

Kentucky Occupational Safety & Health Surveillance (KOSHS) Program Report 2008



KENTUCKY INJURY PREVENTION AND RESEARCH CENTER Cooperative Agreement Number 1U60/OH008483-03

The Kentucky KOSHS Program is an occupational injury and illness surveillance project of the Kentucky Injury Prevention and Research Center (KIPRC)*. The objectives of KOSHS are to identify worker populations and work environments with elevated risk for nonfatal and fatal worker injuries and illnesses, to identify risk factors for an occupational injury, and to develop strategies for dissemination of state occupational health data, with the ultimate goal of reducing the burden of occupational injuries in Kentucky and in the nation. For more detailed information concerning KOSHS, or to obtain additional copies of this report, contact:

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EXECUTIVE SUMMARY

- ❑ Kentucky's *nonfatal* work-related injury and illness rate has decreased by 64% since 1997 but is still 20% above the national rate. The highest injury incidence rate was in hospitals.
- ❑ Kentucky's *fatal* work-related injury rate (7.6 deaths/100,000 workers) has remained fairly steady since the year 2000, and was 85% higher than the national occupational fatality rate in the year 2006. The primary cause of death was due to motor vehicle collisions.
- ❑ Kentucky's work-related amputation rate decreased in the year 2006 to 4.7 cases/ 100,000 workers (Bureau of Labor Statistics). According to the Kentucky Office of Workers' Claims, the highest number of amputations was in help supply services for the year 2005.
- ❑ From 2004- 2005, Kentucky's MSD incidence rate increased and was 61% above the national incidence rate. The highest number of cases was in the manufacturing industry and in the production occupation.
- ❑ Kentucky's pneumoconiosis mortality rate was 2-fold higher than the US rate in the year 2004.
- ❑ The acute work-related pesticide-associated injury and illness rate for Kentucky increased in the year 2006 and was 33% higher than the US rate in the year 2005. Occupational pesticide exposures were due primarily to disinfectant industrial cleaners.
- ❑ Kentucky's malignant mesothelioma incidence rate was below the national age-standardized incidence rate in the year 2004.
- ❑ The Kentucky occupational motor vehicle fatality rate decreased, although the nonfatal injury rate increased by 15% in the year 2006. The most common cause of injury in occupational motor vehicle collisions (Workers' Claims first reports of injury and claims) was a collision or sideswipe with another vehicle. Workers' compensation claims were most frequently filed for the services industry.
- ❑ The Kentucky adult blood lead level (>25µg/dL) prevalence rate was 13.7 cases per 100,000 employed persons in 2006, a 20% increase from the year 2005.
- ❑ The Kentucky industries at greatest risk for occupational injury were nursing and residential care facilities, scheduled air transportation, and motor vehicle manufacturing. The occupations at highest risk for occupational injuries and illnesses in Kentucky for 2005 were driver/sales workers and truck drivers.
- ❑ Occupational falls occurred primarily in eating places and in elementary and secondary schools. Laborers (except construction) and truck drivers were the occupations recorded most frequently in worker claims and first reports of injury.

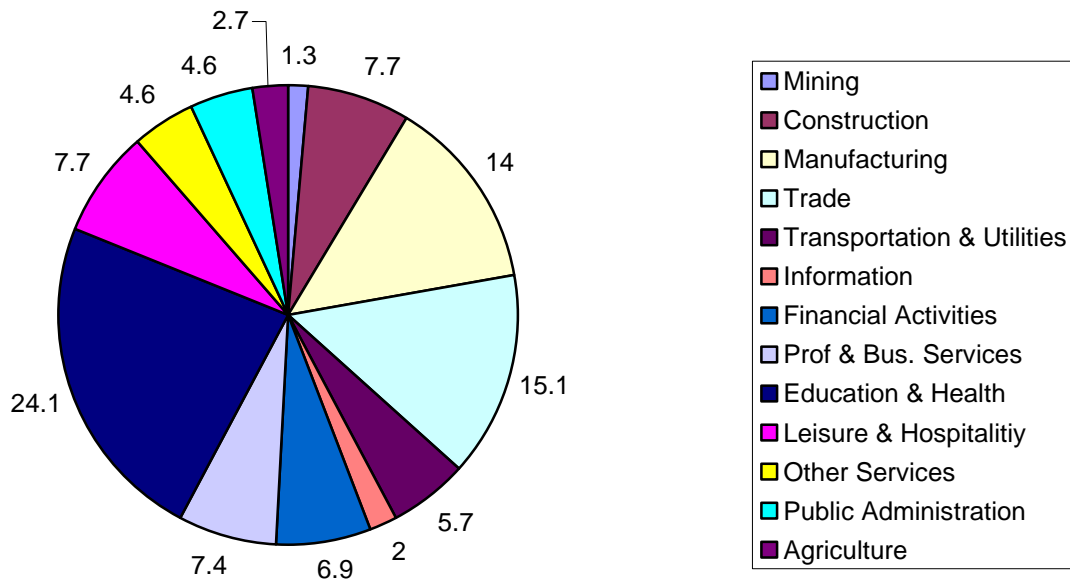
QUANTITATIVE ANALYSIS

Demographics

Profile: Employment Demographics

In 2005, 24% of Kentucky workers were employed in education and health, 15% in trade, 14% in manufacturing, 8% in leisure and hospitality, and 7% in professional and business services (Figure 1).

Figure 1. Kentucky Employment by Industry (%), 2005.



The most commonly employed occupations were professional and related (20%), service (15%), office and administrative support (14%), management, business and financial operation (12%), sales (11%), and transportation and material moving (7%).

Data Source: Bureau of Labor Statistics (BLS) Geographic Profiles of Employment and Unemployment

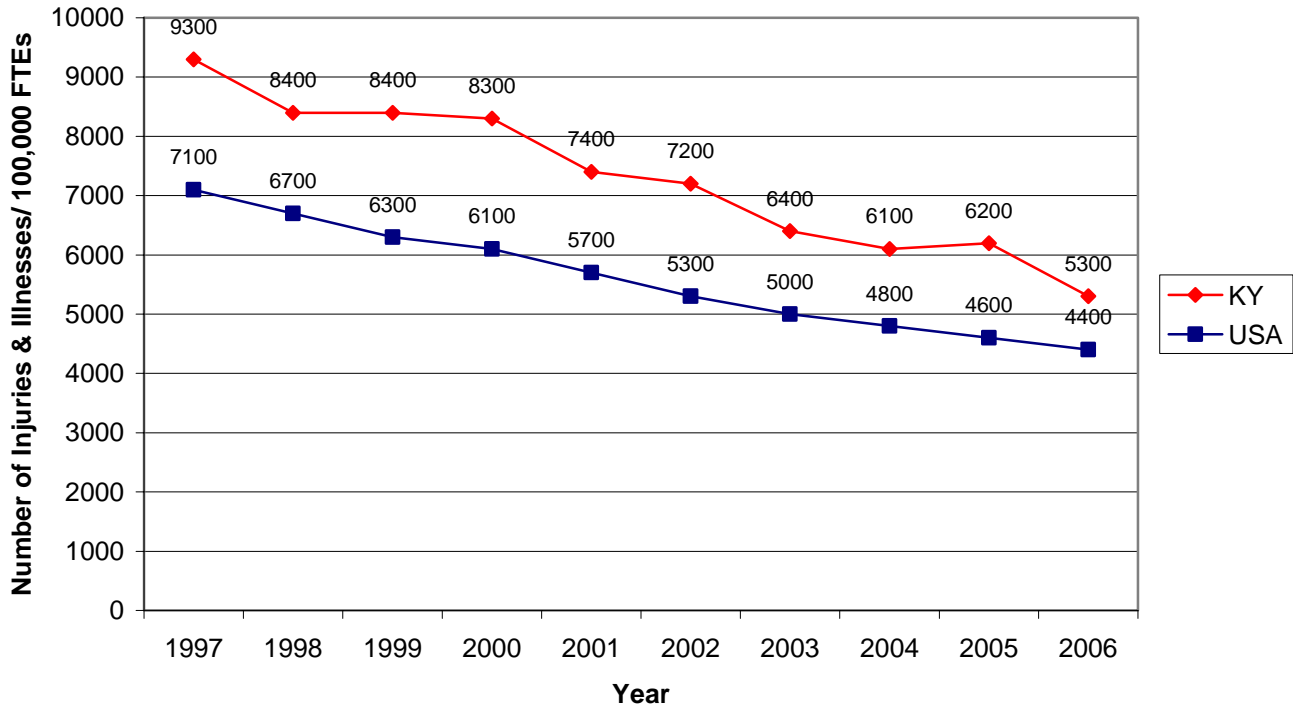
Occupational Injuries and Illnesses Combined

Indicator #1: Non-Fatal Work Related Injuries and Illnesses Reported By Employers

In 2006, there were 75,700 nonfatal work-related injuries and illnesses in Kentucky, an incidence rate of 5,300/ 100,000 employees. Although this rate is down 64% from the incidence rate of 8,700/100,000

recorded in 1997 (Figure 2), Kentucky is 20% above the national incidence rate of 4,400 /100,000 FTEs.

Figure 2. Estimated Annual Total Work-Related Injury And Illness Incidence Rates In Kentucky (1997-2006).



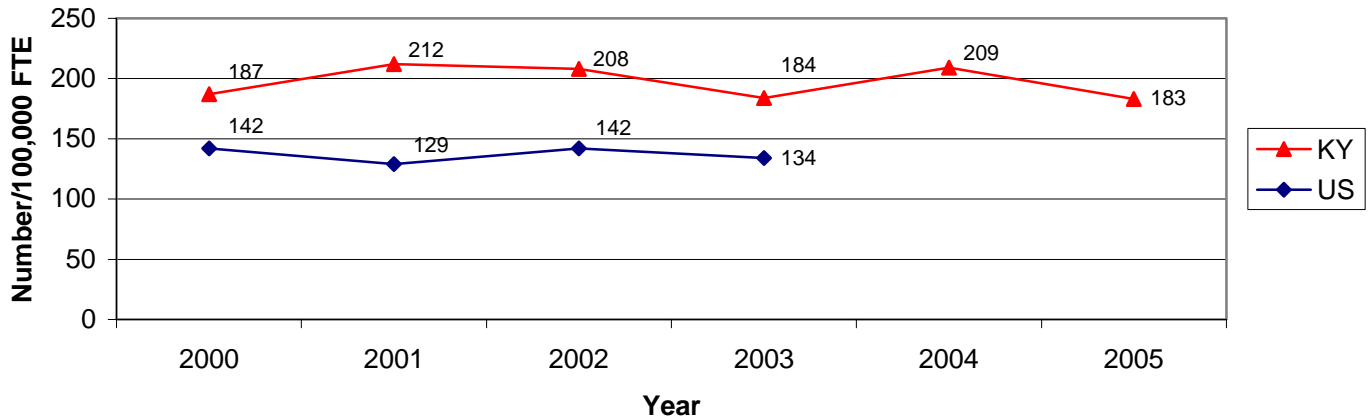
Industries with the highest nonfatal injury incidence rates in 2006 were in hospitals (27.1 cases/100 FTE), coating, engraving, heat treating, and allied activities (18.0 cases/100 FTE), forging and stamping (14.0 cases/100 FTE), office furniture manufacturing (13.7 cases/100 FTE), wood container and pallet manufacturing (13.0 cases/FTE), and architectural and structural metals manufacturing (13.0 cases/100 FTE).

Data Source: Annual BLS Survey of Occupational Injuries and Illnesses (SOII)

Indicator #2: Work-Related Hospitalizations

In 2005, there were 3,536 work-related hospitalizations with an annual crude rate of 184 per 100,000 employed persons age 16 years and older, nearly unchanged since the year 2000. Kentucky work-related hospitalization rates have been consistently higher than the US work-related hospitalization rates (Figure 3).

Figure 3. Work-Related Hospitalization Rates In Kentucky Compared To U.S. Rates, 2000-2005.

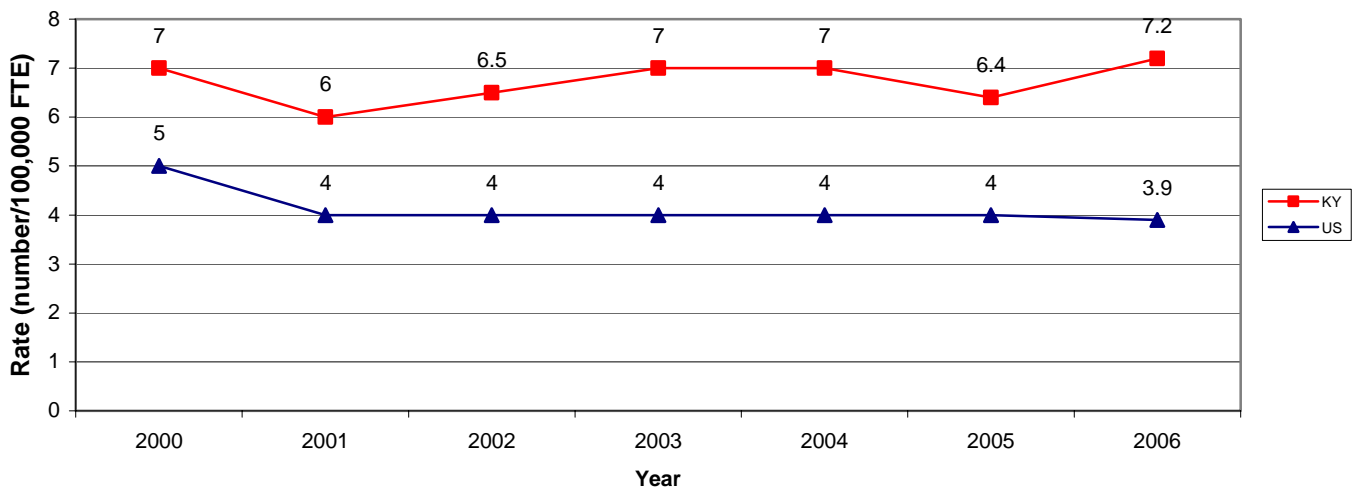


Data Source: Numerator data was obtained from the Kentucky Department for Public Health UB92 hospital discharge data set. Denominator data was obtained from BLS Current Population Survey data. Diagnosis coding of hospitalization data was performed according to *ICD-9-CM* coding standards.

Indicator #3: Fatal Work-Related Injuries

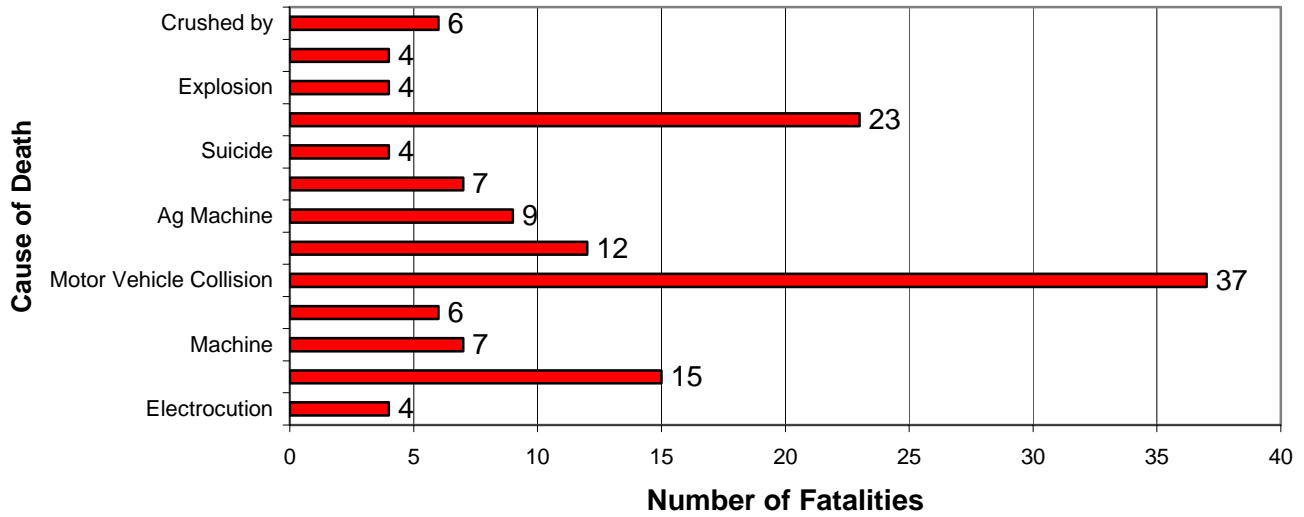
Fatal occupational injuries are reported to the National Census of Fatal Occupational Injuries (CFOI) program, which records all worker deaths that occurred in Kentucky. The fatality rate for Kentucky occupational injuries increased from 7 deaths/100,000 employed in the year 2000 to 7.6/100,000 in 2006 (CFOI data). Figure 4 compares 2000-2006 fatality rates with the U.S. using Fatality Assessment and Control Evaluation (FACE) data. Kentucky had an occupational fatality rate 85% higher than the national occupational fatality rate in 2006. Most of the worker fatalities occurred in the transportation industry. Motor vehicle collisions were the primary external cause of death for Kentucky workers (Figure 5).

Figure 4. Rate of Fatal Work-Related Injuries in Kentucky and U.S., 2000-2006.



Data Source: KY FACE data

Figure 5. Occupational Fatalities by Incident Type-2006.

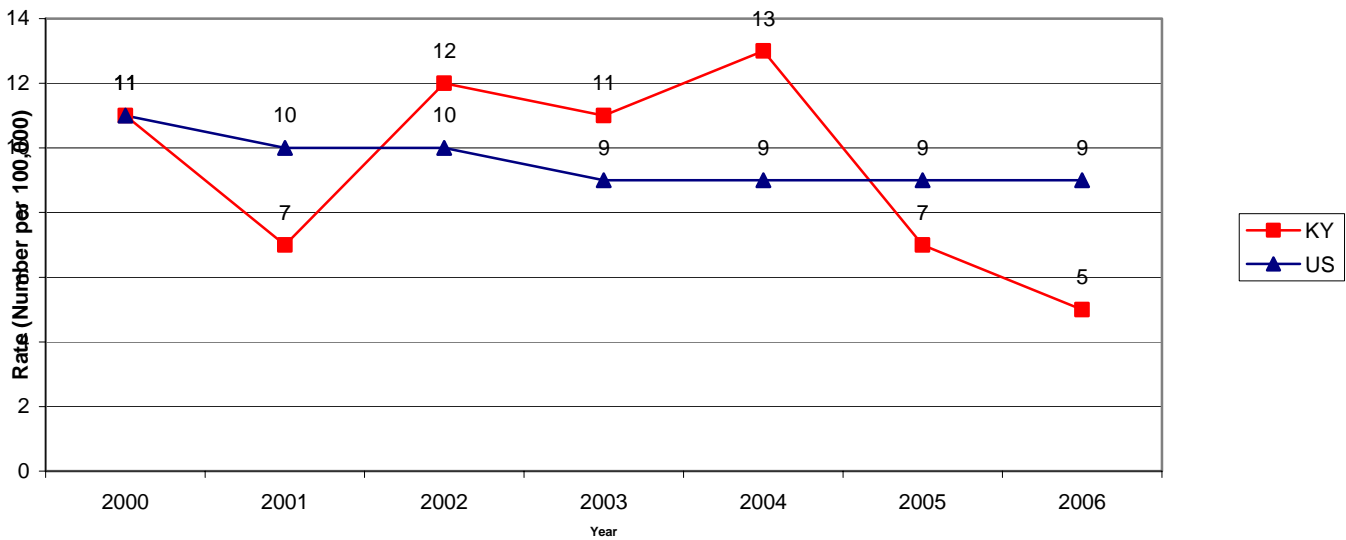


Data Source: Kentucky FACE program

Indicator #4: Work-Related Amputations with Days Away From Work Reported By Employers

There were 90 amputation cases with days away from work in 2006, a decrease from 137 in 2000. The annual incidence rate of 4.7 cases per 100,000 FTEs has decreased since the year 2004, and was lower than the national amputation incidence rate of 9/100,000 (BLS SOII) in 2006 (Figure 6).

Figure 6. Rate of Work-Related Amputations Involving Days Away From Work Reported by Private Sector Employers for Kentucky and U.S., 2000-2006.

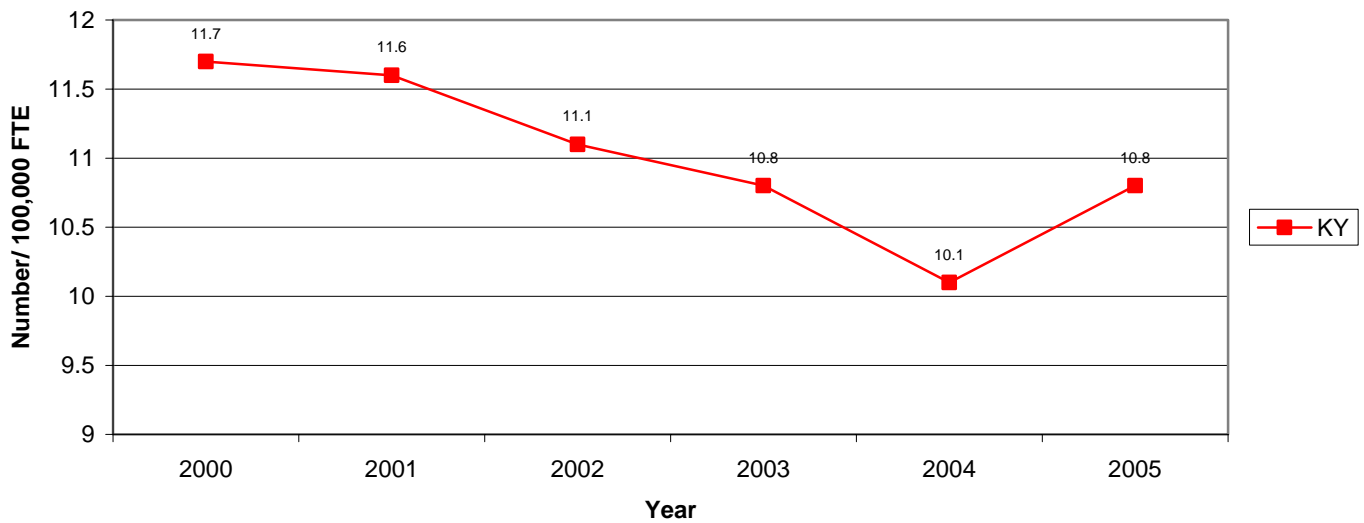


Data Source: Annual BLS Survey of Occupational Injuries and Illnesses (SOII).

Indicator #5: Amputation Claims Filed With the State Workers’ Compensation System by Injury Year

The number of amputation injury claims filed with the Kentucky Office of Workers’ Claims in the year 2005 was 185 compared to 171 claims filed in 2004. The annual incidence rate for amputation claims increased from 10.1 cases per 100,000 employees in 2004 to 10.8 cases/100,000 workers in 2005 (Figure 7).

Figure 7. Rate of Lost Work Time Claims for Amputations Identified in Workers’ Compensation Systems for Kentucky, 2000-2005.



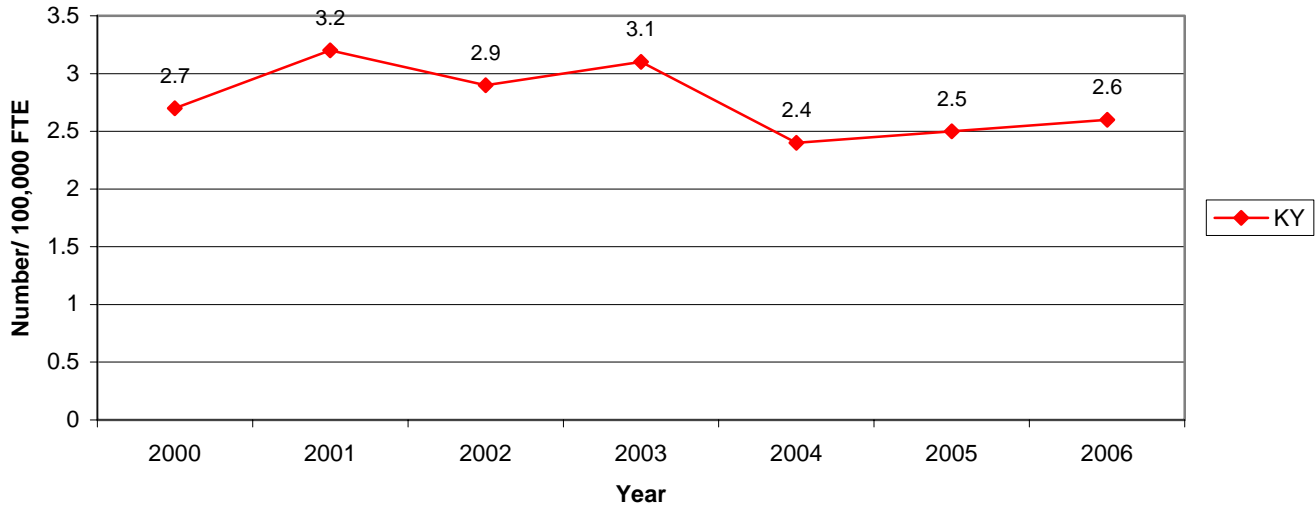
Using 2005 data, the majority of the amputations occurred in help supply services (n= 13), bituminous coal underground mining (n=10), motor vehicles and car bodies (n=7), eating places (n=6), and grocery stores (n=6).

Data Source: Work-related amputation surveillance data was provided by the Kentucky Office of Workers’ Claims, Frankfort, KY.

Indicator #6: Hospitalization for Work-Related Burns

There were 50 work-related burn hospitalization cases in 2006, up from 47 in 2005. The annual crude rate for work-related burn hospitalizations per 100,000 employed persons ages 16 and older was 2.6 in 2006. Kentucky work-related burn hospitalization rates have remained steady and are shown in Figure 8.

Figure 8. Rate of Hospitalizations for Work-Related Burns for Kentucky, 2000- 2006.

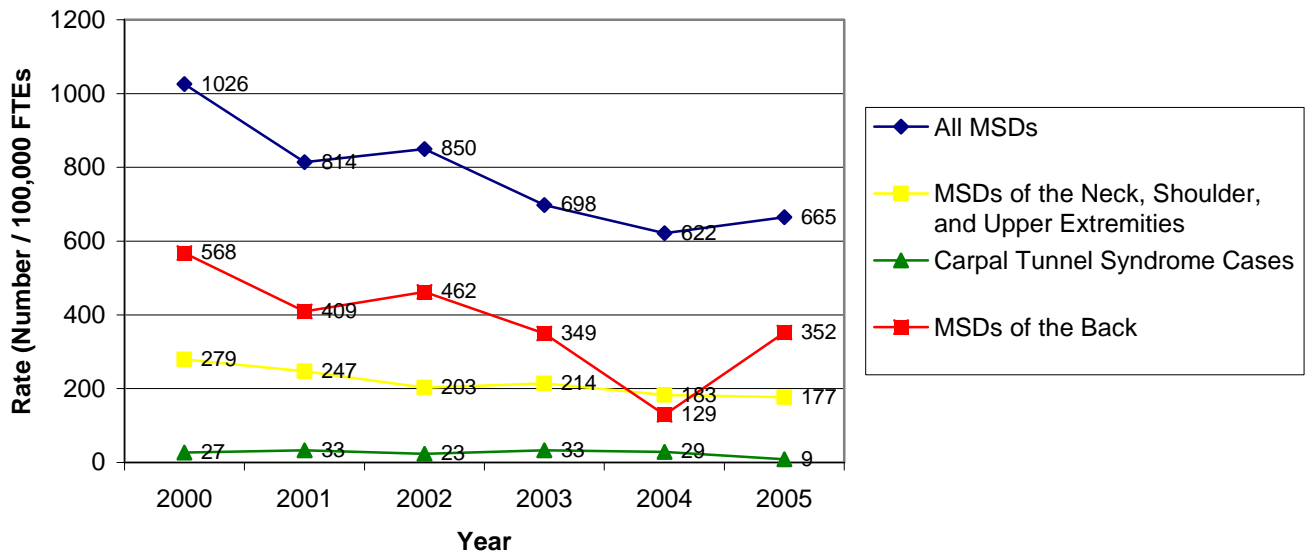


Data Source: Kentucky Department for Public Health UB92 hospital discharge data.

Indicator #7: Work-Related Musculoskeletal Disorders (MSDs) with Days Away From Work Reported By Employers

Kentucky had a total annual MSD incidence rate of 665 cases/100,000 FTEs in 2005 (Figure 9) and the MDS incidence rates have decreased since the year 2000.

Figure 9. Numbers and Incidence Rates for Musculoskeletal Disorders (MSDs) in Kentucky Involving Days Away From Work.



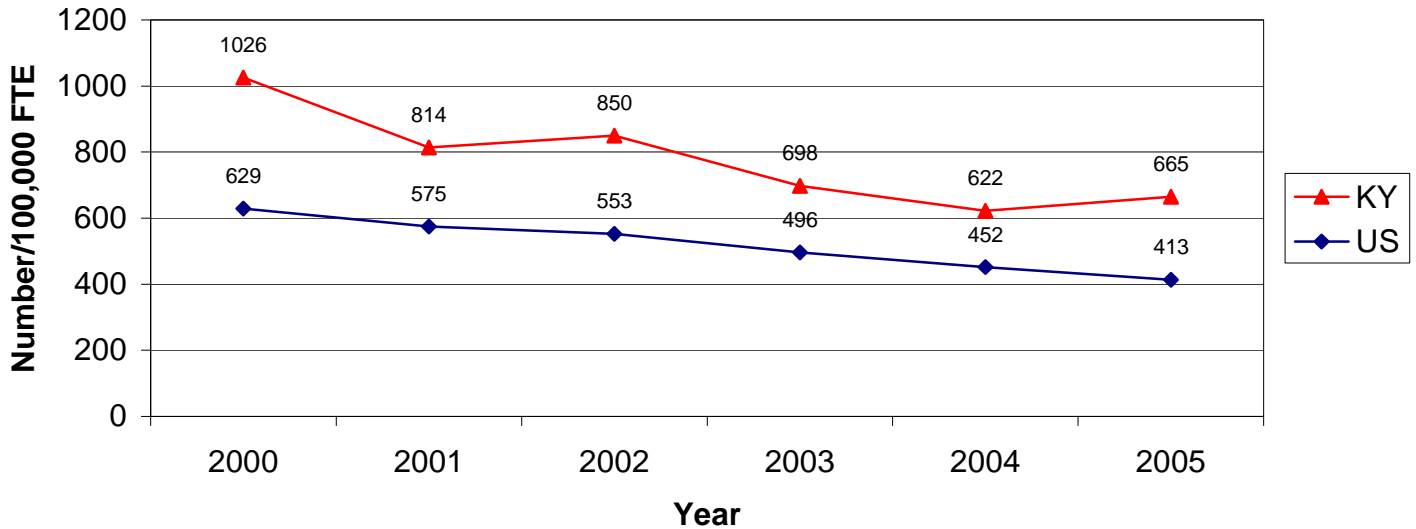
The most frequent carpal tunnel syndrome cases were in production. (Table 1).

Table 1. Number of MSD Cases by Worker and Case Characteristics, 2006.

	# of MSDs (code 17xxxx)
Gender:	
Male	5,750
Female	5,690
Age:	
16-19	120
20-24	640
25-34	2280
35-44	3080
45-54	3530
55-64	1580
65 and older	120
Occupation:	
Management, Business, Financial	320
Professional and Related	1070
Service	1640
Sales and Related	610
Office & Admin. Support	1290
Farming, Fishing, and Forestry	160
Construction and Extractive	790
Installation, Maintenance, Repair	640
Production	3610
Transportation & Material Moving	1300
Industry:	
Agriculture, Forestry, Fishing & Hunting	170
Mining	80
Construction	690
Manufacturing	4180
Wholesale Trade	530
Retail Trade	1170
Transportation & Warehousing	670
Utilities	50
Information	230
Financial Activities	440
Professional and Business Services	740
Education and Health Services	1710
Leisure and Hospitality	530
Other Services	270

The Kentucky MSD incidence rate was 61% above the national rate (Figure 10) in 2005.

Figure 10. Rate of all Work-Related Musculoskeletal Disorders Involving Days Away From Work Reported by Private Sector Employers for Kentucky and U.S., 2000-2005.

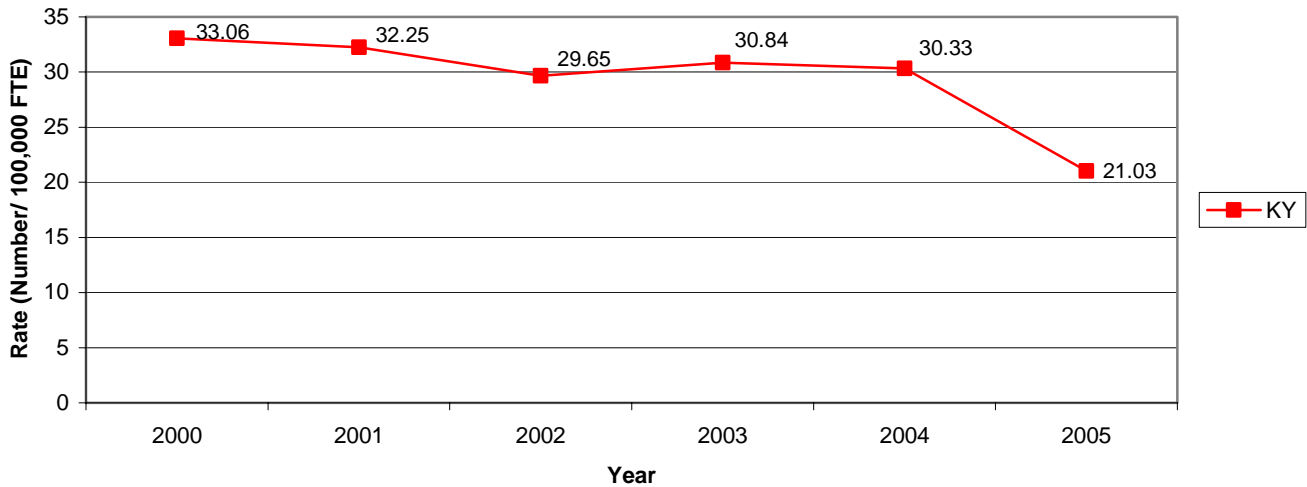


Data Source: Annual Bureau of Labor Statistics (BLS) Survey of Occupational Injuries and Illnesses (SOII).

Indicator #8: Carpal Tunnel Syndrome Cases Filed with the State Workers’ Compensation System by Injury Year

In 2005, there were 361 cases filed with an annual incidence rate of 21 CTS cases per 100,000 workers; rates have declined since the year 2000 (Figure 11).

Figure 11. Rate of Lost Work-Time Claims for Carpal Tunnel Syndrome Cases Identified in State Workers’ Compensation Systems for Kentucky, 2000-2005.



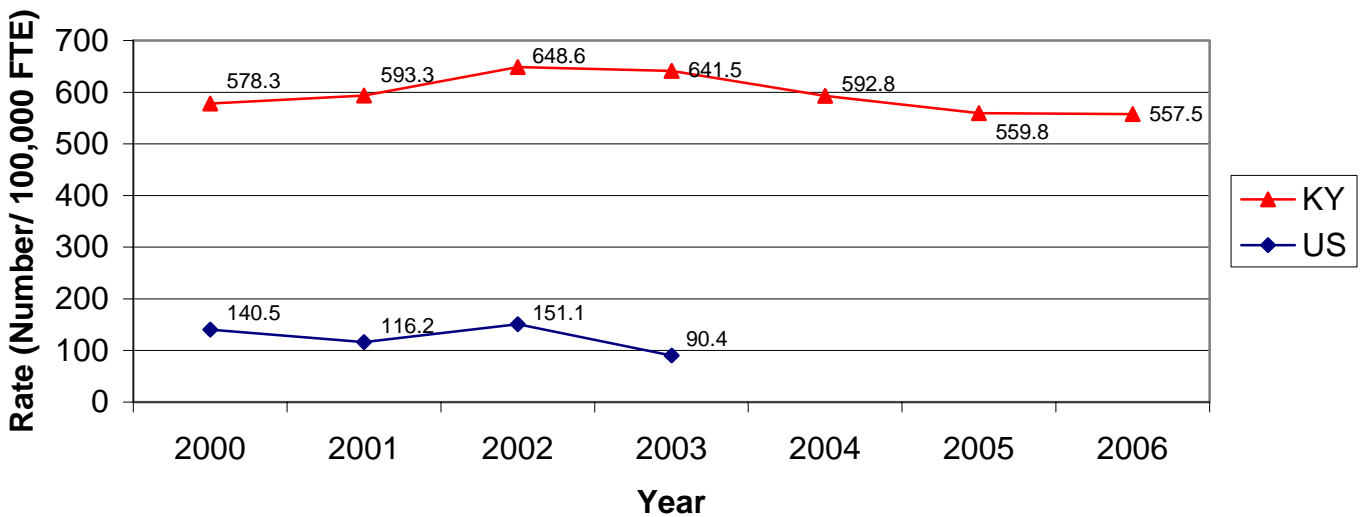
CTS claims occurred primarily in motor vehicle parts and accessories (n= 20), motor vehicles and car bodies (n= 18), elementary and secondary schools (n=12), eating places (n= 12), and grocery stores (n=12) for the year 2005. Most of the CTS cases were reported in miscellaneous machine operators (n=44), assemblers (n=34), laborers except construction (n=27), general office clerks (n=16), and textile sewing machine operators (n=14).

Data Source: Carpal tunnel syndrome claims data was provided by the Kentucky Office of Workers' Claims, Frankfort, KY.

Indicator #9: Hospitalization From or With Pneumoconiosis

The annual rate of pneumoconiosis hospitalizations per million residents in Kentucky decreased from an age-standardized rate of 578/million residents in 2000 to a rate of 558/million residents in 2006 (Figure 12).

Figure 12. Age-Standardized Rate of Hospitalizations From or With Total Pneumoconiosis for Kentucky and the U.S., 2000-2006^{ab}.



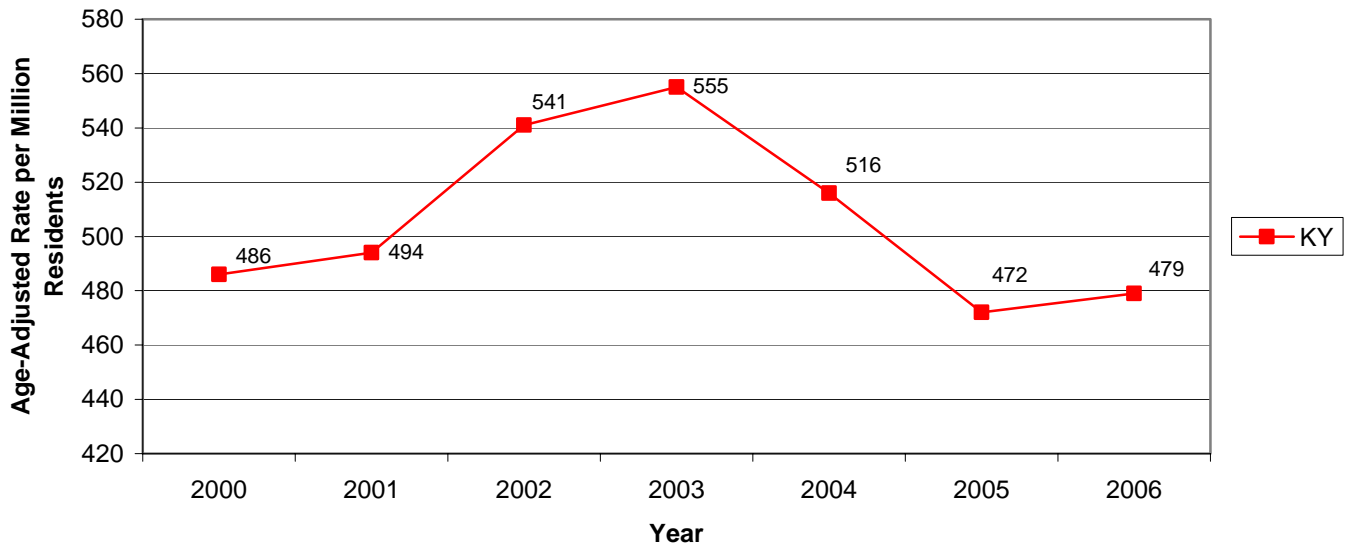
^a The above rates are based on the number of hospitalizations and not the number of people who were hospitalized. The actual number of people hospitalized would be expected to be less.

^bU.S. rates are not yet available for years 2004-2006.

Coal Workers' Pneumoconiosis

Figure 13 shows the number of hospitalizations and the annual age-adjusted coal workers' pneumoconiosis hospitalization rate per million residents in 2006. The age-adjusted rate was 479 hospitalizations/million residents.

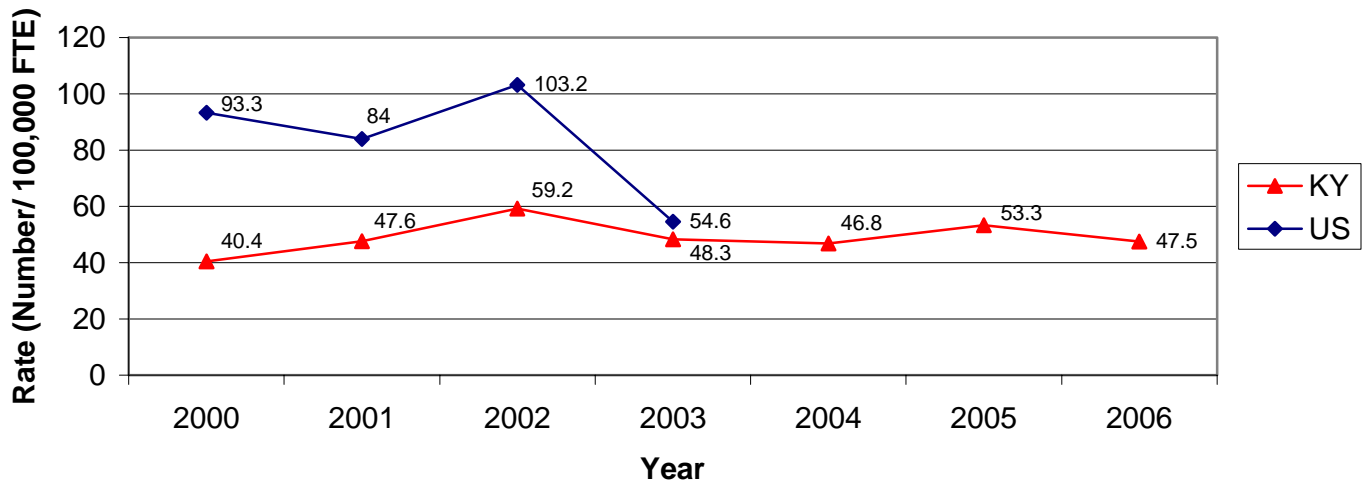
Figure 13. Annual Age-Adjusted Coal Workers’ Pneumoconiosis Hospitalization Rates per Million Residents in Kentucky (2000-2006).



Asbestosis

The age-adjusted asbestosis hospitalization rate has remained fairly steady and was 47.5 hospitalizations per 100,000 full-time workers in 2006 (Figure 14).

Figure 14. Age-Standardized Rate of Hospitalizations from or with Asbestosis for Kentucky and the U.S., 2000-2006^a.



^aU.S. rates are not yet available for years 2004-2006.

Silicosis

Kentucky’s age-adjusted silicosis hospitalization rate (11/million) has remained the same for the last three years. Table 2 shows the age-adjusted rates for silicosis hospitalizations for years 2000- 2006.

Table 2. Annual Age-Adjusted Silicosis Hospitalization Rates per Million Residents in Kentucky (2000-2006).

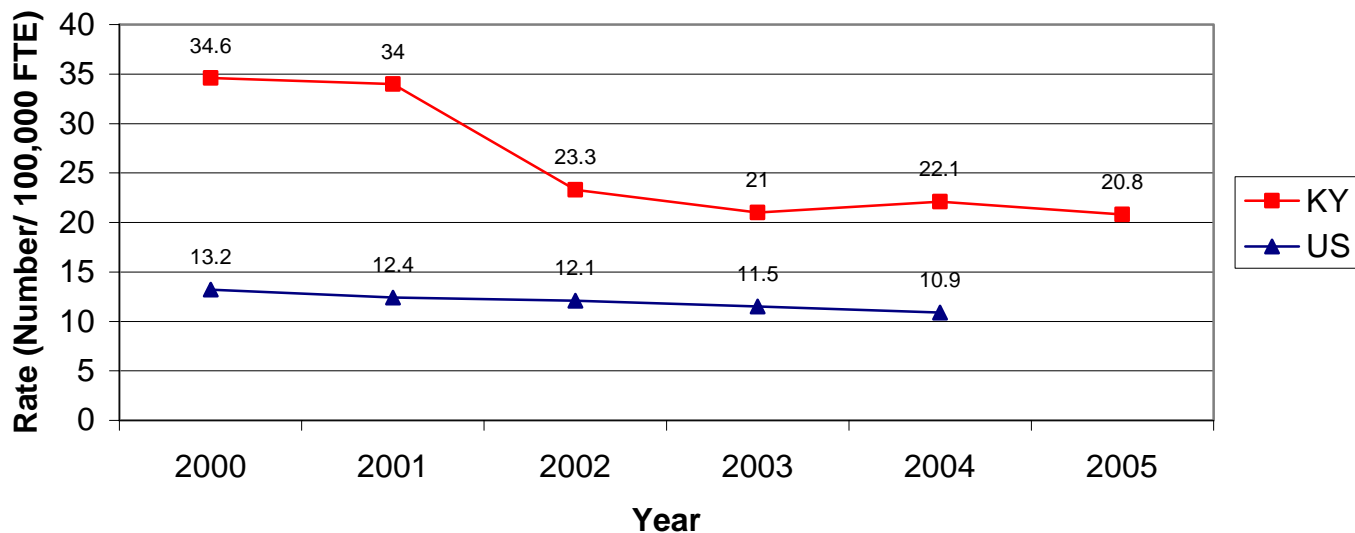
Year	Age-Adjusted Rate
2000	15
2001	12
2002	16
2003	14
2004	11
2005	11
2006	11

Data Source: Kentucky Department for Public Health UB92 hospital discharge data.

Indicator #10: Mortality From or With Pneumoconiosis

Deaths from pneumoconiosis numbered 68 in 2005, down from 72 in the year 2004. The age-adjusted total death rate for pneumoconiosis was 20.8 per million residents in 2005. Kentucky’s total pneumoconiosis mortality rate has remained fairly constant for the last three years (Figure 15).

Figure 15. Age-Standardized Mortality Rate From or With Total Pneumoconiosis for Kentucky and U.S., 2000-2005^a.



^aU.S. rate is not yet available for year 2005.

Coal Workers’ Pneumoconiosis Deaths

Coal workers’ pneumoconiosis mortality rates have decreased since the year 2000. In 2005, coal workers’ pneumoconiosis accounted for 50 occupational deaths (age-adjusted rate of 14.2/million). This rate is decreased from the 73 deaths reported in 2000 (age-adjusted death rate of 23.6 per million residents).

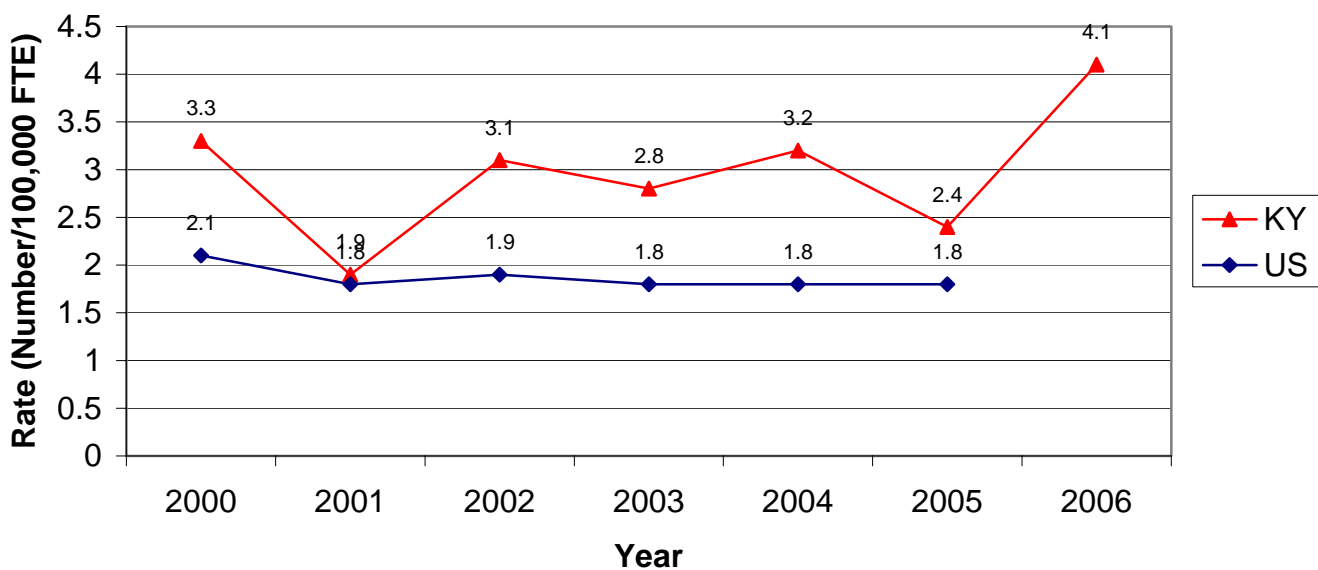
Data Source: State pneumoconiosis mortality data was obtained from the Kentucky Department for Public Health Office of Vital Statistics.

Indicator #11: Acute Work-Related Pesticide-Associated Illness and Injury Reported to Poison Control Centers

In 2006, 79 pesticide poisoning cases were reported to the Kentucky Regional Poison Control Center compared to 45 cases in 2005. The annual incidence rate of reported work-related pesticide poisonings per 100,000 employed persons age 16 years or older in 2006 was 4.1, increased from 2.4/100,000 in the year 2005. When examining 2006 reports, the primary pesticide exposures were due to disinfectant industrial cleaners (n=19, 24%), pyrethroids (n=8, 10%), hypochlorite disinfectants (n= 7, 9%), and other/unknown disinfectants (n=13, 16%). Fifty-four percent of the acute work-related pesticide-associated illnesses and injuries were in women. Most of the exposed workers were 40-49 years of age (n=18). Many of the pesticide-related illnesses and injuries resulted in minor effects (n=35) when medical outcomes were determined. Twelve people had moderate effects. Thirty-eight people were medically treated and released for pesticide-related illnesses and injuries.

When compared to the national rate for the year 2005, Kentucky’s work-related pesticide-associated poisoning rate was 33% greater than the national rate (1.8 cases per 100,000) (Figure 16).

Figure 16. Rate of Work-Related Pesticide-Associated Poisonings for Kentucky and U.S., 2000-2006^a.



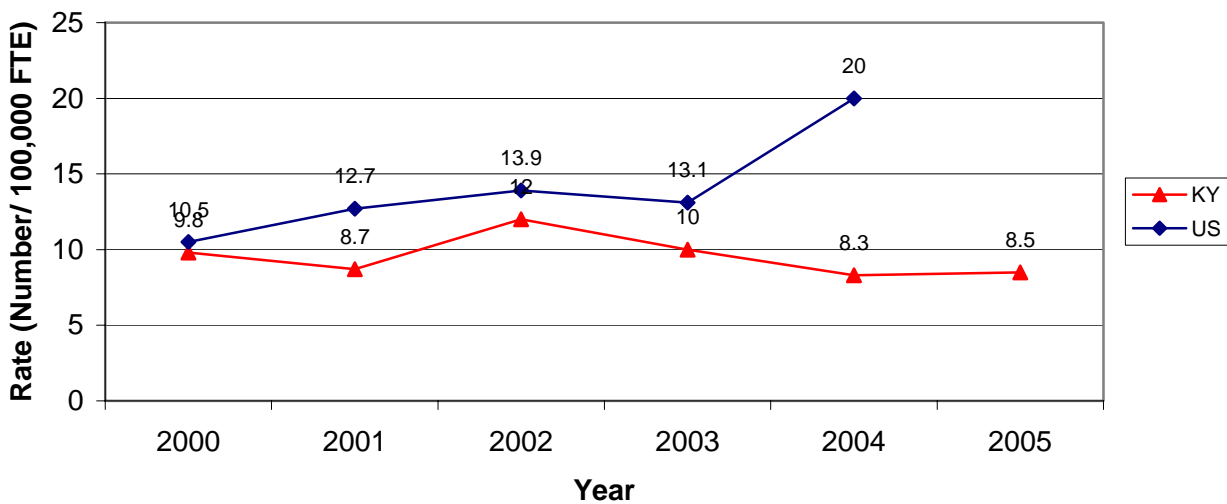
^aU.S. rate is not yet available for the year 2006.

Data Source: Work-related pesticide poisoning data was obtained from the Kentucky Regional Poison Control Center, Louisville, KY.

Indicator #12: Incidence of Malignant Mesothelioma

Malignant mesothelioma annual incidence rates were determined for 2005. The age-adjusted rate was 8.5 cases per million residents (29 cases) in 2005, compared to 8.3 cases per million in 2004. The 2004 rate was below the national rate of 20.0 cases per million residents (Figure 17).

Figure 17. Age-Standardized Incidence Rate of Malignant Mesothelioma for Kentucky and the U.S., 2000-2005^a.



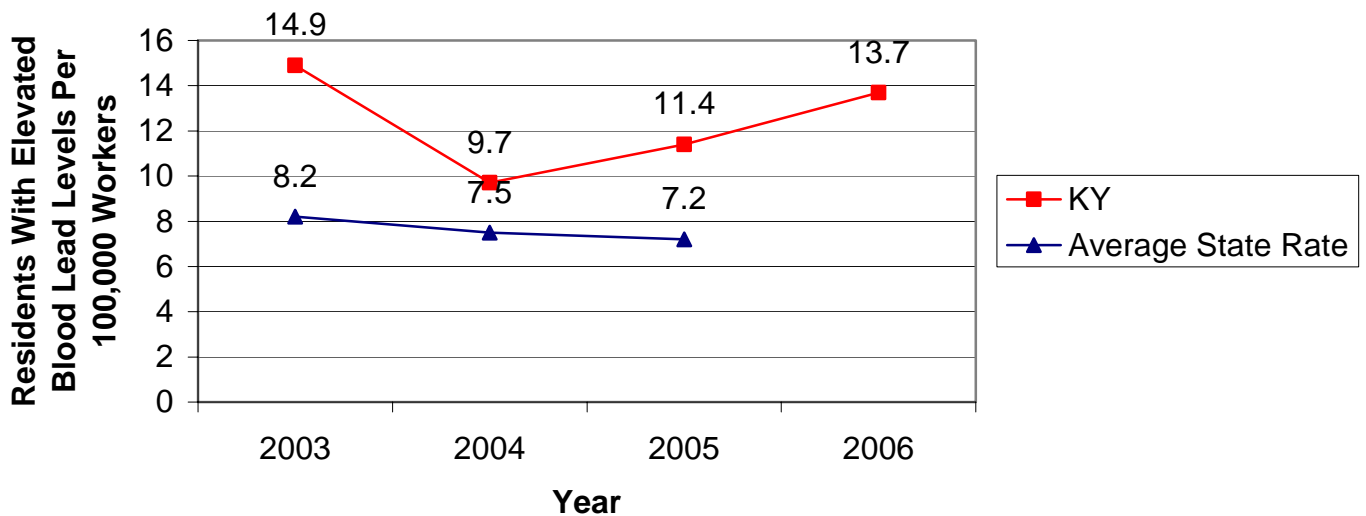
^aU.S. rate is not yet available for the year 2005.

Data Source: Malignant mesothelioma case data was provided by the Kentucky Cancer Registry.

Indicator # 13: Elevated Blood Lead Levels among Adults

Lead exposure is considered elevated in the adult when it reaches 25 µg/dL. In 2006, Kentucky’s prevalence rate of persons with blood lead levels ≥ 25µg/dL was 13.7 cases per 100,000 workers; there were 1.7 cases per 100,000 workers with 40µg/dL blood lead levels. Figure 18 shows Kentucky’s blood lead level rates in relation to the average state rate.

Figure 18. Prevalence Rate of Persons with Blood Lead Levels $\geq 25\mu\text{g}/\text{dl}$ of Persons Age 16 Years or Older for Kentucky and the Average State Rate, 2003-2006.

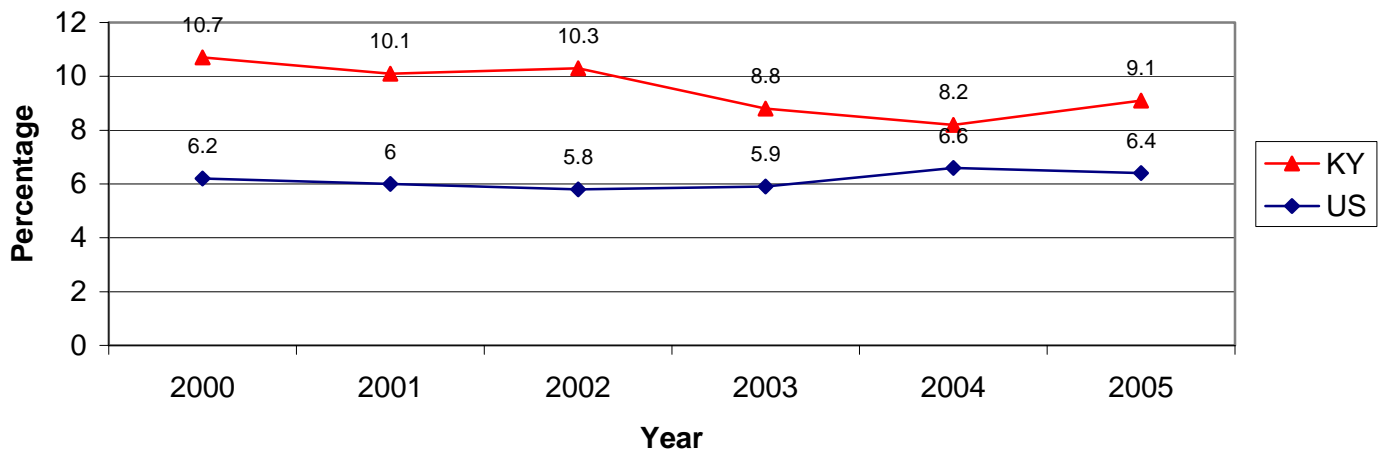


Data Source: Adult blood lead level data was obtained from the Kentucky Adult Blood Lead Epidemiology and Surveillance (ABLES) program located in the Kentucky Lead Poisoning Prevention Program, Division of Adult and Child Health, Frankfort, KY. US rates were obtained from the NIOSH Adult Blood Lead Epidemiology and Surveillance program.

Indicator #14: Percentage of Workers Employed in Industries at High Risk for Occupational Morbidity

The percentage of Kentucky workers employed in high-risk industries for the years 2000-2005 was higher than the percentage of US workers employed in high risk industries (Figure 19).

Figure 19. Percentage of Workers in Industries with High Risk for Occupational Morbidity for Kentucky and the US, 2000-2005.



In 2005, the Kentucky industries at greatest risk for occupational injury were nursing care facilities, scheduled air transportation, and motor vehicle manufacturing, the same as in year 2004. Figure 20 shows the percentage of workers employed in the highest morbidity risk industries in KY compared to the US.

Figure 20. Percentage of Workers in Highest Morbidity Risk Industries in Kentucky and US, 2005.

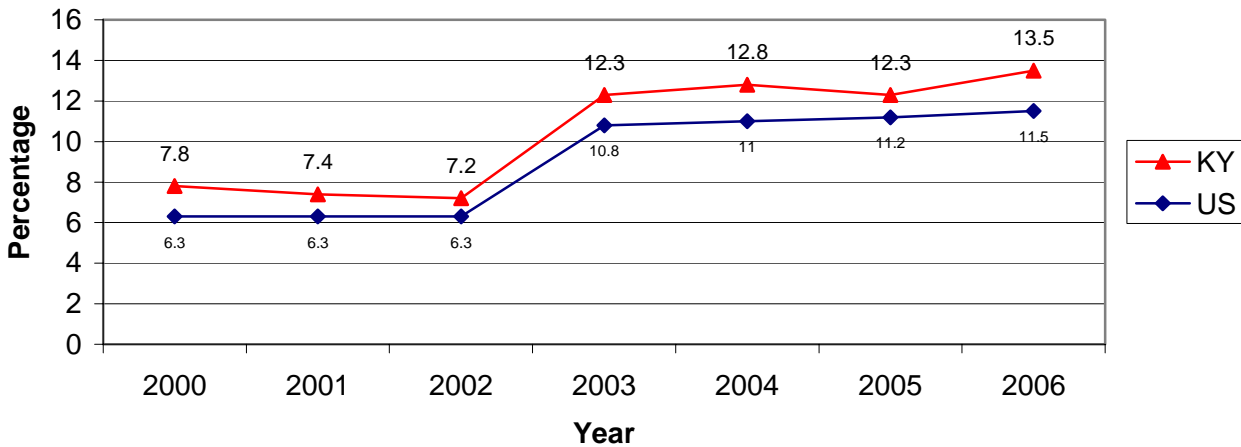


Data Source: Bureau of the Census County Business Patterns (CBP)

Indicator #15: Percentage of Workers Employed in Occupations at High Risk for Occupational Morbidity

The proportion of Kentucky workers employed in occupations at increased risk for occupational injury and/or illness in 2006 was 13.5%, 17% above the national percentage in high risk occupations (Figure 21).

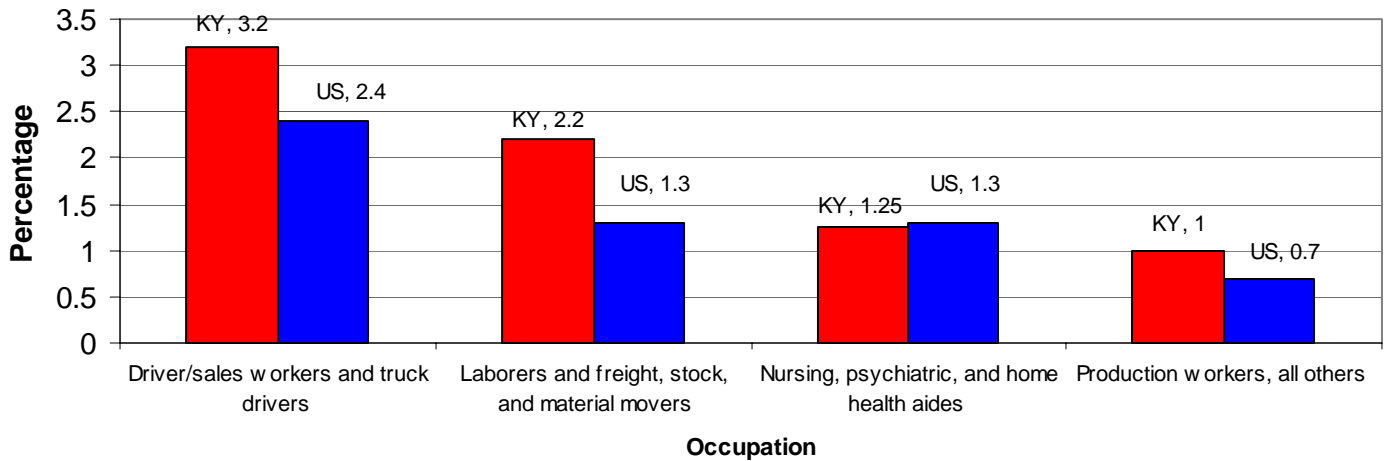
Figure 21. Percentage of Workers in Occupations with High Risk for Occupational Morbidity by State and U.S., 2000-2006^a.



^a Selected high-risk occupations changed in 2003.

The occupations at highest risk for occupational injuries and illnesses in 2006 are shown in Figure 22.

Figure 22. Occupations at High Risk for Occupational Injuries and Illnesses in Kentucky, 2006.



Data Source: Bureau of Labor Statistics Current Population Survey (CPS).

Indicator #16: Percentage of Workers Employed in Industries and Occupations at High Risk for Occupational Mortality

Fourteen percent of Kentucky’s workers were employed in high mortality-risk industries and 12.4% were employed in high mortality risk occupations in 2006. The percentage of Kentucky workers employed in industries at high risk for occupational mortality was similar to the US in 2006 (Figure 23). The percentage of Kentucky workers employed in occupations at high risk for occupational mortality was 15% higher than the national percentage (Figure 24). The industries at highest risk for occupational mortality in 2006 were 1) construction (6.3%); 2) truck transportation (1.9%); 3) animal production (1.2%); and 4) coal mining (0.9%).

Figure 23. Percentage of Workers Employed in Industries with High Risk for Occupational Mortality in Kentucky, 2000-2006.

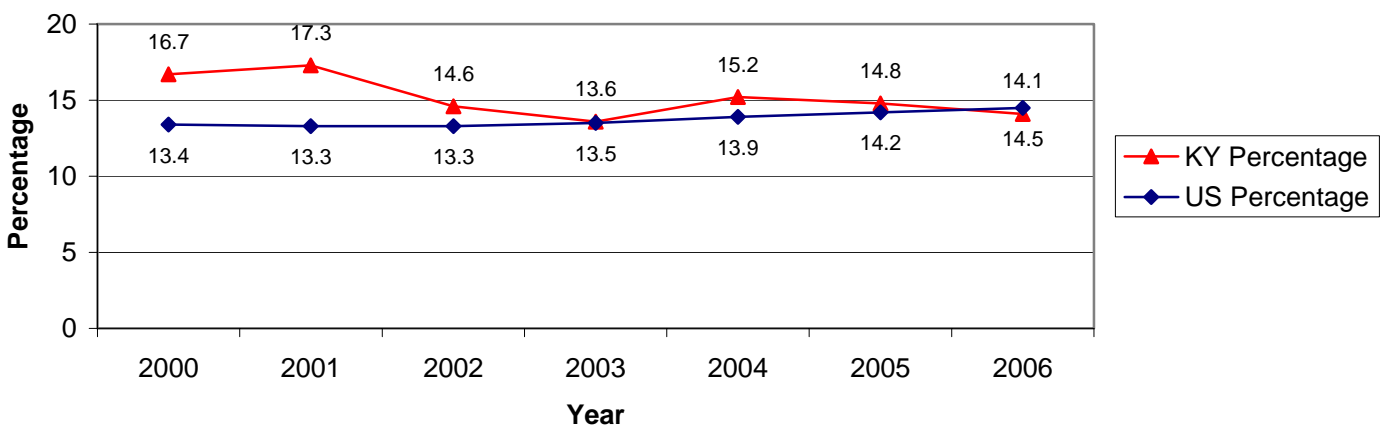
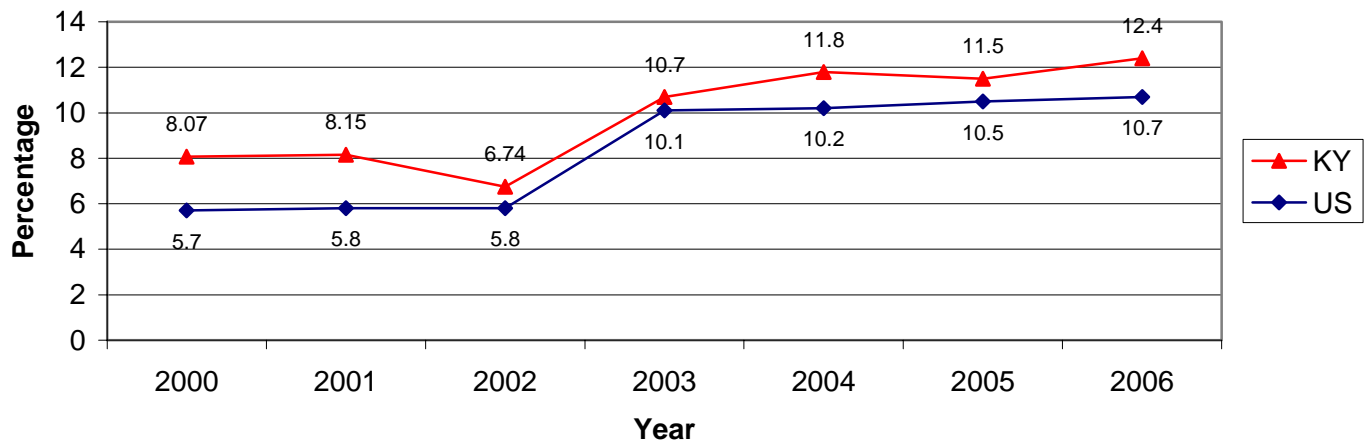


Figure 24. Percentage of Workers Employed in Occupations with High Risk for Occupational Mortality in Kentucky, 2000-2006.



In 2006, the occupations at highest risk for occupational mortality were driver/sales workers and truck drivers (3.2%), and farmers and ranchers (1.12%).

Data Source: Bureau of Labor Statistics (BLS) Current Population Survey (CPS)

Indicator #17: Occupational Safety and Health Professionals

The rates of occupational safety and health professionals in Kentucky are shown for the year 2005 (Table 3).

Table 3. Rates of Occupational Safety and Health Professionals in Kentucky, 2005.

	ABPM	ACOEM	ABOHN	AAOHN	ABIH	AIHA	BCSP	ASSE
KY rate of occupational safety and health professionals per 100,000 employed persons age 16 years or older	1.1	3.6	4.5	6.6	3.1	5.6	5.6	33.9

- ABPM- American Board of Preventive Medicine
- ACOEM- American College of Occupational and Environmental Medicine
- ABOHN- American Board of Occupational Health Nurses
- AAOHN- American Association of Occupational Health Nurses
- ABIH- American Board of Industrial Hygiene
- AIHA- American Industrial Hygiene Association
- BCSP- Board Certified Safety Health Professionals
- ASSE- American Society of Safety Engineers

Data Sources: American Board of Preventive Medicine (ABPM) diplomats database, ACOEM annual roster, American Board of Occupational Health Nurses Directory, AAOHN annual roster, American Board of Industrial Hygiene, AIHA member directory, BCSP member directory, ASSE member directory, BLS

Current Population Survey.

Indicator #18: OSHA Enforcement Activities in the Private Sector

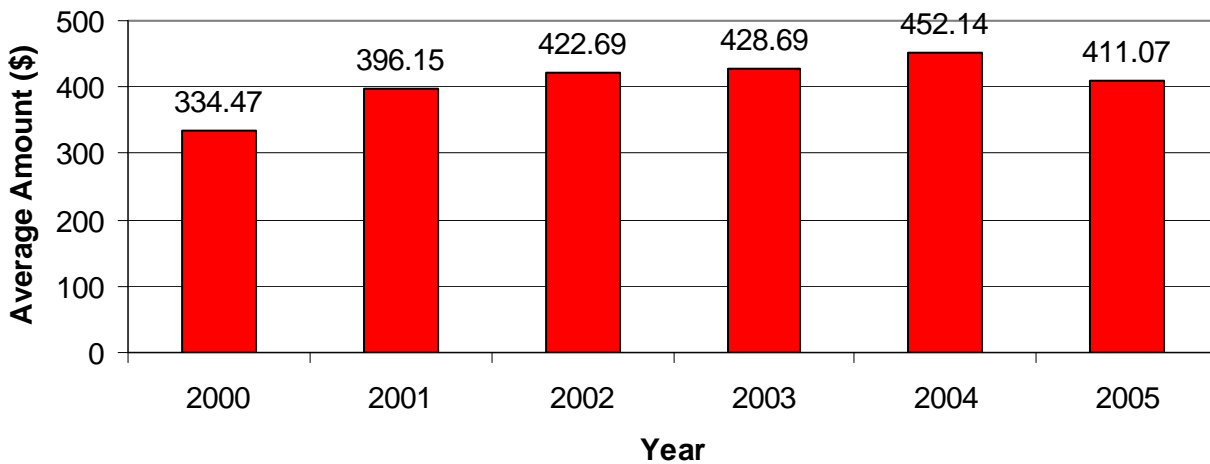
In 2004, there were 1,792 establishments inspected, a decrease from 1,827 in the year 2003. The percentage of establishments under OSHA jurisdiction inspected by OHS in 2004 was the same as in 2003 (1.72% in 2004 compared to 1.74% in 2003).

Data Sources: OSHA annual reports of total inspections conducted and the number or workers covered by these inspections, BLS statistics on Covered Employers and Wages.

Indicator #19: Workers' Compensation Awards

The total amount of workers' compensation benefits paid in Kentucky in 2000 was \$575,292,000; in 2005, the total amount of workers' compensation benefits paid was \$705,802,000. The average amount of workers' compensation benefits paid per covered worker decreased from years 2004 to 2005 to \$411.07 and is shown in Figure 25. When comparing US and Kentucky average amount of workers' compensation benefits paid, Kentucky's average amount was lower (\$411) than for the US (\$432) in the year 2005.

Figure 25. Average Amount of Workers' Compensation Benefits Paid Per Worker in Kentucky, 2000-2005.



Data Source: National Academy of Social Insurance

Indicator #20 (Kentucky-Specific): Fatal and Non-Fatal Occupational Motor Vehicle Collision Injuries

In 2006, there were 13,099 occupational motor vehicle collisions (MVCs) in Kentucky, approximately the same number as in 2005 (Table 4).

Table 4. Unit Type Involved in Occupational Driver Motor Vehicle Collisions, 2000-2006.

Vehicle Type	2006	2005	2004	2003	2002	2001	2000
Bus	613	614	600	508	459	493	531
Emergency Vehicle - In response	339	323	366	348	316	353	322
Emergency Vehicle - Non-response	898	857	851	785	789	753	735
Light truck	10	14	20	41	23	21	66
Military Vehicle	71	78	67	88	90	63	56
Other Publicly Owned Vehicle	358	348	523	374	311	294	540
Passenger Car	4	7	5	17	19	17	30
Railroad Train	57	68	52	66	57	53	43
School Bus	926	992	1014	963	977	1011	1019
Taxicab	170	208	218	224	267	281	322
Truck & Trailer	1671	1459	1533	1150	1026	979	1166
Truck-Single	3174	3334	3328	3124	3127	3334	3401
Truck Tractor & Semi-Trailer	4506	4496	4567	4268	4077	4276	4684
Truck - Other Combination	302	302	295	215	215	217	306
Total Number of Vehicles	13,099	13,102	13,441	12,172	11,753	12,145	13,221

There were 126 people (drivers or occupants) killed and 3,114 people injured in work-related MVCs in 2006 (Tables 5 and 6). The occupational driver motor vehicle fatality rate was 0.66/100,000 employed persons in 2006, decreasing since the year 2004. Occupational driver motor vehicle fatality rates for 2000-2006 are shown in Figure 26.

Figure 26. Occupational Motor Vehicle Fatality Rates- 2000-2006.

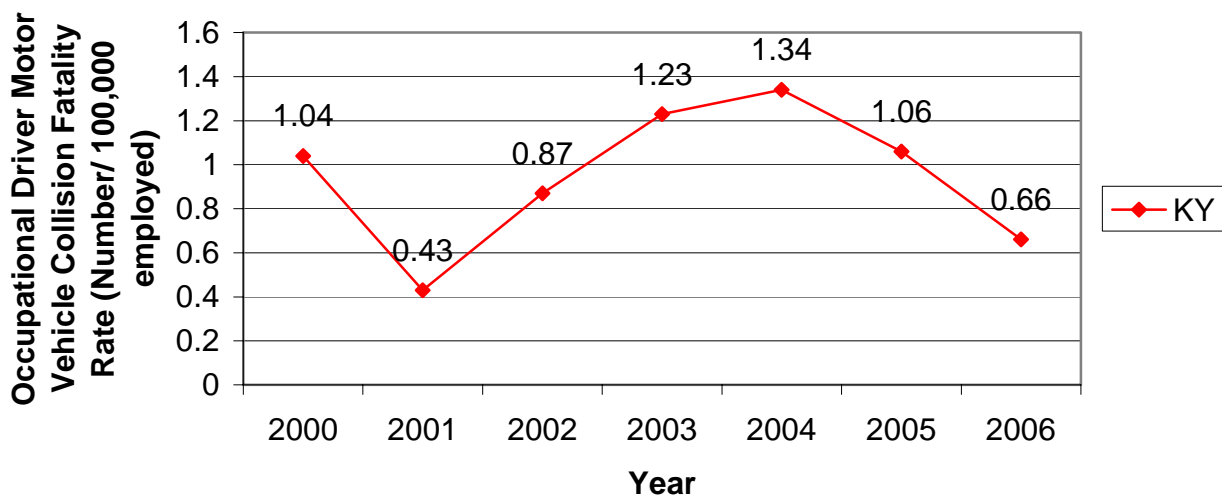


Table 5. Number Killed in Occupational Motor Vehicle Collisions, 2004-2006.

# of People Killed Per MVC	2006	2005	2004
1	102	103	108
2	9	14	10
3	2	0	1
4		1	1
Total	126	135	135

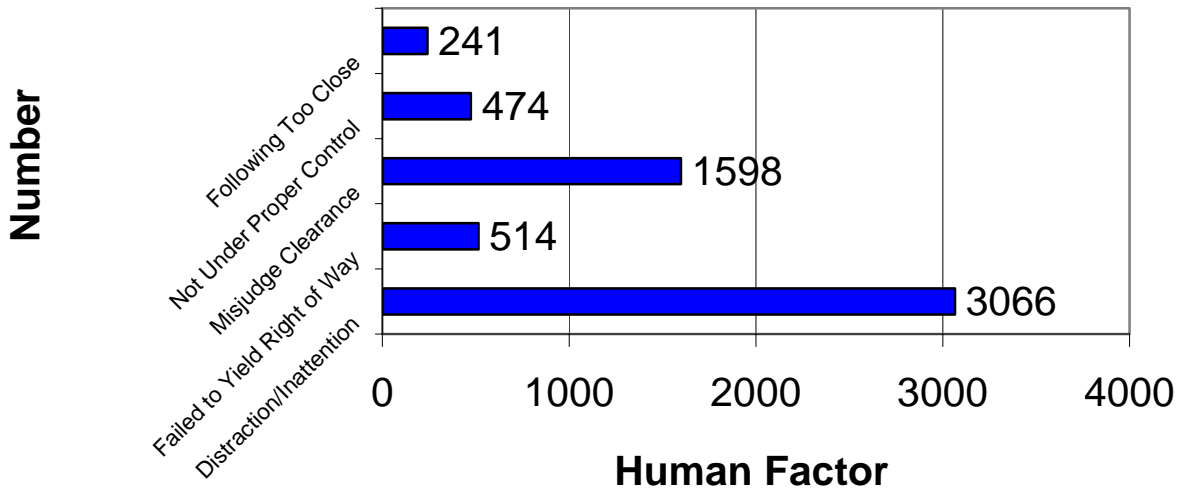
Table 6. Number Injured in Occupational Motor Vehicle Collisions, 2004-2006.

Number of People Injured Per MVC	# of MVCs in 2006	2006	# of MVCs in 2005	2005	# of MVCs in 2004	2004
		Total		Total		Total
1	1405		1449	1449	1540	1540
2	431	862	423	846	418	836
3	113	339	121	363	115	354
4	44	176	58	232	43	172
5	18	90	18	90	14	70
6	10	60	4	24	8	48
7	4	28	3	21	5	35
8	4	24	2	16	1	8
9	3	27	1	9	2	18
10		11	1	10	0	0
11	1	13	0	0	0	0
12		10	1	12	0	0
13	1	59	1	13	0	0
17			0	0	0	0
18			0	0	1	18
19			0	0	2	38
20	1		0	0	0	0
22			0	0	1	22
24			0	0	0	0
27			0	0	0	0
44			0	0	1	44
48			1	48	0	0
59	1					
Total		3,114		3,133		3,194

Distraction/inattention was the primary contributing human factor in occupational motor vehicle collisions for both the working and nonworking driver (Table 13). Distraction/inattention (n=3066), misjudging clearance (n=1598), failure to yield right of way (n=514), not maintaining proper control (n=474), and

following too close (n=241) were the human factors cited more frequently for occupational drivers involved in MVCs (Figure 27). Nonuse of safety belts was recorded in approximately 4% of the collision reports for occupational drivers, the same as in year 2005.

Figure 27. Human Factors Involved in Occupational Motor Vehicle Collisions, 2006.

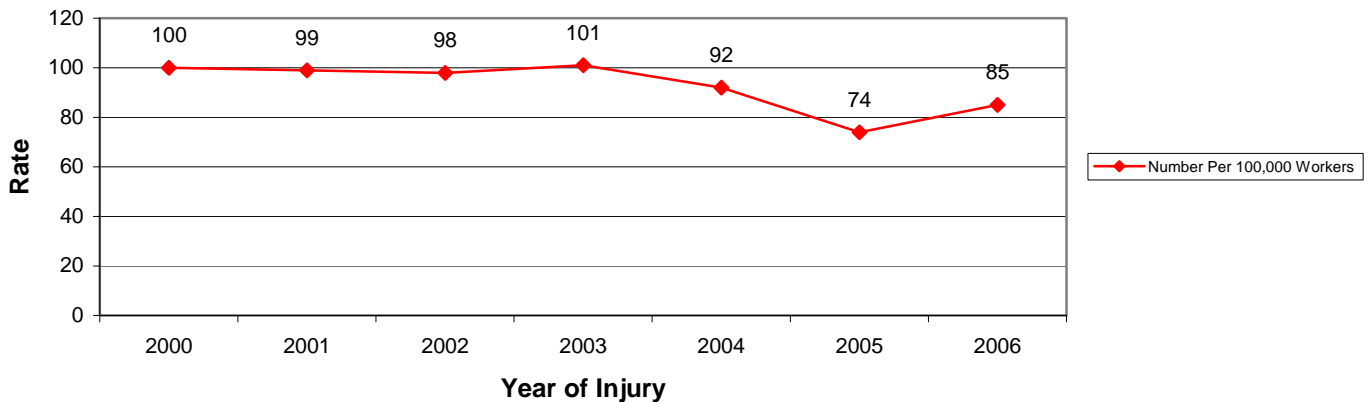


Data Source: Motor vehicle collision surveillance data was obtained from the Collision Report Analysis for Safer Highways (CRASH) database established and maintained by the Kentucky State Police.

Indicator #21 (Kentucky- Specific): Occupational Motor Vehicle Collisions- First Reports of Injury and Claims Filed With Workers’ Claims by Injury Year

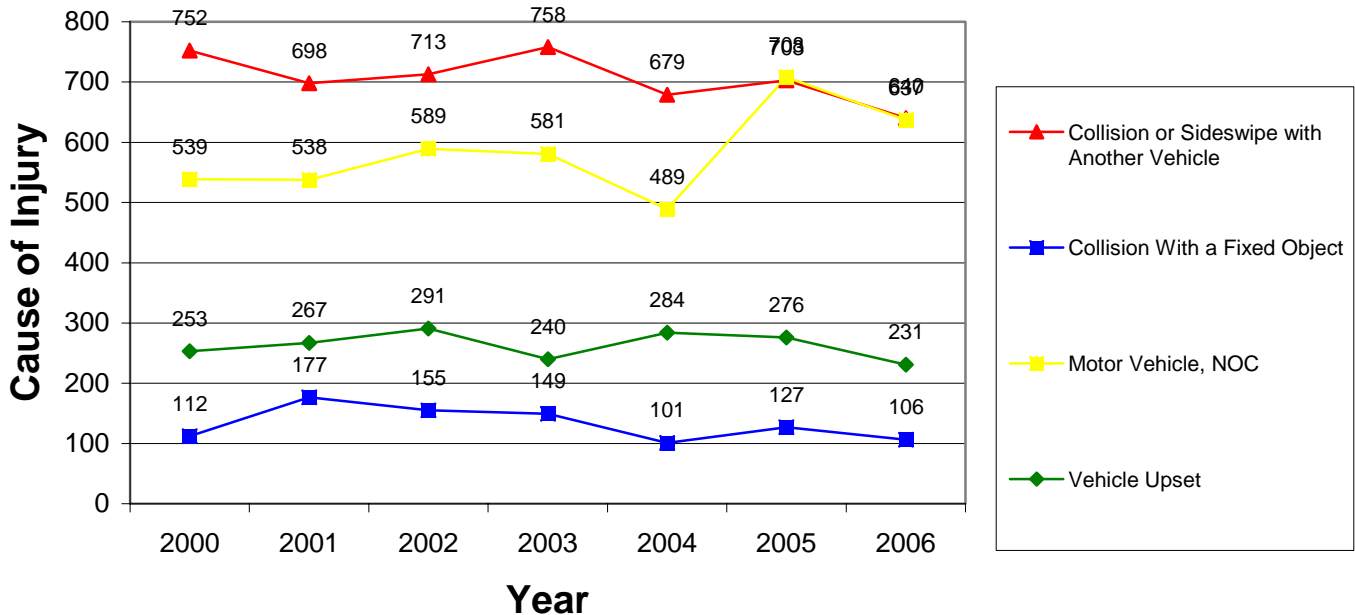
The occupational motor vehicle collision driver injury rate was 85 first reports of injuries and claims /100,000 employed workers in the year 2006 (Figure 28), increased from the 74/100,000 in 2005.

Figure 28. Occupational Motor Vehicle Collision Driver Injury Rates, 2000-2006.



The cause of injury in occupational motor vehicle collision reports and claims was primarily a collision or sideswipe with another vehicle (Figure 29).

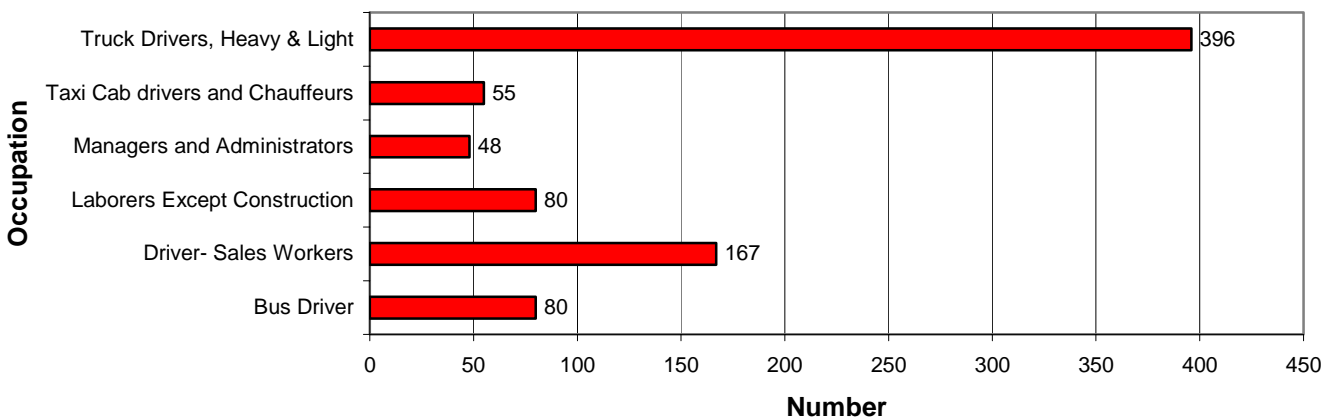
Figure 29. Cause of Injury in Occupational Motor Vehicle Collisions, 2000-2006^a.



^a “Vehicle upset” refers to a vehicle that overturns or jack-knifes

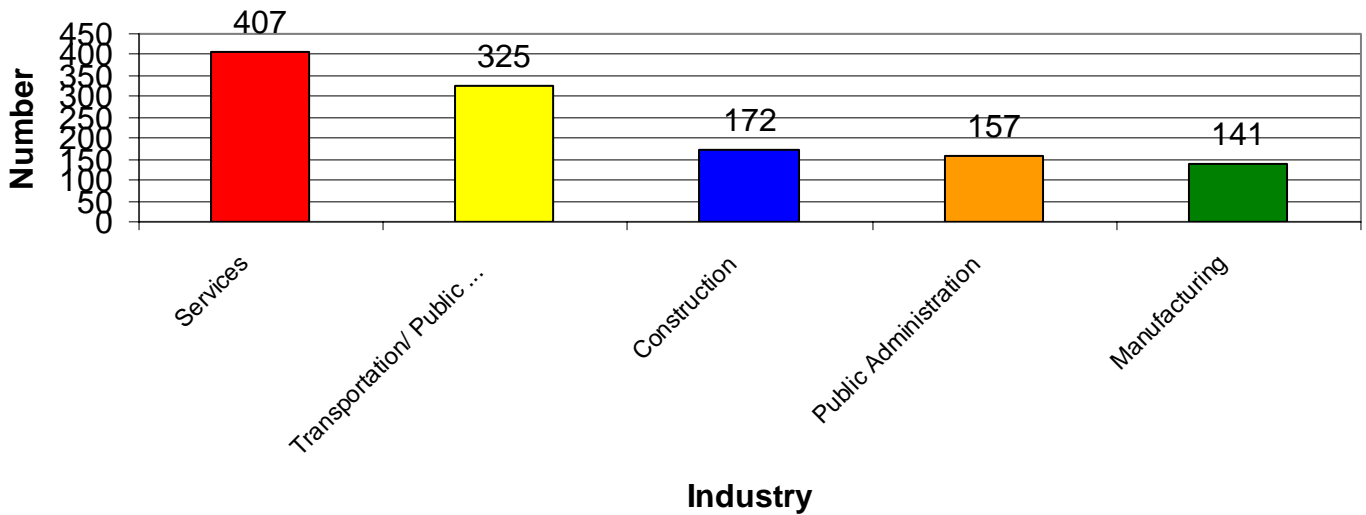
The top six occupations for which motor vehicle collision workers’ first reports of injury and claims were filed for 2006 are shown in Figure 30. The primary occupations were truck drivers (heavy and light) (n= 396), driver- sales workers (n=167), laborers (non-construction) (n=80), and bus drivers (n=80). The number of claims filed increased for bus drivers and driver-sales workers from 2005 to 2006.

Figure 30. Occupational Motor Vehicle Collision First Reports of Injury and Claims Filed With Workers’ Claims by Occupation, 2006.



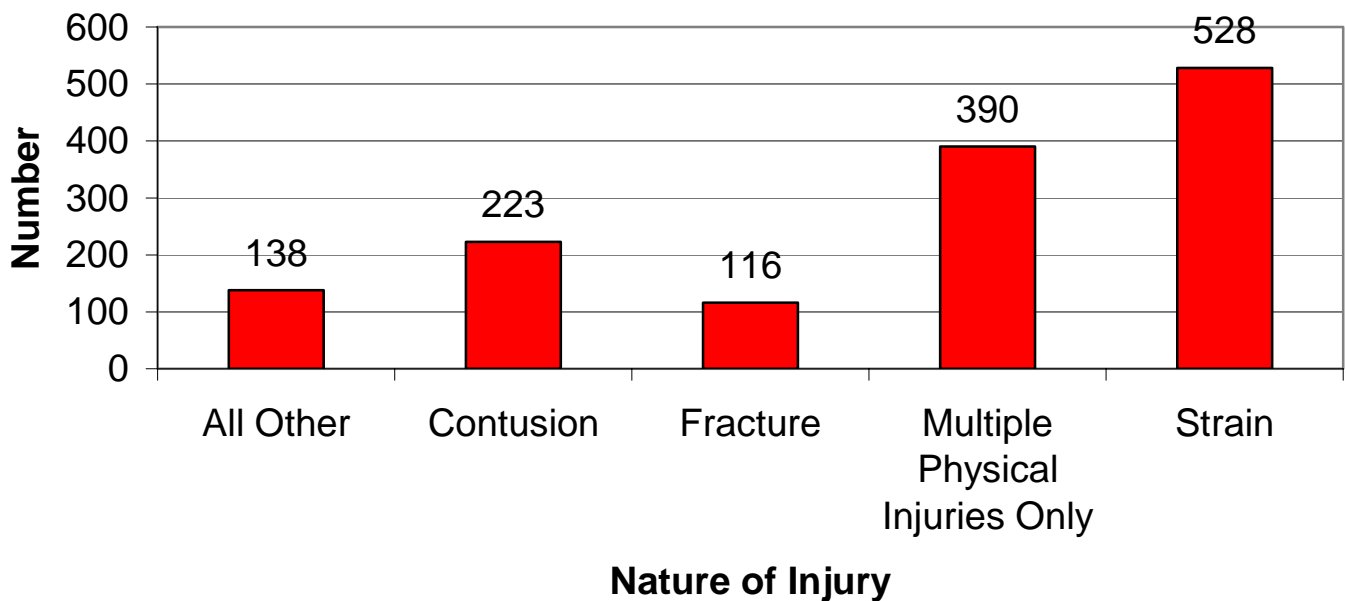
The industries by Standard Industrial Classification (SIC) code where most of the occupational motor vehicle collisions occurred were services, and transportation/ public utilities industries (Figure 31).

Figure 31. Occupational Motor Vehicle Collision First Reports of Injury and Claims Filed With Workers' Claims by Industry, 2006.



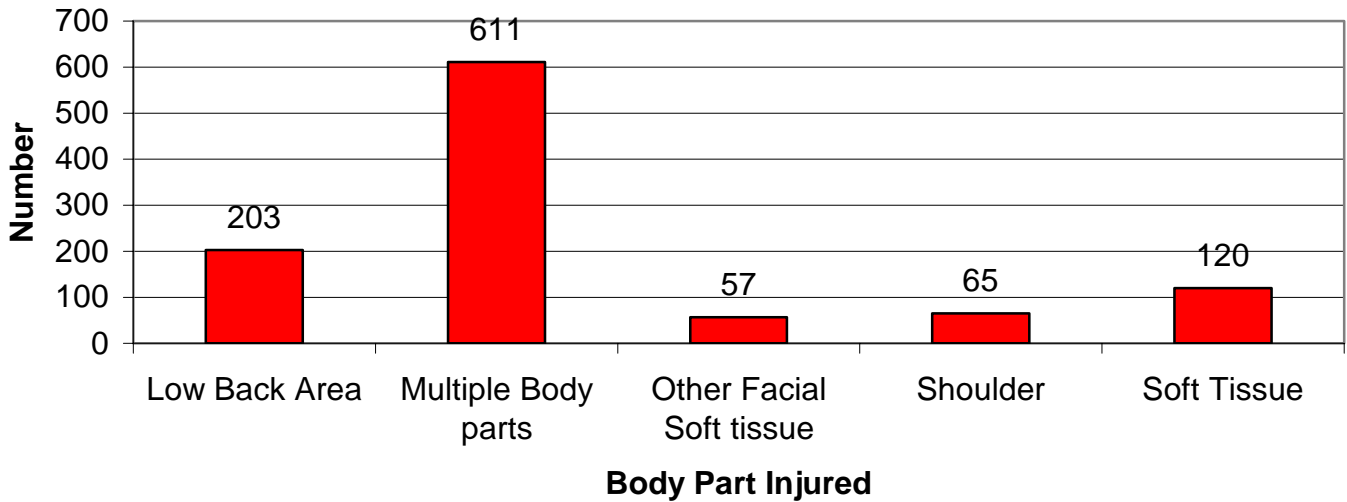
Strains and multiple physical injuries were more frequently suffered by workers involved in motor vehicle collisions (Figure 32).

Figure 32. Occupational Motor Vehicle Collision First Reports of Injury and Claims Filed With Workers Claims by Nature of Injury, 2006.



Multiple body parts and the low back area were most frequently among workers involved in motor vehicle collisions (Figure 33).

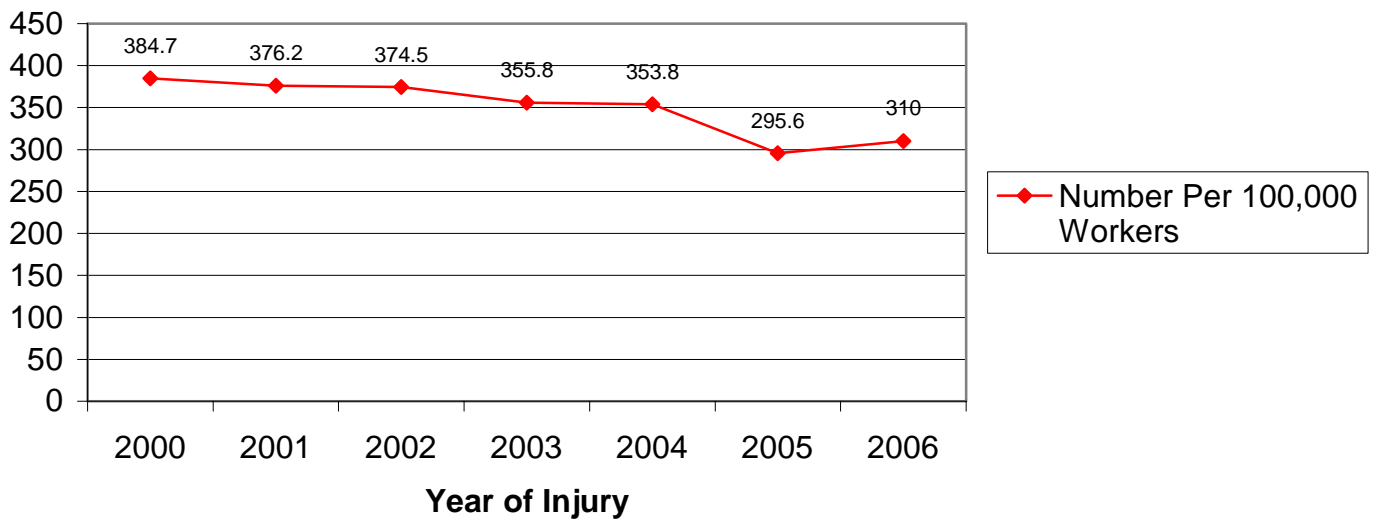
Figure 33. Common Body Parts Injured in First Reports of Injury and Claims Filed with the Office of Workers' Claims, 2006.



Indicator #22 (Kentucky- Specific): Occupational Falls- First Reports of Injury and Claims Filed With Workers' Claims by Injury Year

In the year 2006, there were 5,959 occupational falls claims and first reports filed. The occupational fall injury incidence rate was 310/100,000 employed workers in the year 2006, an increase from 296/100,000 in 2005. The fall injury incidence rates are shown in Figure 34.

Figure 34. Occupational Fall Injury Incidence Rates, 2000-2006.



The top 10 industries for occupational falls in the year 2006 are shown in Table 7.

Table 7. Top Ten Industries Where Occupational Falls Occurred, 2006.

Industry	Frequency (n)
Eating Places	510
Elementary and Secondary Schools	445
General Medical and Surgical Hospitals	232
Skilled Nursing Care Facilities	223
Help Supply Services	206
Executive Offices	196
Grocery Stores	158
Bituminous Coal Underground Mining	142
Department Stores	126
Nursing and Personal Care	117

Work-related falls occurred most frequently in non-construction laborer occupations (Table 8).

Table 8. Top Ten Occupations Where Occupational Falls Occurred, 2006.

Occupation	Frequency (n)
Laborers, Except Construction	483
Truck Drivers Heavy and Light	339
Sales Workers, Retail and Personal Services	302
Nursing Aides or Orderlies and Attendants	262
Miscellaneous Machine Operators, NEC	170
Kitchen Workers- Food Preparation	168
Teachers NEC	165
Carpenters and Apprentices	155
Construction Laborers	139
Janitors and Cleaners	133

Strains were the injuries most frequently reported when workers fell (n=1538) in 2006. Other types of injuries were contusions (n= 1106), fractures (n= 986), sprains (n= 713), and multiple physical injuries (n= 671). The body parts most frequently affected in work-related falls were multiple parts (n= 1090), knees (n= 919), ankles (n=597), low back area (lumbar and lower sacral) (n= 556), and shoulders (n= 383).

CONCLUSIONS

Kentucky has made significant advances in the reduction of occupational injuries and illnesses. Incidence rates were reduced for total work-related injuries, work-related hospitalizations, work-related amputations, carpal tunnel syndrome, asbestosis, total pneumoconiosis, and fatal occupational motor vehicle collisions for the latest data years available. Areas with increased injury incidence rates include total work-related fatalities, work-related burns, musculoskeletal diseases, coal workers' pneumoconiosis hospitalizations, pesticide-associated poisonings, blood lead levels, nonfatal occupational motor vehicle collisions, and occupational falls. Prevention efforts this year will focus on the prevention of occupational motor vehicle collisions, and pesticide- associated poisonings.