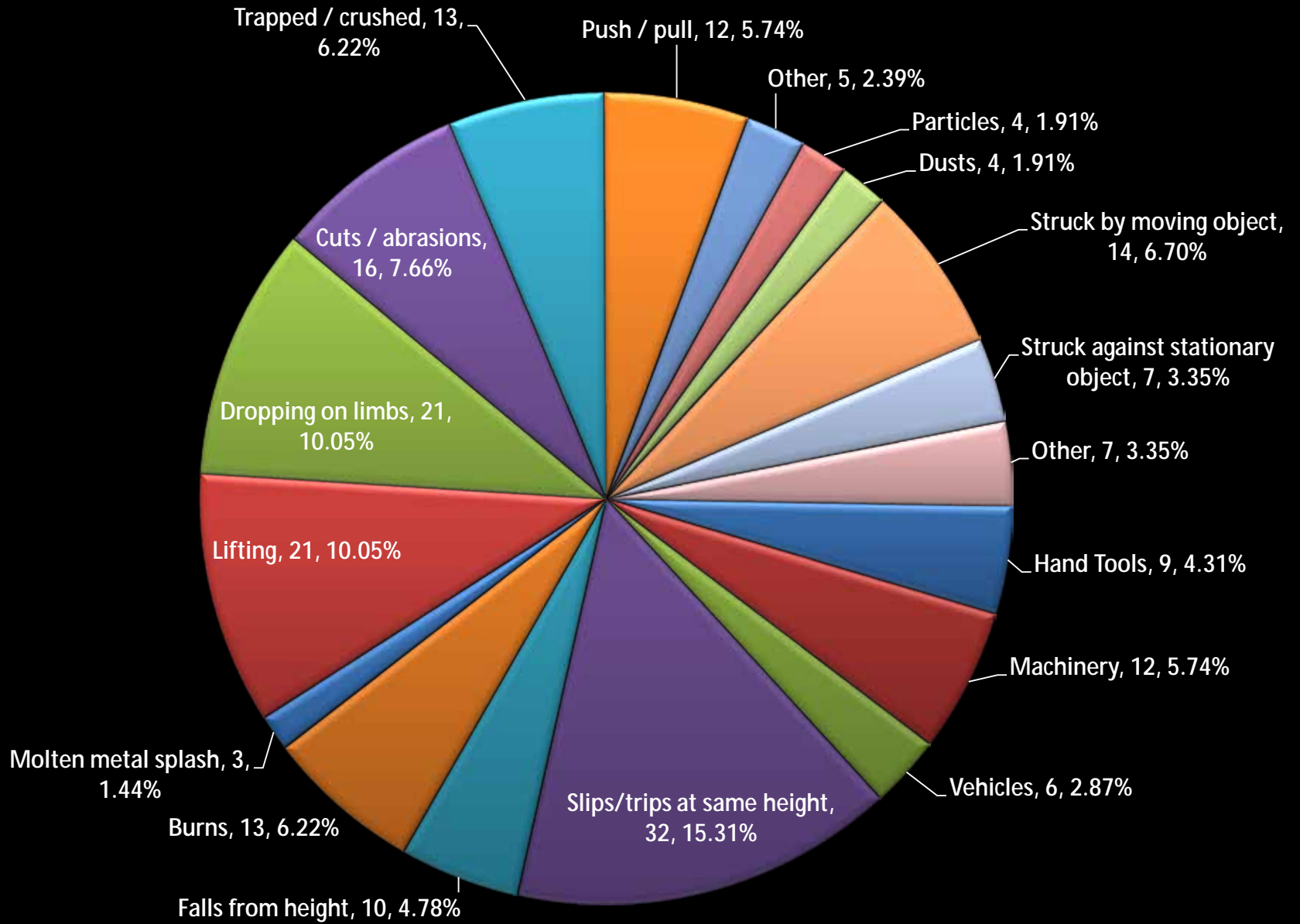
2014 Over 7 Day Accidents - Micro



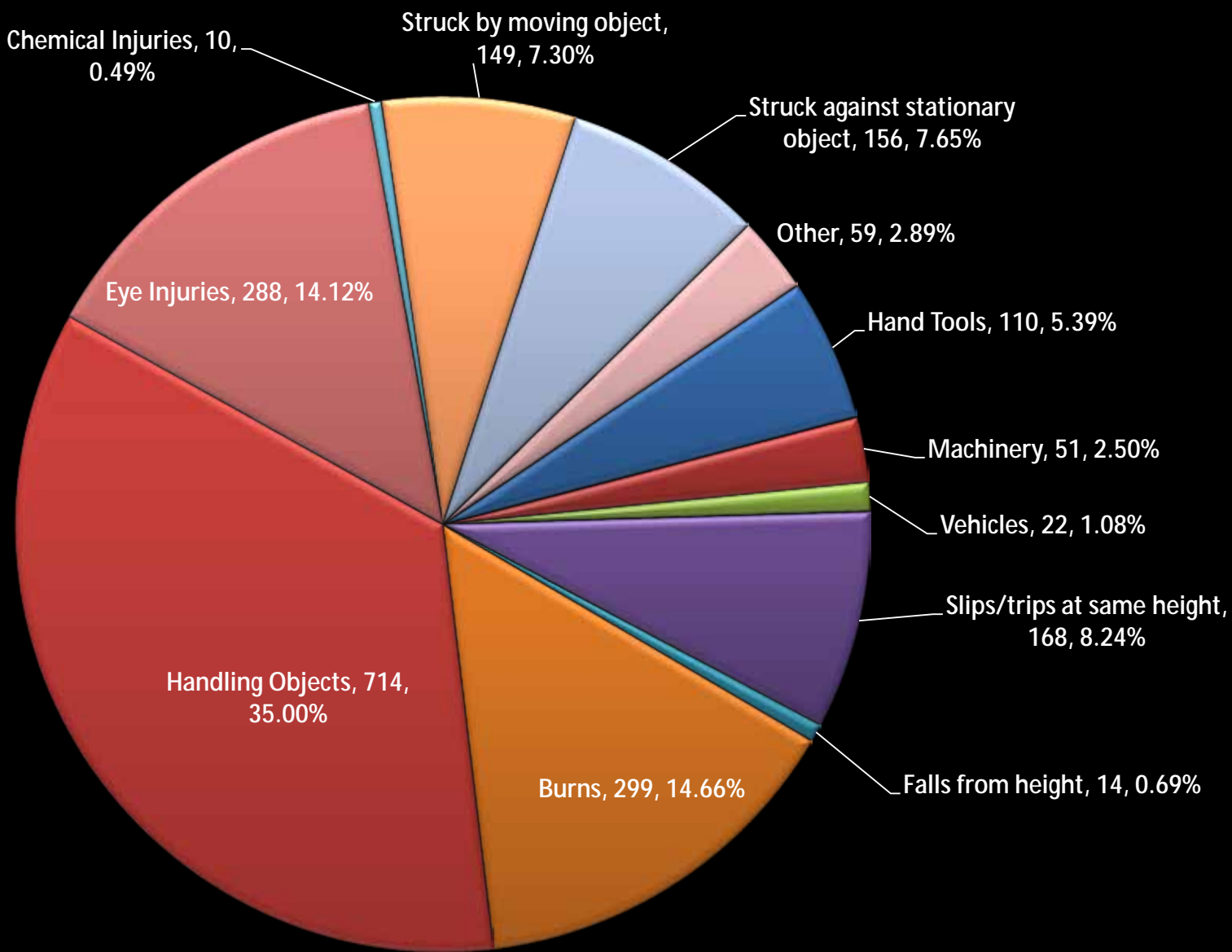
2014 Lost Time Accidents - Macro



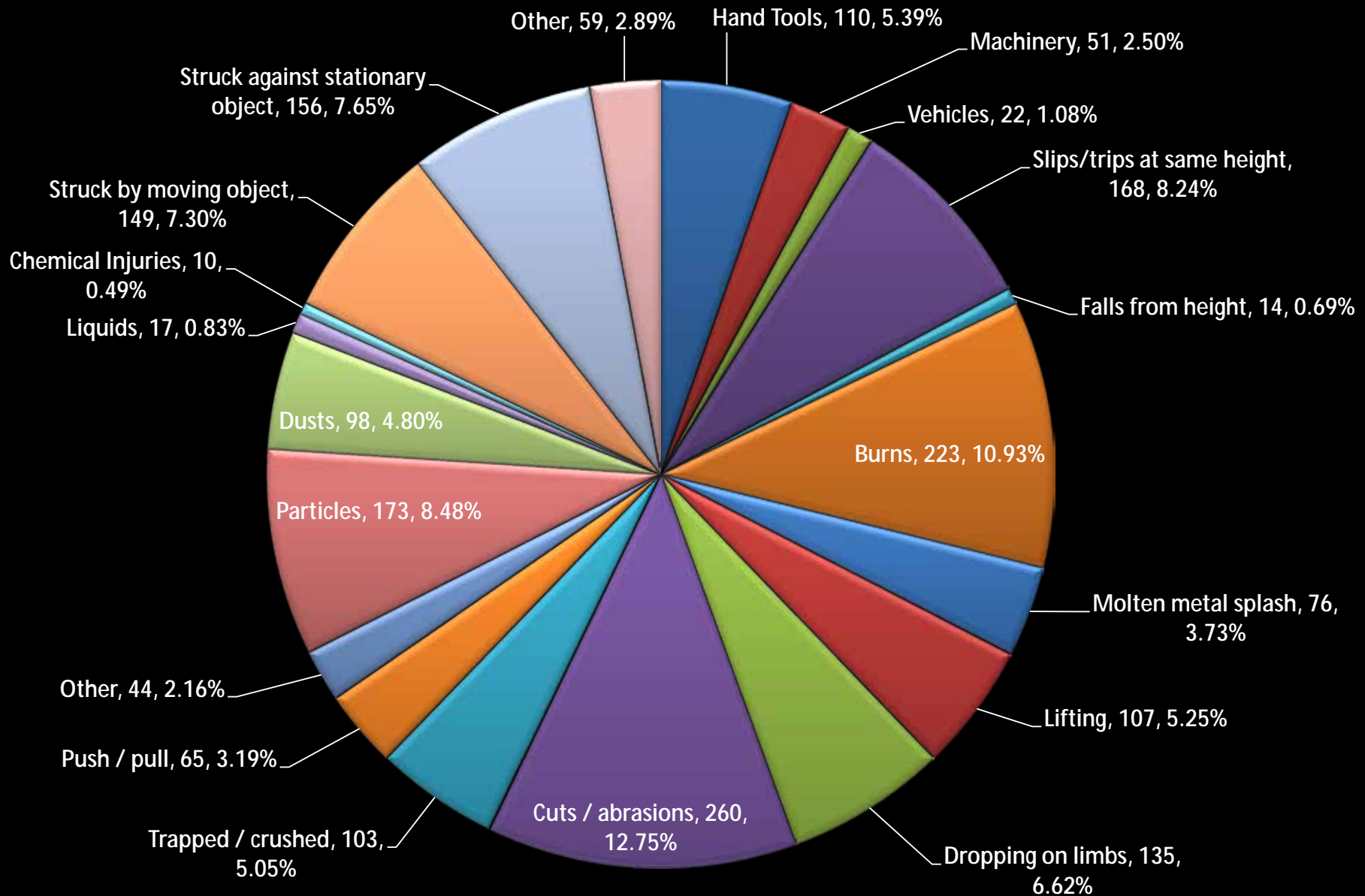
2014 Lost Time Accidents - Micro



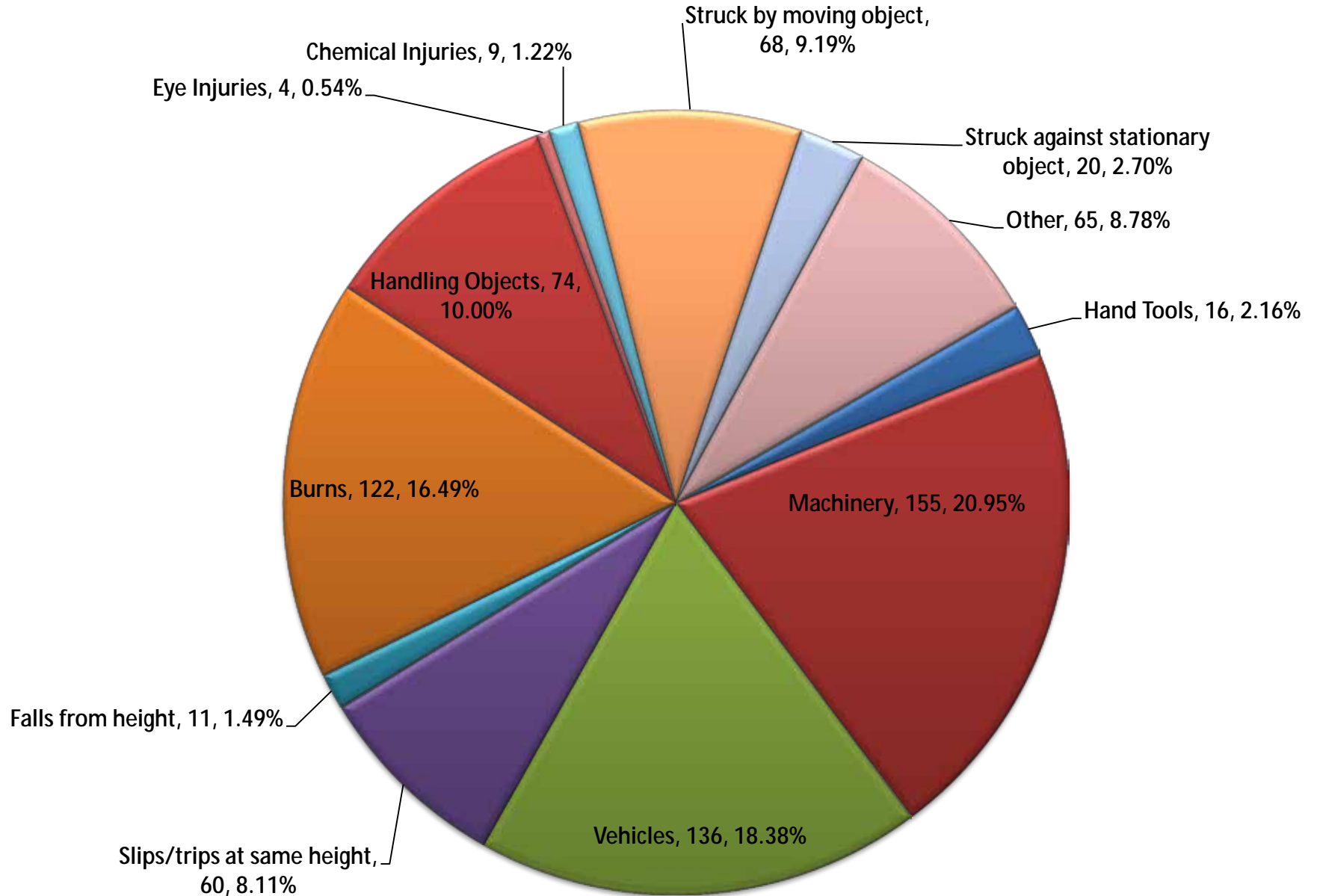
2014 First Aid Only Accidents - Macro



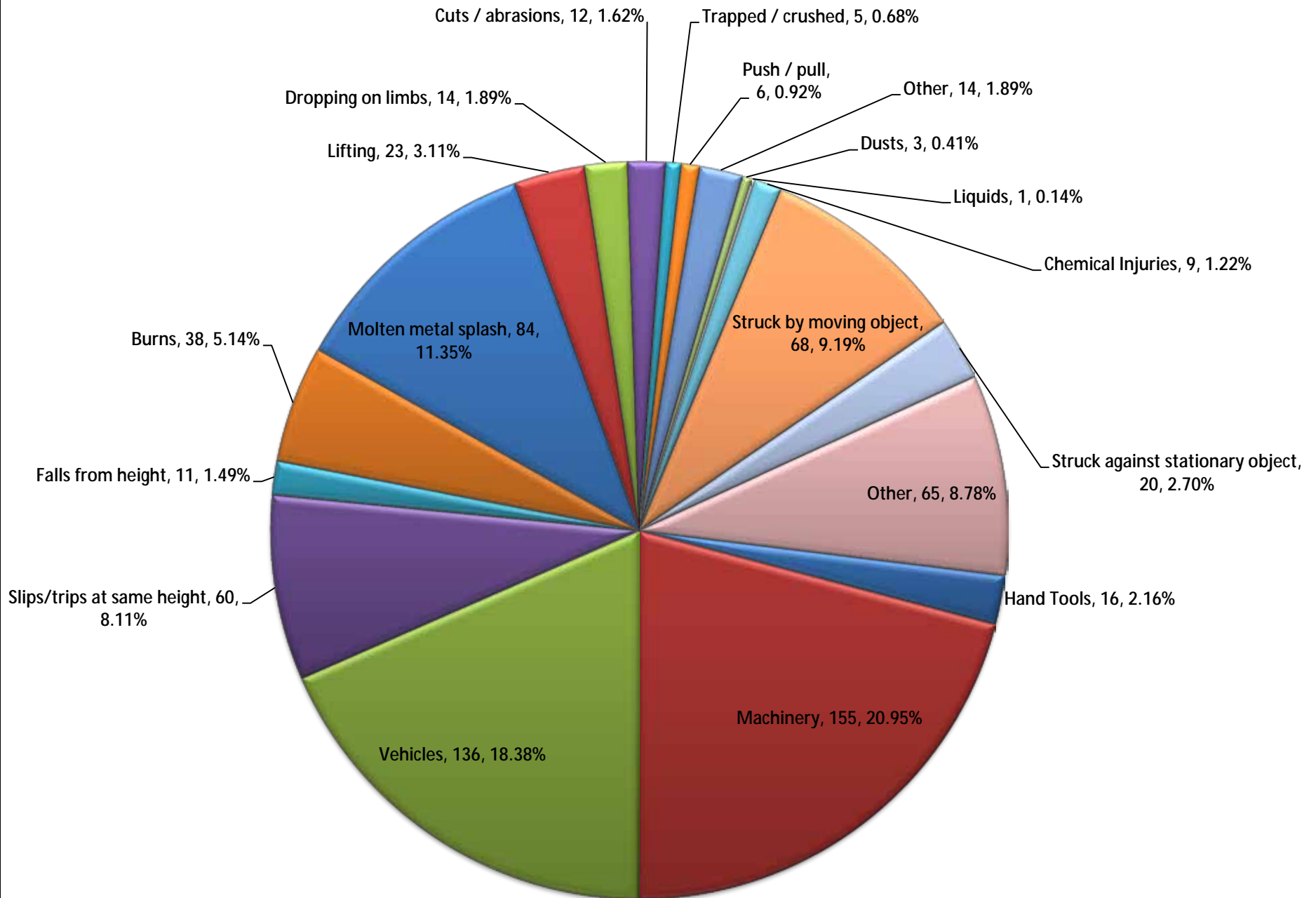
2014 First Aid Only Accidents - Micro



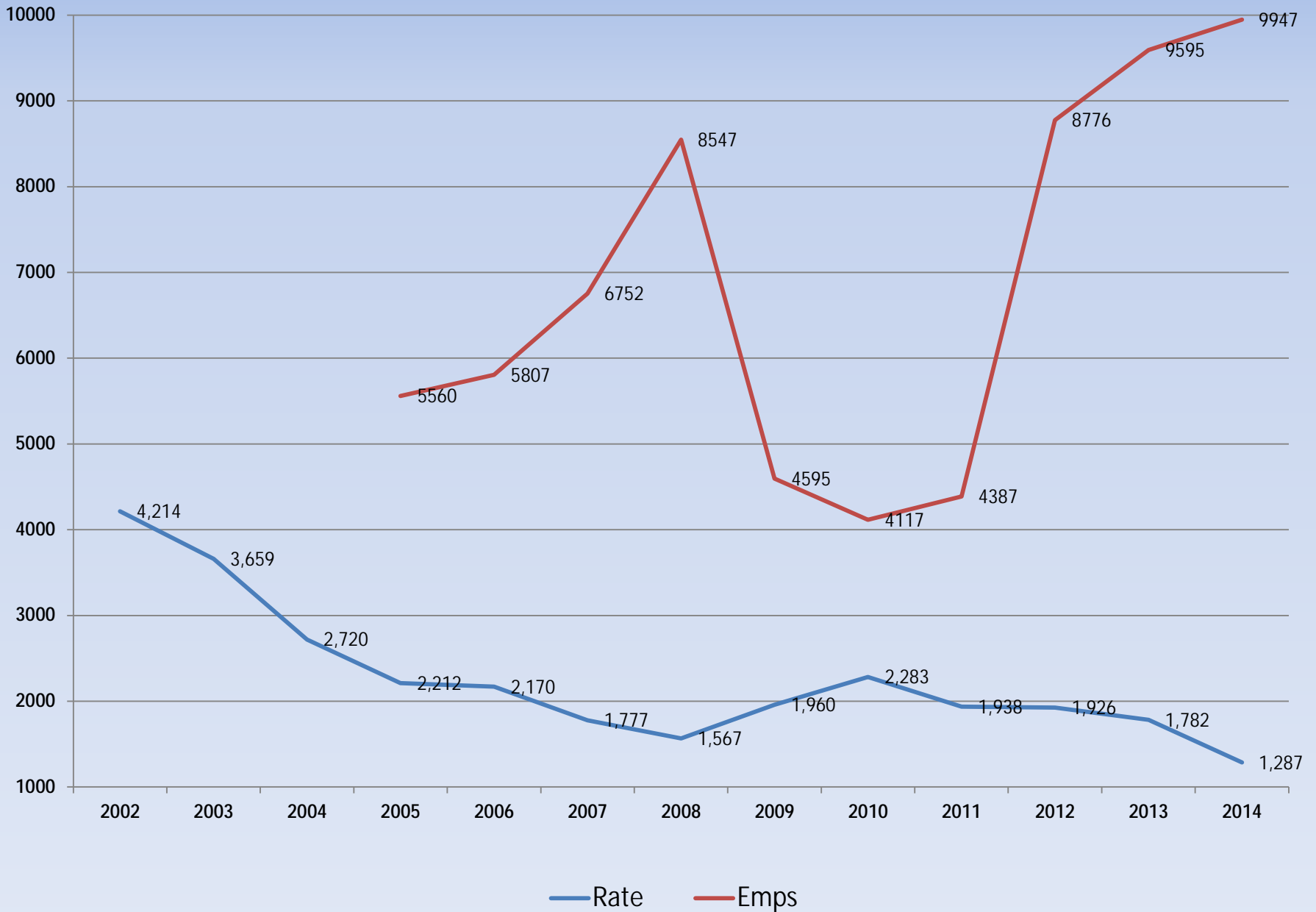
2014 Near Miss Reports - Macro



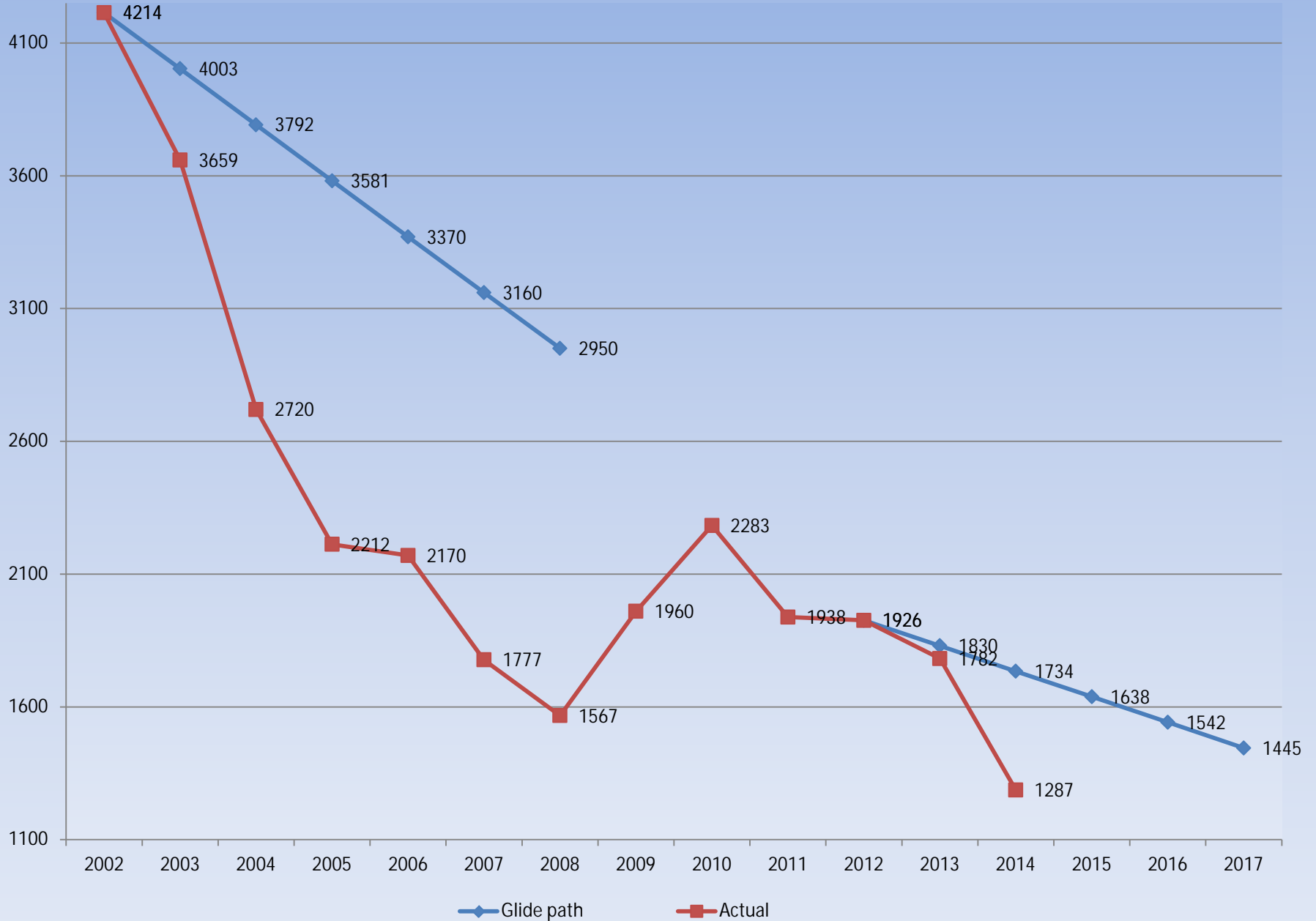
2014 Near Miss Reports - Micro



SHIFT RIDDOR Rates 2002 - date

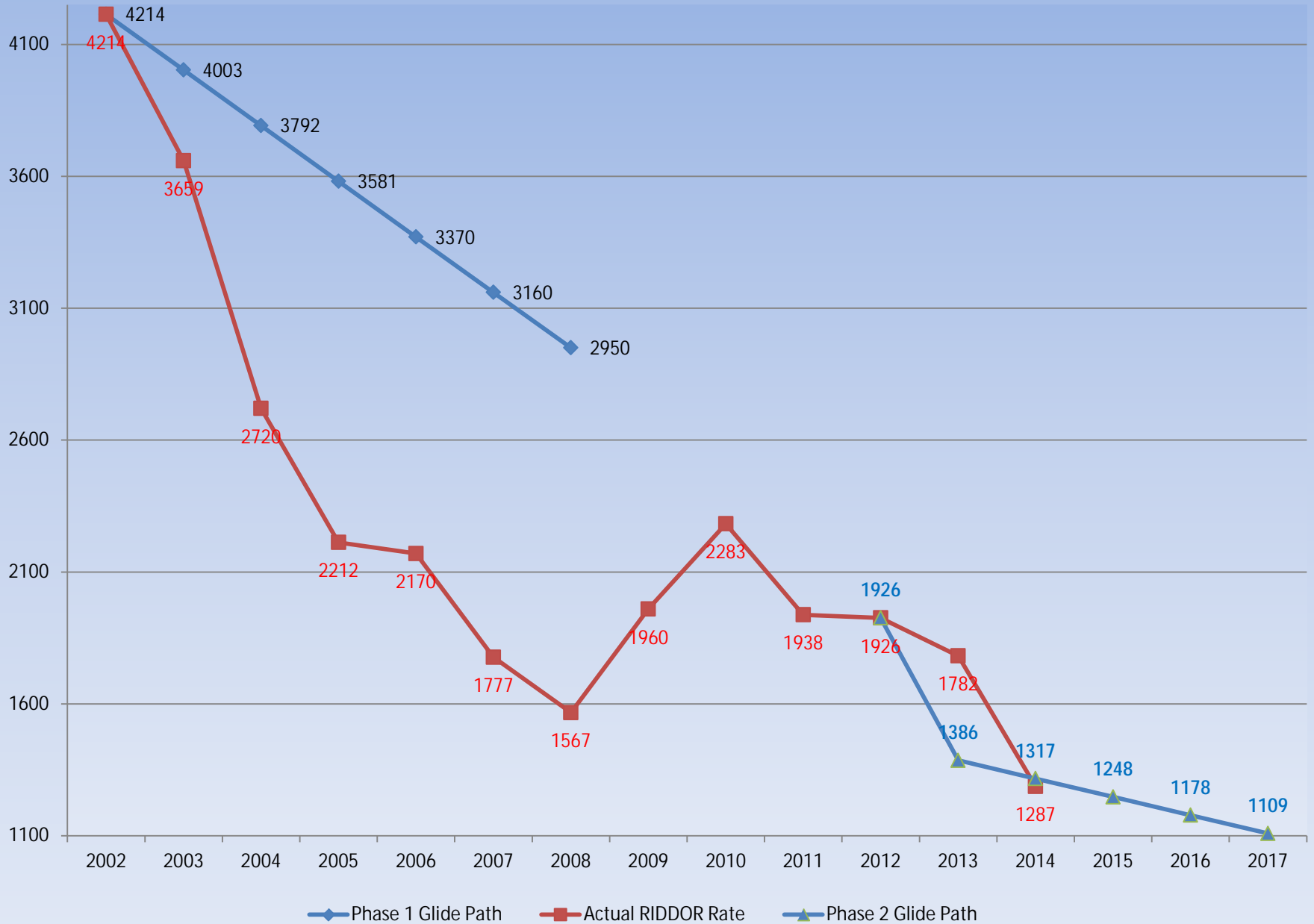


RIDDOR - Target Rates vs Actual Acheivement



RIDDOR - Target Rates vs Actual Achievement

(Dec 2013 RIDDOR Change Compensated)



New / Returning Reports 2014

Category	Number	Employees	Material	Process	Size of Company
New	10	1011	Ferrous 7 Non-ferrous 3	Sand 5 Die 3 Investment 2	Small 6 Medium 2 Large 2
Returnees	2	438	Ferrous 1 Non-ferrous 1	Sand 1 Die 1	Medium 1 Large 1
Restructured	0				

Category	Number	Employees				
			Accidents	Rate/100 emp	RIDDOR	Rate/100K emp
New	10	1011	199	19.68	9	890.2
Returning	2	438	73	16.67	2	456.62
Restructured	0					

Process Comparisons – Ferrous vs Non-Ferrous

	Ferrous (40)		Non-Ferrous (36)	
Employees	5039		4908	
	Total Accidents	RIDDOR	Total Accidents	RIDDOR
Hand Tools	66	6	54	0
Machinery	46	10	34	2
Vehicles	15	2	17	3
Slips / Trips	110	12	108	6
Falls from Height	14	1	12	0
Burns	138	4	186	6
Manual Handling	408	28	441	20
Eye Injuries	193	0	103	2
Chemical Injuries	7	0	4	1
Struck by Moving Object	80	9	102	8
Struck against Stationary Object	80	1	85	1
Other	48	3	22	0
Reportable Diseases	3	3	0	0
TOTAL	1208	79	1168	49
Rate	23.97/100	1567.77 /100K	23.80/100	998.37 /100K

Location & number of **total** accidents - Ferrous vs Non-ferrous

Locale	No. of acc's	% of total	Number of foundries with accidents in this area	No. of acc's	% of total	Number of foundries with accidents in this area
	Ferrous foundries			Non-ferrous foundries		
Foundry	893	73.92	39	887	75.94	36
Machine shop	193	15.98	15	91	7.79	17
Other area	122	10.10	22	190	16.27	29

Location & number of **RIDDOR** accidents - Ferrous vs Non-ferrous

Locale	No. of acc's	% of total	Number of foundries with accidents in this area	No. of acc's	% of total	Number of foundries with accidents in this area
	Ferrous foundries			Non-ferrous foundries		
Foundry	61	77.22	26	33	67.35	16
Machine shop	7	8.86	4	2	4.08	2
Other area	11	13.92	10	14	28.57	9

Process Comparisons – Sand vs Die-cast vs Investment

	Sand (52)		Die-cast (18)		Investment (6)	
Employees	6363		2260		1324	
	Total Accidents	RIDDOR	Total Accidents	RIDDOR	Total Accidents	RIDDOR
Hand Tools	85	6	24	0	11	0
Machinery	60	11	12	1	8	0
Vehicles	20	3	12	2	0	0
Slips / Trips	143	15	62	2	13	1
Falls from Height	18	1	7	0	1	0
Burns	166	7	137	3	21	0
Manual Handling	522	34	246	8	81	6
Eye Injuries	217	1	60	1	19	0
Chemical Injuries	7	0	0	0	4	1
Struck by Moving Object	117	15	47	2	18	0
Struck against Stationary Object	106	1	47	1	12	0
Other	50	3	15	0	5	0
Reportable Disease	3	3	0	0	0	0
TOTAL	1514	100	669	20	193	8
Rate	23.79/ 100	1571.58 /100K	29.60/ 100	884.95 /100K	14.58/ 100	604.22 /100K

Location & number of **total** accidents – Sand vs Die vs Investment

Locale	No. of acc's	% of total	Foundries with accidents in area	No. of acc's	% of total	Foundries with accidents in area	No. of acc's	% of total	Foundries with accidents in area
	Sand Foundries			Die-cast Foundries			Investment Foundries		
Foundry	1118	73.84	51	534	79.82	18	128	66.32	6
Machine shop	220	14.53	21	54	8.07	7	10	5.18	4
Other area	176	11.62	32	81	12.11	14	55	28.50	6

Location & number of **RIDDOR** accidents – Sand vs Die vs Investment

Locale	No. of acc's	% of total	Foundries with accidents in area	No. of acc's	% of total	Foundries with accidents in area	No. of acc's	% of total	Foundries with accidents in area
	Sand Foundries			Die-cast Foundries			Investment Foundries		
Foundry	76	76.00	35	15	75.00	6	3	37.50	2
Machine shop	7	7.00	4	1	5.00	1	1	12.50	1
Other area	17	17.00	14	4	20.00	3	4	50.00	2

Process Comparisons – Company Size

	Large (6492 emp)		Medium (2569 emp)		Small (886 emp)	
	/100 employees	/ 100K employees	/100 employees	/ 100K employees	/100 employees	/ 100K employees
	Total	RIDDOR	Total	RIDDOR	Total	RIDDOR
Hand Tools	62	5	36	1	22	0
Machinery	51	7	17	3	12	2
Vehicles	19	2	7	2	6	1
Slips / Trips	151	10	51	8	16	0
Falls from Height	17	0	5	1	4	0
Burns	181	4	90	3	53	3
Manual Handling	486	26	229	15	134	7
Eye Injuries	204	1	58	0	34	1
Chemical Injuries	7	1	4	0	0	0
Struck by Moving Object	138	8	33	7	11	2
Struck against Stationary Object	120	2	30	0	15	0
Other	43	3	23	0	4	0
Reportable Diseases	3	3	0	0	0	0
TOTAL	1482	72	583	40	311	16
Rate	22.83/ 100	1109.06/ 100K	22.69/ 100	1557.03/ 100K	35.10/ 100	1805.86/ 100K

Location & number of **total** accidents – By Company Size

Locale	No. of acc's	% of total	Foundries with accidents in area	No. of acc's	% of total	Foundries with accidents in area	No. of acc's	% of total	Foundries with accidents in area
	Large			Medium			Small		
Foundry	1080	72.87	21	426	73.07	28	274	88.10	26
Machine shop	204	13.77	16	66	11.32	10	14	4.50	6
Other area	198	13.36	19	91	15.61	20	23	7.40	13

Location & number of **RIDDOR** accidents – By Company Size

Locale	No. of acc's	% of total	Foundries with accidents in area	No. of acc's	% of total	Foundries with accidents in area	No. of acc's	% of total	Foundries with accidents in area
	Large			Medium			Small		
Foundry	53	73.61	16	31	77.50	17	10	62.50	10
Machine shop	8	11.11	5	0	0	0	1	6.25	1
Other area	11	15.28	8	9	22.50	7	5	31.25	4

Results Comparisons – 2012 to 2014 (48 Foundries)

	2014 (7136 emp)		2013 (6763 emp)		2012 (6984 emp)	
	Total	RIDDOR	Total	RIDDOR	Total	RIDDOR
Hand Tools	91	6	104	6	101	3
Machinery	58	9	46	7	80	10
Vehicles	25	3	21	7	17	1
Slips / Trips	174	13	162	25	204	20
Falls from Height	19	1	28	6	24	7
Burns	234	5	216	16	220	5
Manual Handling	626	36	554	32	525	55
Eye Injuries	250	2	254	0	237	3
Chemical Injuries	7	0	5	1	5	0
Struck by Moving Object	144	12	173	15	280	29
Struck against Stationary Object	137	2	122	0	157	5
Other	58	3	56	3	87	14
Reportable Diseases	3	3	1	1	0	0
TOTAL	1826	95	1742	119	1937	152
Rate	25.59 /100	1610.17 /100K	25.76 /100	2087.35 /100K	27.73 /100	2273.44 /100K

SHIFT Case Study 1 (Large foundry)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
RIDDOR	9	7	5	3	7	5	1	6	6	5
RIDDOR Rate / 100K	4390	3590	2551	1515	3889	2688	546	3125	3508.77	2941.18
Total	138	98	79	62	37	40	28	26	41	50
Overall Rate / 100	66.67	53.85	40.31	31.31	20.56	21.51	15.301	13.54	23.98	29.41

	Hand Tools	M/C	Veh	F /S/T	FFH	Burns	Handle Object	Eyes	Chem	Struck by MO	Struck SO	Other	Rep Dis	Total
2006	1	4	0	10	0	7	15	46	0	0	14	1		98
2007	2	0	2	6	1	5	19	32	0	5	4	3		79
2008	1	3	0	8	0	5	13	22	0	3	5	2		62
2009	0	1	0	6	0	3	12	10	0	1	4	0		37
2010	0	0	2	2	0	3	9	11	0	8	5	0		40
2011	1	2	1	1	0	1	8	7	0	5	2	0		28
2012	1	0	2	4	0	2	4	7	0	2	2	0		26
2013	3	1	1	5	1	3	4	10	0	11	1	0	1	41
2014	2	0	1	4	1	4	7	12	0	13	5	1	0	50

SHIFT Case Study 2 (Small foundry)

	2009	2010	2011	2012	2013	2014
RIDDOR	0	0	1	0	3	1
RIDDOR Rate / 100K	0	0	2174	0	8571.42	2083
Total	66	40	32	24	26	29
Overall Rate / 100	153.49	93.02	69.57	53	74.29	60

	Hand Tools	M/C	Veh	F /S/T	FFH	Burns	Handle Object	Eyes	Chem	Struck by MO	Struck SO	Other	Rep Dis	Total
2009	3	3	0	7	0	6	19	21	0	2	4	1		66
2010	0	0	0	3	0	3	10	11	0	7	6	0		40
2011	2	1	0	2	0	2	4	12	0	7	2	0		32
2012	0	0	0	0	0	1	17	2	0	2	1	1		24
2013	1	0	0	1	0	2	15	6	0	0	1	0	0	26
2014	4	0	0	0	0	2	17	6	0	0	0	0	0	29

Case Study Progress Reports

Large Member

- Over 10 year reporting period the business has 22% less employees in 2014 than 2005¹
- There is a defined increase in active safety management as time has progressed²
- There is an increased level in value-added activities beyond the casting process

Small Member

- Since 2009 until 2014 there is a 10% increase in the number of employees³
- There is a defined increase in active safety management as time has progressed⁴

¹ By default a decrease in employee numbers will increase reported values for both RIDDOR and overall accident rates on a like for like number of accidents.

² An increase in reported accident numbers cannot be taken by themselves to be indicative of a decrease in safety performance. As active safety increases employees become more aware of the need to report accidents. This, taken with a decrease in overall employee numbers, will show an increase in reported rates and does not mean that the foundry is a less safe place to be working or that due care for the health, safety and welfare of employees is not taking place.

³ By default an increase in the size of the workforce will result in decreased reported values for both RIDDOR and overall accident rates on a like for like number of accidents.

⁴ With a small number of employees even 1 RIDDOR reportable accident results in a high reported value for the business compared to a large business with significantly more employees. This cannot be taken as a measure that the small foundry is a less safe place to work than the larger one, without taking due care and diligence to understand the operating environment within which the employees are working.

2017 Targets

Based on the information received from SHIFT members during the phase 2 base year of 2012, the target values to achieve the 25% reduction in accidents for the initiative by the end of 2017 were:

- 127 or less RIDDOR reportable accidents
- A RIDDOR rate of less than 1444
- A total number of accidents per 100 employees of 19 or less

However..... due to the change in RIDDOR reporting requirements that occurred in December 2013, targets needed to be revised in line with the changes and therefore the new targets to achieve are:

- ü **100 or less RIDDOR reportable accidents**
- ü **A RIDDOR rate of less than 1109**
- ü **A total number of accidents per 100 employees of 17 or less**

Summary

- A 5.5% increase in numbers of members reporting data over 2013 equates to a 3.67% increase in employees included within the initiative. Some individual members show a significant uplift in numbers employed compared to 2013 while others remain stable and a few show a reduction.
- There is a significant reduction in the number of RIDDOR accidents reported. Taking the changes to RIDDOR regulations in 2013 into account the actual real term reduction equals 4 accidents or 3.03%.
- There has been an increase in overall accidents reported by 138 (4.35%) on the overall accident rate per 100 employees compared to 2013. Given there is an increase in the number and size of first time reporting members, this is not to be completely unexpected.
- There is a significant change in the number of companies who have reported for the last 3 rolling years from 26 in 2013 to 48 in 2014. This gives a better underlying performance value compared to any previous 3 year rolling period. The reduction in RIDDOR accidents is 37.5% in real terms between 2012 & 2014.
- Analysis of historic figures indicate the primary four categories for accidents in 2014 have been the same main categories throughout the history of SHIFT. Despite efforts made, more still needs to be done to improve in these areas.
- The number of investment casting sector companies has remained stable although the reporting members has changed between 2013 and 2014, so any performance variation cannot be assumed to be naturalised.

Conclusion

As in 2013, the SHIFT Initiative has increased the number of reporting members, although, the mix of companies reporting has changed, with some members who have good track records for reporting previously, not submitting entries in 2014, despite an active increase in chasing for information from the administrator. That has been offset by the number of companies reporting for the first time. That said, there still remains a hard core of the membership still to be persuaded to enter their data. Greater emphasis needs to be made to understand what is preventing the sharing of information with the initiative, taking into account that full anonymity is guaranteed when the data is aggregated into the final reports.

The overwhelming reason for the decrease in the RIDDOR rate for the initiative is the change to the reporting requirements, which removed the need to report over 3 day injuries within the legislation. However, some members have been very active in addressing both safety and health, which has resulted in improved performance for themselves. Significantly, the overall accident rate per 100 employees has slightly increased. However, it is possible that this is due to the mix of companies that have reported data. 12 members are reporting for either their first time or returning to reporting following a break. These members make up the difference to those who did not report this year.

There is an 84.6% increase to the number of members who have consistently reported data for the past 3 years. This serves to give a more realistic underlying performance of the initiative towards its goals. This dataset does show a significant reduction in the amount of reportable accidents. The overall number of accidents reported has not dropped by a statistically significant number, given the number of employees included has not significantly increased in this group.

Conclusion

Even with the adjustment to the RIDDOR figure in this report, the entire UK reportable accident rate will have changed accordingly as a result of the change to the regulation in 2013. As a result, the SHIFT RIDDOR rate remains 3.59 times that of the overall UK average and in excess of 3 times the Manufacturing sector average.

Therefore, there is still much work remaining to be done, but importantly, the report for 2014 shows that even with the revised RIDDOR figure, the initiative is on target to achieve its goal of a 25% reduction in reported workplace accidents and cases of ill-health by 2017.

The initiative is undertaking new work targeting behavioural change in the workplace and with the expected report for the Long Latency Health Risk Project due to be published in the middle of this year, this will help to guide the efforts to be made over the next 18 months.

The initiative and its members continue to remain focussed on making improvements in order to help maintain the health of its member's employees and to reduce the number of accidents and occurrences of work-related ill-health sustained within UK foundries.