

**Review Of Workplace Health and Safety
Compensation Commission Claims
By Public Health Care Employees In
Newfoundland And Labrador
1990 – 1999
(Provincial Report)**

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Executive Summary

The following report profiles the injury claim history of Health Board employees in Newfoundland and Labrador from 1990 – 1999. Additional data on claim type is reported for the 2000 calendar year where available. Employers involved in human resources, clinical management, employee wellness and injury prevention along with unions, health and safety professionals, and workers will find useful information on injuries and accidents.

From 1990 – 2000, the Workplace Health and Safety Compensation Commission (WHSCC) of Newfoundland and Labrador has accepted almost 26,000 claims from publicly employed health care workers in the province. These claims included 12,307 time-loss, 11,750 medical aid, 1737 report only and 2 fatality claims. For the period 1990-1999, WHSCC has paid out over \$93 million dollars for these claims. A total of 192,128 weeks of work or 3695 person years of work were lost because of injuries occurring in the workplace.

The claims for this period can be summarized as follows:

Claimant Information

- Health Board claimants are typically 74% female.
- The average age of claimants has decreased from 46.8 in 1990 to 40.8 in 2000.
- The occupational categories with the highest percentage of lost-time weeks are “Nursing Assistants”(26%), “Graduate Nurses Except Supervisors”(24%), and “Janitors/Cleaners” (13%).

Claim Type and Lost-time Weeks

- The number of lost-time claims has decreased by 52.8% from 1631 in 1990 to 770 in 1997. This number has since increased to 1073 in 1999.
- The number of lost-time benefit weeks (Temporary Earnings Loss (TEL) + Extended Earnings Loss (EEL)) has decreased 80.8% from 46,750.1 in 1990 to 8980 in 1997. This number has since increased to 10,104.5 in 1999.

Benefit Type and Associated Costs

- The costs attributable to TEL, EEL, Rehabilitation (REHAB), Medical Aid (MA), and Permanent Functional Impairment (PFI) benefits have decreased overall from 1990 to 1999. However, TEL and MA costs have begun to show moderate increases from 1997 to 1999.
- The average length of TEL benefit periods has decreased by 41.0% from 17.8 weeks for claims starting in 1990 to 10.5 weeks for claims starting in 1999.
- The number of Lost-time claims with associated extended earnings loss benefits (EEL) have decreased from 56 for 1990 to 5 in 1999.
- The number of claims requiring re-training/upgrading had decreased in the mid-nineties but has since increased to a level that is only 9.1% lower than that of 1990.

Claim Characteristics

- “Back, spine, or trunk” was the part of body injured in 50% of all lost-time claims between 1990 and 1999.
- “Overexertion in lifting” was the type of accident reported in 51% of all lost-time claims between 1990 and 1999.
- The most common nature of injury was sprains, strains or tears attributable to 86% of lost-time claims.
- A person other than the injured worker was the main source of injury attributable to approximately 45% of lost-time claims.

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Part 1. Introduction

1.1 Background

The Provincial Health and Community Services Human Resource Planning Steering Committee was established in 1999 to study health human resource planning in the province of Newfoundland and Labrador. This report is one of the initiatives of the committee. It will contribute to the overall evaluation and future planning of human resources for the health sector.

1.2 Purpose

Data from a recent report by the Association of Workers Compensation Boards of Canada (AWCBC)¹ shows that workers in the health and social service industries in Canada had more than 35,000 time-loss injuries in 1999. Nurses and assisting occupations (aides, orderlies, etc.) are the largest group of health workers and generally account for over 75% of workplace injuries in health care. In Newfoundland and Labrador, the number of claims in 1999 for health and social service workers was 1,113, up 25% over the previous year. While data at the health sector level is limited, a 1998 research brief by the Newfoundland and Labrador Workplace Health Safety Compensation Commission reported that 1 out of every 2 lost time claims stems from injuries occurring in the service industry, with the health services sector being responsible for 1 out of every 4 lost time claims within this industry⁴.

The number of employees away from work for any given year, due to work accidents and injuries, has the potential to dramatically affect any process of human resource planning. This report is an attempt to profile the injury claims of Health Board employees in the province of Newfoundland and Labrador from 1990 to 1999. Information provided in this report will help the both the committee members and stakeholders to better understand average incidence rates, types of injuries, and the impacts experienced by the health sector, and how this will relate to future health human resource planning.

1.3 Limitations

The data supplied by Workplace Health and Safety Compensation Commission (WHSCC) represented the accepted claims from employees in the public health care system. In general WHSCC reports at an industry level (i.e. Service Industry) and very rarely at the sector level (i.e. Health Care Sector). Attempts to compare this current analysis with health sector WCB (Worker's Compensation Board) utilization in other jurisdictions are limited. A national scan for Worker's Compensation reports focusing on the health care sector, resulted in one report from British Columbia, which will be referenced where appropriate.

As part of the claim documentation process, all Workers' Compensation Boards across the country request an occupation title for each employee filing a claim, however this request is not mandatory in Newfoundland & Labrador. Furthermore, the occupations that are provided by claimants are coded in the WHSCC database using Newfoundland Industry Classification (NIC) codes that, for many occupations, are out-of-date. Of the 26,048 records retrieved from WHSCC, 13,202 records were without a stated occupation. Fortunately, for reporting purposes, these claims accounted for only 10.9% of the total lost-time dollars paid by the WHSCC. Out-of-date industry codes are also an issue when reporting claimant information by occupation. For example, there are several nursing codes present in the data:

- Nursing Supervisors – generally nurse managers
- Graduate nurses, except supervisors – the majority of nurses employed in the public health care system
- Nursing assistants – generally Licensed Practical Nurses
- Nursing, therapy related – Nursing therapy and related assisting occupations. Generally a catch all when inadequate information is provided to enable classification elsewhere.
- Nursing aides and orderlies – generally personal care attendants, ward clerks, etc.
- Nurses in training – student nurses.

The occupational codes used by WHSCC are nationally based to facilitate inter-provincial comparisons. Standard criteria have been developed to determine the appropriate category for injured workers. For the purposes of this report, occupational groups are reported as coded by WHSCC.

WHSCC data is recorded by the commission on a claim basis rather than a yearly basis. Thus, the number of weeks associated with a claim represents the total number of weeks paid on that claim to date, which for the purposes of this report was Feb 5, 2001. Therefore, while the number of claims has been restricted to claims commencing between the years 1990 – 2000 inclusive, the dollars associated with a claim may include dollars paid up to and including Feb 5, 2001. While, the “start date” and “last payment date” for each claim was provided by WHSCC, other information regarding the claim history such as overlap of benefit types, intermittent periods of inactivity, and carryover information from previous years was not available.

A further limitation of this report has been the inability to compare the annual number of claims to the number of public health sector employees in the province. Total numbers of Health Board employees per year for the past ten years are unavailable, thus preventing a comparison of how the total number of employees may have affected the number of claims per year.

Although, the majority of Health Boards in the province have had Injury Prevention Programs in place for many years, the lack of dedicated funding and/or personnel has resulted in varying levels of implementation throughout the province. A review of current injury prevention practices for each Health Board, while outside of the scope of this project, is recommended.

1.4 Scope Of Report

Data for this report was provided by the Workplace Health, Safety and Compensation Commission (WHSCC) of Newfoundland and Labrador for the period from January 1990 to February 2001. Complete data is available for the 10-year period between 1990 and 1999. For the year 2000, data on the number and types of claims are reported, however information relating to the length of claims, many of which would still remain active late into 2001, is incomplete and is therefore not included in this report.

All accepted claims originating from any Health Board employee in the province between January 1990 and February 2001 were summarized in this report. Not included however, are health professionals or employees practicing within the private sector or those employed by government.

The report has been broken down into two major parts:

- Part 1, the Introduction, provides an overview of the report purpose, scope and terminology.
- Part 2 provides a provincial roll-up of Workers Compensation information for Health Boards in the province.

An additional report will provide a board-by-board profile of Workers Compensation injuries and lost time weeks.

1.5 Terminology

The statistics provided by WHSCC are based on accepted injury claims from workers throughout the province. The following terms are used by WHSCC to classify injuries, compensation, and health services (<http://www.whscc.nf.ca>).

1. Time-Loss Claims: Time-loss claims include claims where time at work is lost due to a workplace injury.
2. Medical-Aid Claims: - A claim which has been accepted by the Board but for which no time-loss compensation has been authorized. Includes No Time Loss - Medical Aid Only and Time Loss - Medical Aid Only claims².
3. Fatality Claims – Those claims where a survivor benefit is paid
4. Temporary Earnings Loss (TEL) Benefits - When a work injury results in temporary loss of earnings, the WHSCC pays the worker *temporary total disability* or *temporary partial disability* benefits, based on the nature and degree of disability, for as long as the disability lasts.

5. Rehabilitation (Rehab) Benefits - The Commission will provide services and programs to assist a worker to return to the work force, but such support is conditional on the worker's active participation in his/her own rehabilitation. Rehabilitation services and programs are offered to an injured worker, but only to the extent that these services are necessary to overcome employment obstacles imposed by the injury, and in a manner that will cost effectively restore the worker to an earning capacity comparable to the pre-injury level. Examples of rehabilitation services include refresher courses for people away from the workplace for an extended period of time due to injury, or re-training when the claimant, because of the injury, is unable to return to a pre-injury job.

6. Extended Earnings Loss (EEL) - benefits are paid to injured workers who experience loss of earning capacity after maximum medical improvement and, where appropriate, the application of vocational rehabilitation services. Benefits are paid as long as the loss continues, but not past age 65.

7. Medical Aid (MA) Benefits – The Commission pays reasonable health care expenses related to a workplace injury. These include medical doctor's fees, chiropractic fees, hospital costs, prescription drugs, physiotherapy, occupational therapy, and aids such as crutches or prosthesis. The Commission also pays the reasonable cost of travel, accommodations, and meals when you have to leave your home community for health care treatment. The Commission will also pay for homeopathic remedies and herbal medicines prescribed by your medical doctor.³

8. Permanent Functional Impairment (PFI) - A worker who suffers a permanent impairment as a result of a work-related injury may be entitled to a lump sum payment for Permanent Functional Impairment (P.F.I.). The P.F.I. benefit recognizes non-economic loss, as opposed to loss of earning capacity, and is based on measurable loss of bodily function.

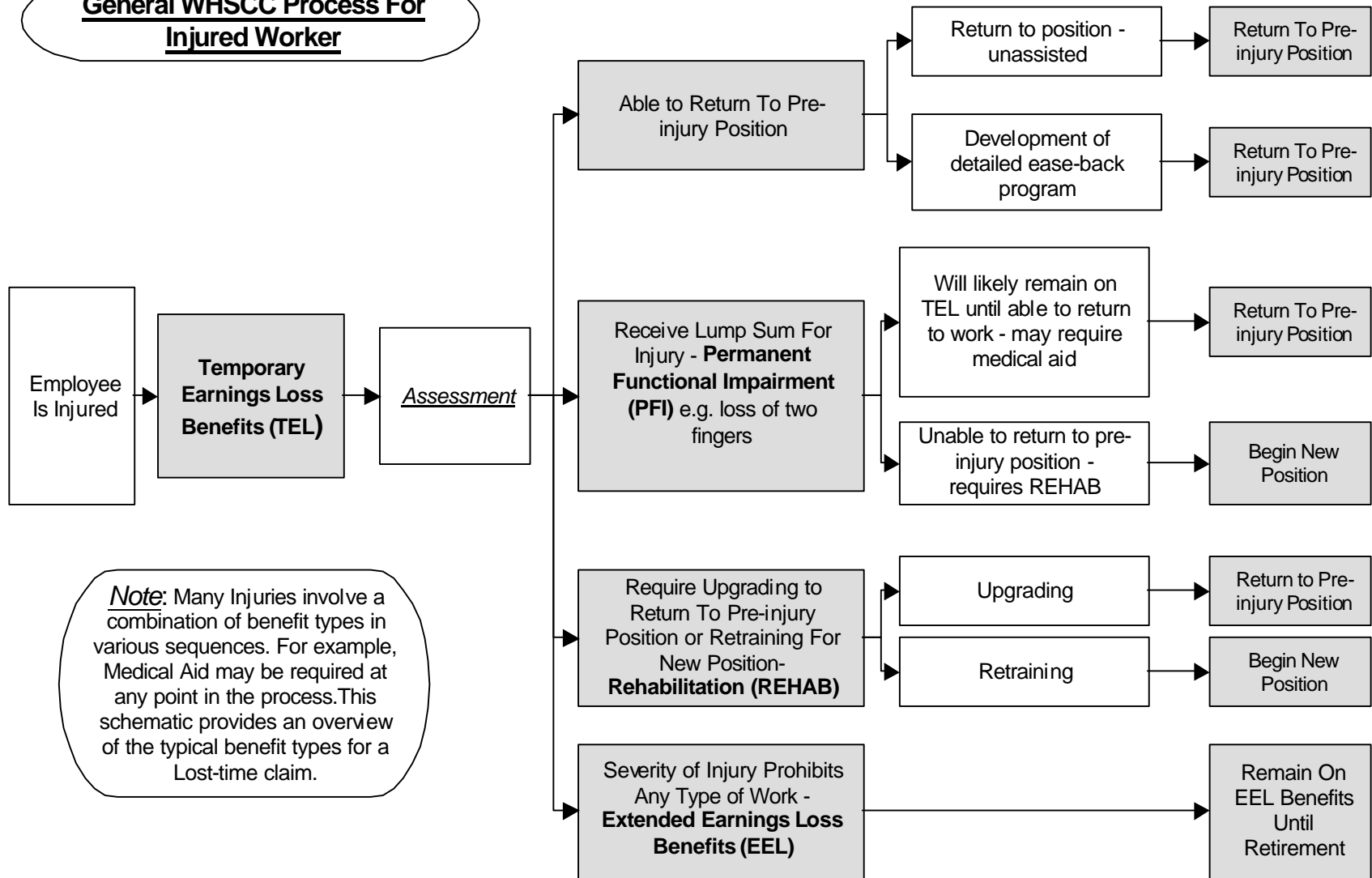
9. Lost-time Weeks – For the purposes of this report, lost-time weeks will equal TEL + EEL weeks.

10. Injury Related Dollars – Injury related dollars include all dollars attributable to injury recovery excluding rehabilitation (retraining/upgrading) costs. For this report, injury related dollars equal TEL + EEL + MA + PFI.

1.6 General WHSCC Process

The following flow chart provides a general overview of the WHSCC process for an injured worker beginning a lost-time claim. It is important to note however, that the situation presented in the diagram is a somewhat simplistic version, as many claims require a variety of benefit types in various sequences.

General WHSCC Process For Injured Worker



Note: Many Injuries involve a combination of benefit types in various sequences. For example, Medical Aid may be required at any point in the process. This schematic provides an overview of the typical benefit types for a Lost-time claim.

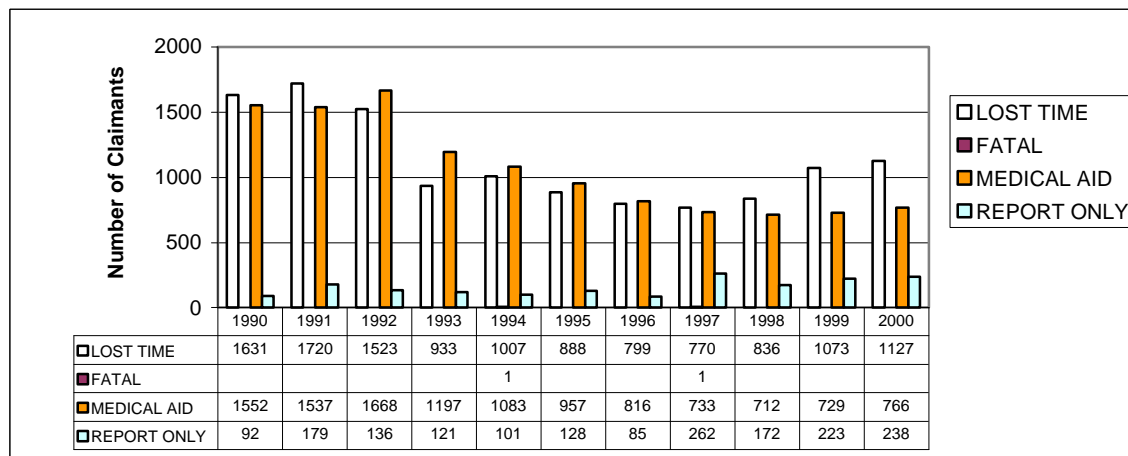
Part 2. Provincial Summary

From 1990 – 2000, the Workplace Health and Safety Compensation Commission (WHSCC) of Newfoundland and Labrador has accepted almost 26,000 claims from publicly employed health care workers in the province. These claims included 12,307 time-loss, 11,750 medical aid, 1737 report only and 2 fatality claims. For the period 1990-1999, WHSCC has paid out over \$93 million dollars for these claims. A total of 192,128 weeks of work or 3695 person years of work (total weeks/52) were lost because of injuries occurring in the workplace. The following data depicts a summary profile of WHSCC data for all public health employees in the province.

2.1 Claim Information

2.1.1 Claim Type

Figure 1: Number of Claims Per Year By Claim Type, 1990 - 2000



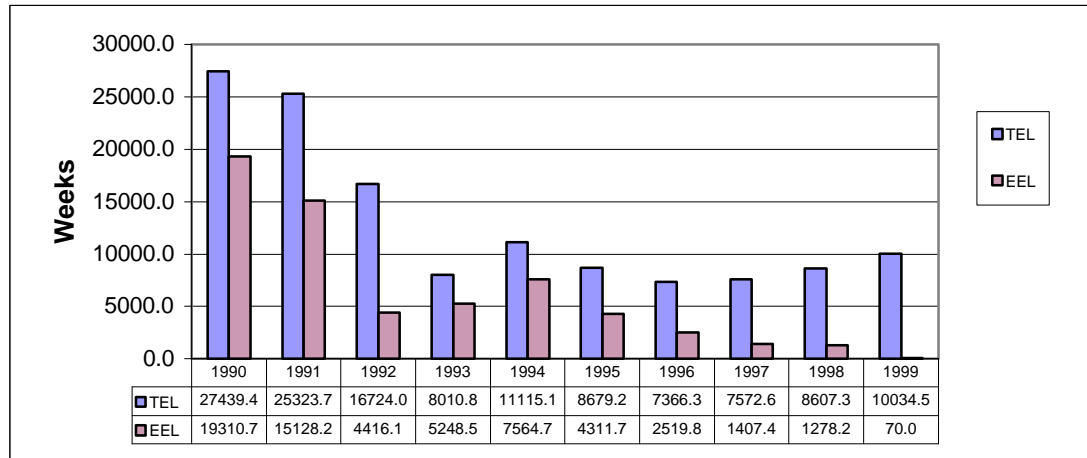
As illustrated in Figure 1, there was a reduction in lost-time claims, medical aid claims and report only claims throughout the mid-nineties, however the number of lost-time claims have been steadily increasing since 1997. Increases have also occurred between 1998 and 2000 for medical aid and report only claims. It is difficult to predict if this rise will continue or if the number has plateaued.

2.1.2 Lost Time Weeks

From a human resources perspective, an important component of planning is the amount of time employees spend away from the workplace due to workplace injury. Many lost-time claims include a variety of benefit types which may occur in a number of different sequences, thus it is difficult to quantify actual lost-time weeks per claim. For the purposes of this report, lost-time weeks include temporary earnings loss (TEL) weeks and extended earnings loss (EEL) weeks which clearly represent time away from the workplace. Rehabilitation weeks represent re-training periods and are discussed further in

section 2.15. Figure 2 provides a provincial profile of lost time weeks by year of claim commencement and benefit type. Thus, TEL weeks for 1990 represent the total number of TEL weeks associated with any claim that started in 1990.

Figure 2: Lost Time Weeks By Year Of Claim Commencement 1990 - 1999



The data in Figure 2 presents a similar pattern to the number of claims by type presented in Figure 1. As expected, we see a fairly stable decrease in the number of lost-time weeks through the years 1990 – 1996, followed by a slow yearly increase though to 1999.

2.13 Total Dollars Paid

The following table provides a summary of the total dollars paid by WHSCC to Health Board employees throughout the province from year of claim commencement to Feb 5, 2001 by benefit type. Thus the TEL dollars reported for 1994, for example, represent the total TEL dollars paid to date on any claim that started in 1994.

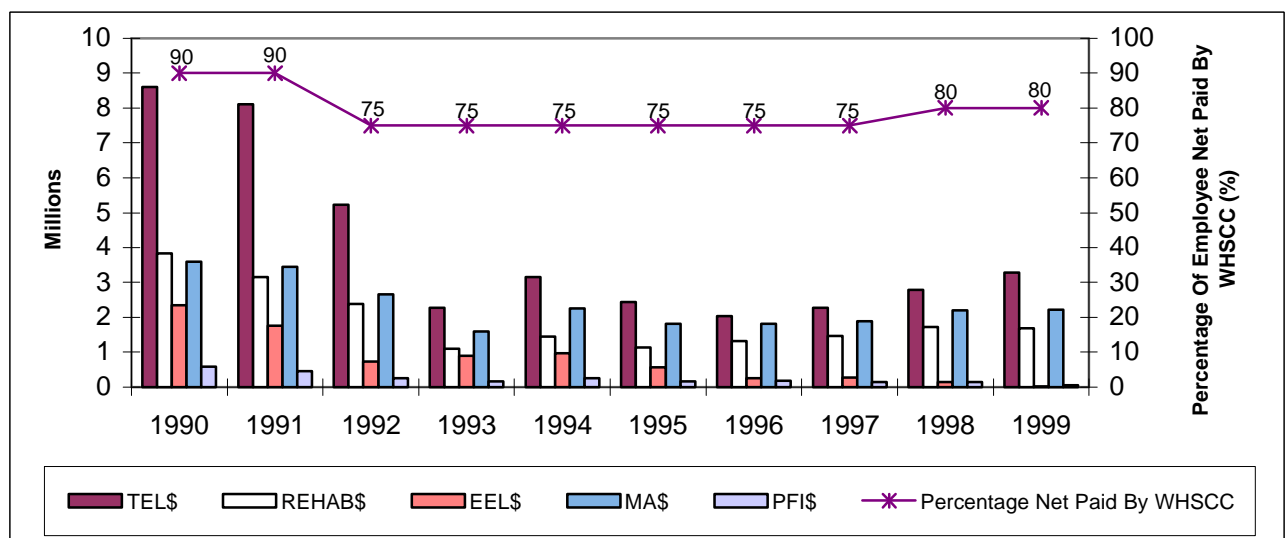
Table 1: Total Dollars By Year of Claim Commencement And Benefit Type

Year	TEL \$	EEL \$	REHAB \$	MA \$	PFI \$	Total
1990	8604480.64	2340130.83	3832379.49	3605410.54	582799.97	18,965,201.47
1991	8110649.06	1752506.88	3160285.47	3449244.53	452158.25	16,924,844.19
1992	5233800	737970.24	2382484.32	2658037.52	255022.5	11,267,314.58
1993	2277703.64	899655.04	1091374.91	1597027.77	158150	6,023,911.36
1994	3164349.53	962408.04	1441347.2	2251790.83	263212.5	8,083,108.10
1995	2441319.42	567307.98	1130262.11	1822210.44	154170.72	6,115,270.67
1996	2031948.58	260917.28	1310033.4	1809258.22	181174.5	5,593,331.98
1997	2264500.66	268760.56	1466875.93	1880346.47	145050	6,025,533.62
1998	2783233.97	136358.94	1719776.75	2207367.25	149965	6,996,701.91
1999	3292724.99	24553.68	1682564.18	2214737.68	48680	7,263,260.53
Total	40,204,710.49	7,950,569.47	19,217,383.76	23,495,431.25	2,390,383.44	93,258,478.41
% Decrease 1990 To 1999	61.7%	98.9%	56.1%	38.6%	91.7%	

A total of over 93 million dollars was paid to public health care employees by WHSCC for claims that started between 1990 and 1999 for work related injuries. While all claim types show a decrease in the dollars paid, the percentage decrease from 1990 to 1999 varies for claim types. Both Extended Earnings Loss (EEL) dollars and Permanent Functional Impairment (PFI) dollars have decreased substantially from 1990 to 1999 by 98.9% and 91.7% respectively. Temporary Earnings Loss (TEL) dollars have declined by 61.7% over the study period. Rehabilitation (REHAB) dollars and Medical Aid (MA) dollars paid in 1999 show the lowest percentage decline from the 1990 levels, totaling 56.1% and 38.6% respectively. This finding is in line with other WHSCC reports which state that while lost time injuries have decreased, the injuries that are now being accepted by WHSCC are increasingly more costly to treat and rehabilitate⁴.

It is important to note that since 1998, WHSCC has been paying 80% of the net earnings for employees, 10% lower than the 90% coverage that was offered in 1990. Total dollars paid by claim type and year of claim commencement along with the percentage of employee net earnings paid out by WHSCC is presented graphically in Figure 3.

Figure 3: Total Dollars Paid By Benefit Type and Year

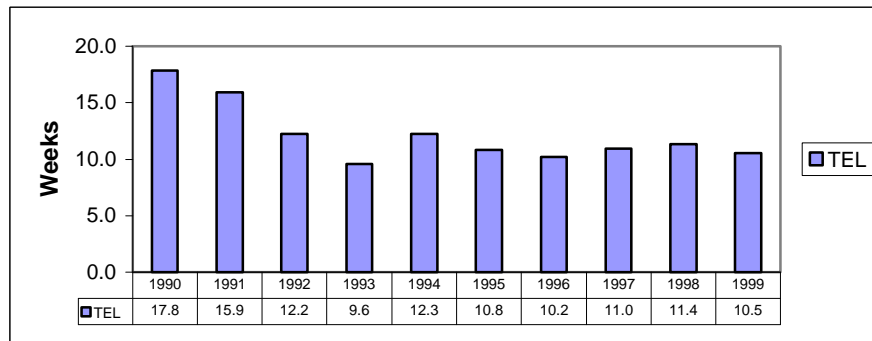


2.14 Average Length of Claim

Many factors contribute to length of claim. Issues such as the claimants age, health history, work effort required by the job, type of injury, etc. all play a role in determining how long an injured worker will be away from the workplace. Many time-loss claims span more than one year with periods of inactivity interspersed throughout. Claims with extended earnings loss benefits will span several years and for most employees, in the health sector, will mean continued compensation until the age of 65 when a pension would replace EEL benefits. In the absence of record histories which would include all start and stop dates of each benefit type associated with a claim, average length was calculated for each year by averaging the total weeks of that benefit type that has been

paid on claims beginning in the reference year. Figure 4 provides an estimate of the average length of TEL benefit periods, by year of claim commencement.

Figure 4: Average Length of TEL Benefit Periods By Year Of Claim Commencement



As illustrated in Figure 4, the average length of TEL benefit periods has decreased over the ten-year reference period. Return-to-work programs and improved disability management programs have likely facilitated the observed decrease in average benefit length.

Given the extended nature of EEL benefits, it is difficult to provide an accurate estimate of average length. Because many claims remain active, and will continue to be for several years, any attempt to quantify the average length would be at best an underestimate. However, EEL benefits are costly to employees, employers and the WHSCC system and a profile of this benefit type, although a cautioned one, is certainly warranted. This data is provided in Table 2.

Table 2: Profile Of EEL Benefits By Year of Claim Commencement

Year	Number of Claims With Paid EEL Benefits	Number That Remain "Active"	Number That Are "Closed"	Average EEL Benefit Weeks To Date for "Active Claims"	Average EEL Benefit Weeks To Date of "Closed Claims"
1990	56	38	18	360.8	311.1
1991	47	37	10	356.9	192.4
1992	24	20	4	191.3	147.7
1993	25	25	0	209.9	0
1994	35	27	8	226.7	180.4
1995	23	21	2	159.3	482.9
1996	20	19	1	132.4	4
1997	16	13	3	96.3	52
1998	17	16	1	78.8	18
1999	5	5	0	14.0	0
Total	268	221	47	N/A	N/A

As presented in Table 2, the majority of EEL claims remain active and continue to accumulate benefit weeks on a regular basis. On a more promising note, the number of EEL claims beginning each year has decreased by 91.1% from 1990 to 1999. The average

weeks reported, provide a glimpse of the extended periods spent away from the workplace by employees injured to this extent. These injuries are particularly costly to:

- 1.) **The Employee** – in terms of pain and suffering, disability, stress, and possible loss or change of employment⁵, and to
- 2.) **The Employer** – as reduced productivity including the loss of experienced employees, expertise, and time delays in replacement. The employer may also incur human resource costs such as recruitment, selection, training, accrued sick leave and vacation leave by injured employee, and possibly overtime for replacement staff⁶.

Tables and charts provided in this report will include EEL benefits as lost-time benefits. It is important to note however, that while the number of claims with associated EEL benefits per year has decreased quite substantially, the lost-time weeks reported are accurate to Feb 5, 2001 only and represent an underestimate of the total benefits that will be accumulated on these claims.

2.15 Rehabilitation Benefits

Rehabilitation benefits include time and dollars spent on upgrading or re-training injured workers for return to the workplace. Examples of rehabilitation services include but are not limited to:

- When an injured worker has been away from the workplace for an extended period of time and requires upgrading to return to pre-injury competency level, i.e. secretary requiring 60 words per minute, or
- When an injured worker, because of the injury, is unable to return to the pre-injury job and therefore requires re-training in an alternate profession.

While the percentage of these claimants that return to pre-injury positions is unknown, it is important to consider the number of claimants that require additional training to return to the workplace. The number of claims that include rehabilitation benefits, the number of rehabilitation weeks, and the cost of rehabilitation services are summarized in the following table by year of claim commencement.

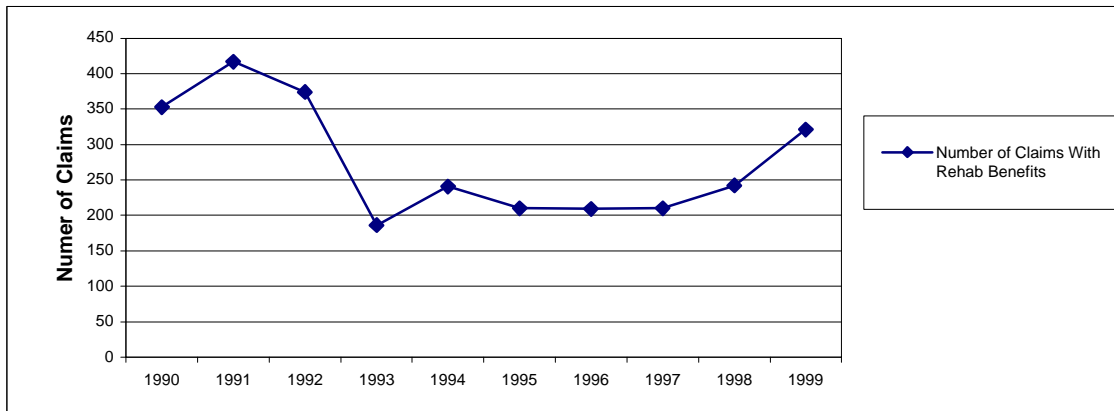
Table 3: Summary of Rehabilitation Benefits

Year	Number of Claims with Rehab benefit weeks > 0	REHAB Weeks	Rehab Dollars Paid	Total Lost-time Claims	% Of Lost-Time Claims That Require Rehabilitative Services
1990	353	12447.3	3,832,379.5	1631	21.6%
1991	417	10556.7	3,160,285.5	1720	24.2%
1992	374	7933.9	2,382,484.3	1523	24.6%
1993	186	3938.0	1,091,374.9	933	19.9%
1994	241	5111.9	1,441,347.2	1007	23.9%
1995	210	4101.9	1,130,262.1	888	23.6%
1996	209	4593.9	1,310,033.4	799	26.2%
1997	210	4936.9	1,466,875.9	770	27.3%
1998	242	5319.5	1,719,776.8	836	28.9%
1999	321	5264.9	1,682,564.2	1073	29.9%
Total	2763	64204.86	19,217,383.8	11180	24.7%
% Decrease 1990 - 1999	9.1%	57.7%	56.1%	34.2%	

Over the ten-year reference period there has been a 57.7% decrease in the number of rehabilitation weeks, a 9.1% decrease in the number of claims with associated Rehab benefits, and a 56.1% decrease in the total dollars provided to upgrade or re-train injured workers to facilitate a return to the workplace.

A graphical representation profiling the number of claims per year with rehab benefits is provided in Figure 5.

Figure 5: Number Of Claims Requiring Rehab Benefits Per Year

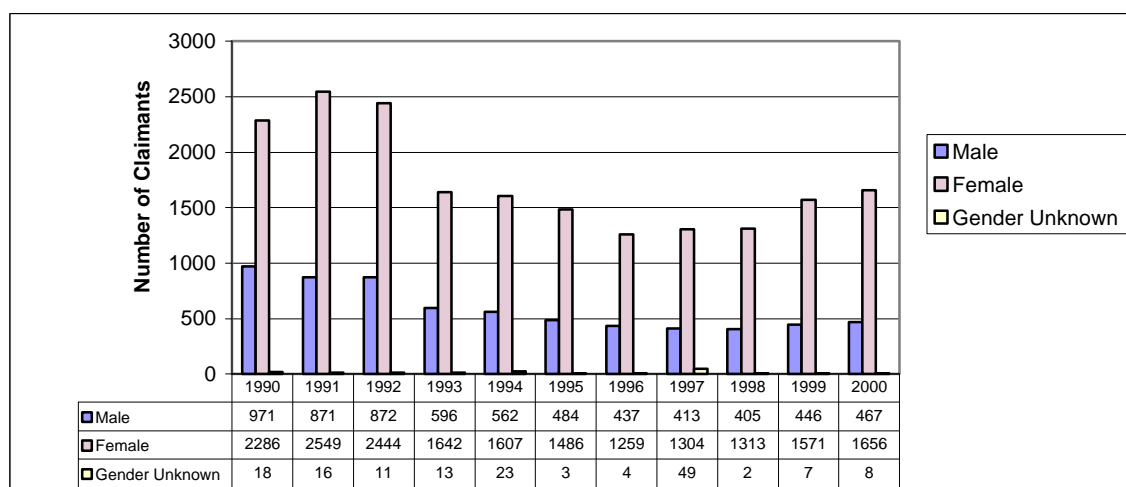


2.2 Claimant Information

2.2.1 Gender of Claimants

The gender profile of public health system employees with accepted WHSCC claims (all claim types) between 1990 and 2000 is provided in Figure 6.

Figure 6: Gender of Claimants Per Year 1990 – 2000.

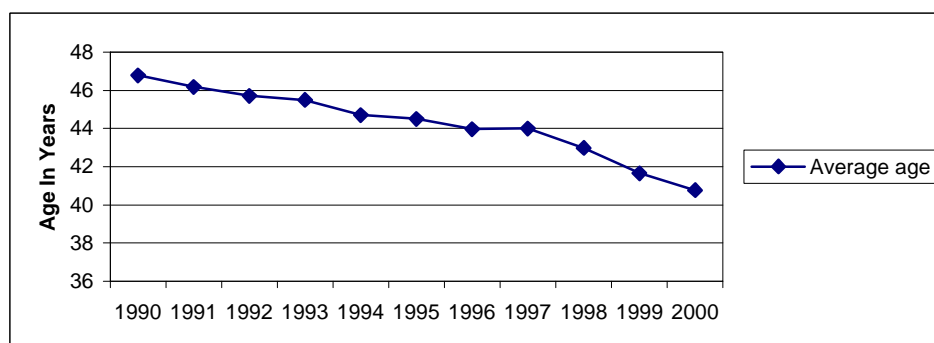


As depicted in Figure 6, the majority of claimants (74.1%) over the past 11 years have been female, as would be expected considering the high number of females employed in the public health sector. For the year 1999, the female proportion was 77.6%. This proportion opposes the cross-industry provincial analysis, for 1999, which reports a proportion of 65.1% male, and the cross-industry national data, for 1999, which has a male proportion of 68.9%¹.

2.22 Average Age Of Claimants

The average age of claimants by year of claim commencement is provided in Figure 7. The calculation of age for this table is based on year of birth rather than actual birth date.

Figure 7: Average Age of Claimants By Year of Claim Commencement



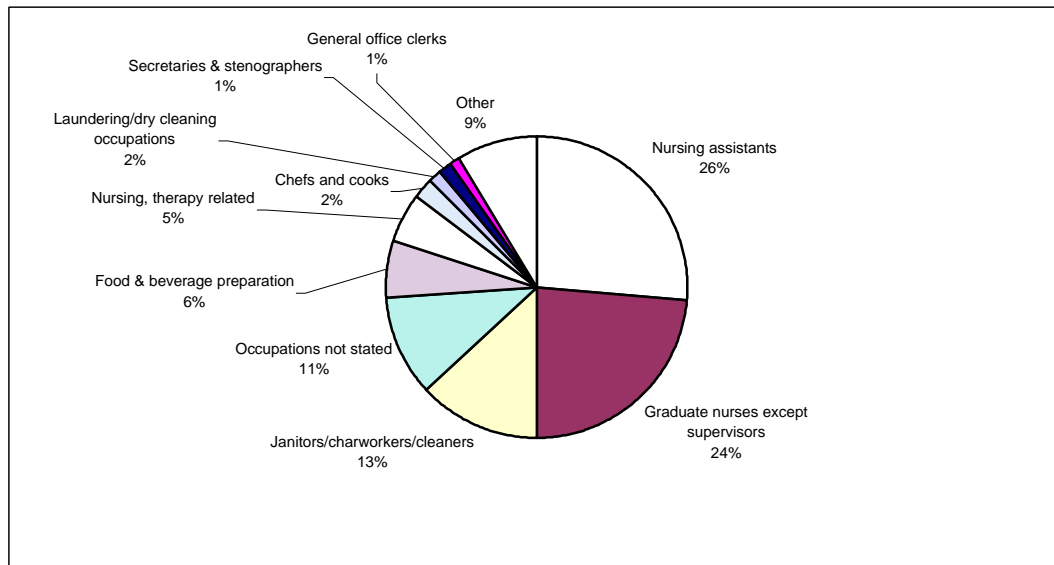
As illustrated in Figure 7, the average age of claimants has decreased by 12.8% from 46.8 in 1990 to 40.8 in 2000. The average age reported in 2000 is closer to the average age of 37, reported by WHSCC in 1999 for the province overall⁷. While the average age for health care claimants has decreased, WHSCC are reporting an increase in the average age of lost-time claimants throughout the province. In a research brief by WHSCC, the authors discuss the effect of an aging workforce on the number of claims and claim costs⁸. The authors note that previous research by the WHSCC indicates that “an aging workforce, despite having lower rates of injury, will generally result in an increase in

claim costs primarily due to more severe injuries, intensive medical management, increased barriers to re-employment, and poor return-to-work rates.”

2.23 Claimant Occupation

In a recent report from WHSCC, the risk of injury was reported to be dependent on occupation⁷. Occupations which are more physically demanding and tiring are typically more prone to musculoskeletal injury. Figure 8 provides a graphical representation of the percentage of total lost-time weeks by Health Sector occupation, many of which could be classified as labouring or physically demanding positions.

Figure 8: Percentage of Lost-time Weeks By Health Board Occupation



As illustrated in Figure 8, nursing assistants account for the highest proportion of lost-time claims by occupational category. While the percentage of lost-time weeks for LPNs and RNs are relatively equal, the impact on each profession differs given that number of LPNs publicly employed in the province in 1999 was 2526 approximately half of the 4711 RNs (unionized employees).

A complete summary of WHSCC benefit types by Health Board occupation is provided in Table 4.

Table 4: Total Benefit Type By Occupation 1990-1999 For All Claim Types

Occupation	TEL + EEL Weeks	% Of Total TEL + EEL Weeks	Rehab Weeks	Injury Related Dollars	% Of Total Injury Dollars	Rehab Dollars
Nursing assistants	50,514.2	26.3	19,769.8	18,740,674.1	25.3	5,526,862.4
Graduate nurses except supervisors	45,556.8	23.7	14,837.3	20,564,802.4	27.8	5,641,242.7
Janitors/cleaners	25,053.0	13.0	6,614.0	8,456,097.5	11.4	1,636,591.0
Occupations not stated	20,914.6	10.9	7,922.5	8,586,521.0	11.6	2,394,322.2
Food & beverage preparation	11,922.8	6.2	4,416.7	4,472,327.5	6.0	1,104,025.3
Nursing, therapy related	10,185.9	5.3	2,595.4	3,056,964.5	4.1	664,458.8
Chefs and cooks	4,122.7	2.1	939.1	1,258,470.5	1.7	256,301.7
Laundering/dry cleaning occupations	2,811.7	1.5	1,076.2	1,039,777.9	1.4	267,774.4
Secretaries & stenographers	2,443.3	1.3	552.2	794,117.6	1.1	161,884.8
General office clerks	2,105.2	1.1	555.5	631,766.0	0.9	136,242.0
Sub-total	175,630.1	91.4	59,278.8	67,601,519.1	91.3	17,789,705.4
Other	16,497.9	8.6	4,926.1	6,439,575.6	8.7	1,427,678.4
Total	192,128.0	100.0	64,204.9	74,041,094.6	100.0	19,217,383.8

Approximately 50% of the lost-time weeks from 1990 –1999 were due to nursing and nursing assistant (LPN) workplace injuries. As illustrated in Table 4, a further 5.3% of the lost-time weeks were associated with therapy related nursing positions.

The number of lost-time claims, per year, attributable to the top four occupations provided in Table 4 is provided in Figure 9.

Figure 9: Lost-time Claims Per Year By Occupation

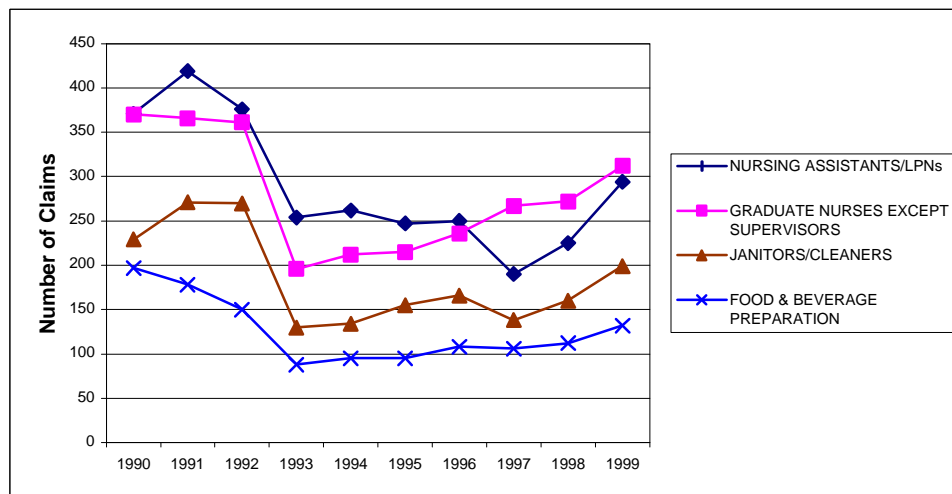
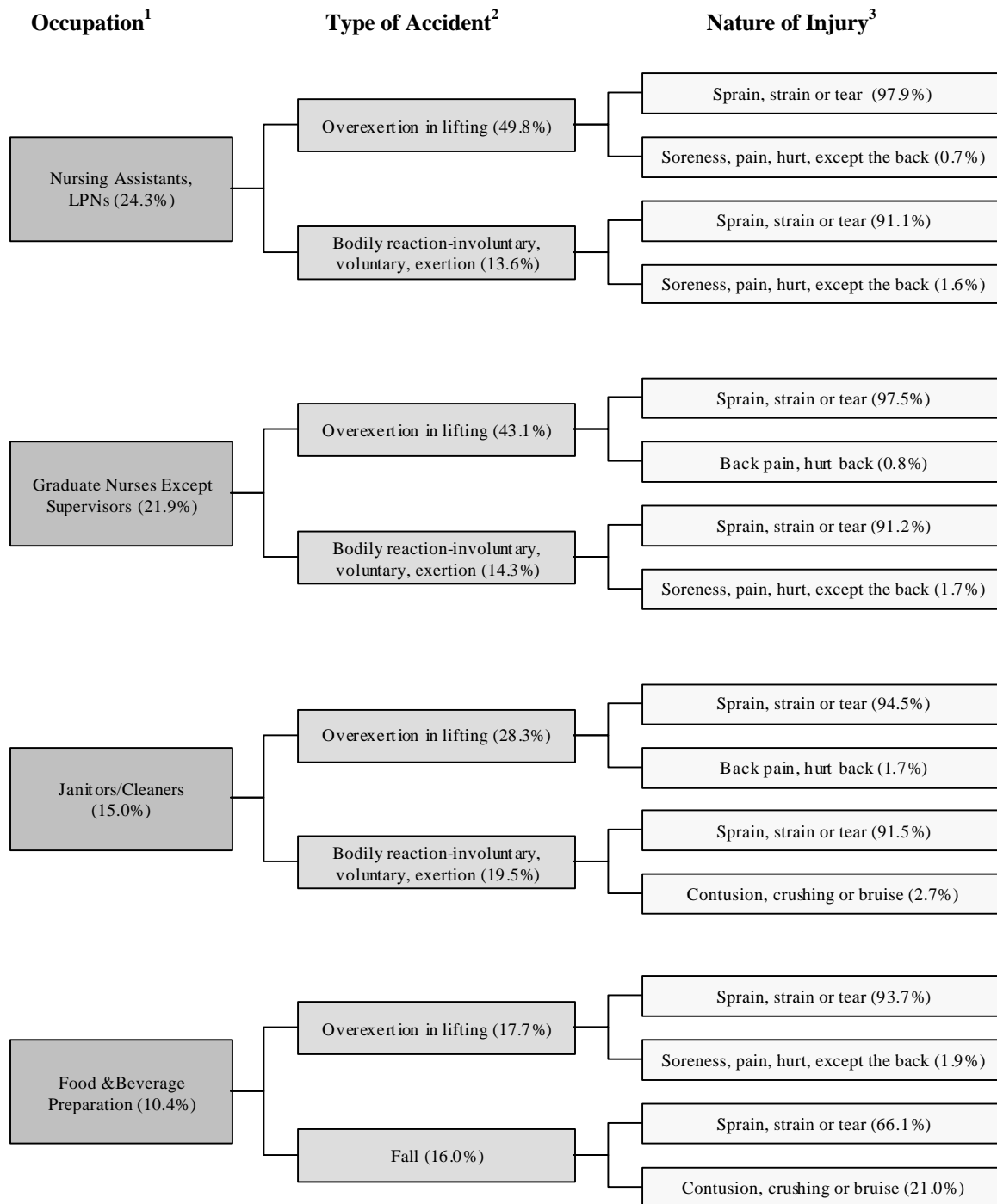


Figure 10 provides a summary of accident type and nature of injury by selected occupations.

Figure 10: Occupation By Accident Type By Nature of Injury For Lost-time Claims Only



¹ The percentages reported are the percentage of all time-loss claims 1990-1999 attributable to given occupation categories.

² The percentage reported are the percentages of all time-loss claims 1990-1999 attributable to the top two accident types for given occupation categories.

³ The percentages reported are the percentages of time-loss claims 1990-1999 attributable to the top two injury types for given accident types.

2.3 Injury Characteristics

The following information summarizes injury characteristics for public health sector employees. Such an analysis can be used in planning work place design, staff training and injury prevention programs. Included are the part of body injured, the type of accident and the nature and source of the injury. As previously stated, TEL and EEL weeks generally represent time away from the workplace and are combined for the following sections. Rehab weeks represent the amount of re-training required because of the injury, and are reported separately. Similarly, TEL, EEL, MA, and PFI dollars all relate to lost-time and/or medical services required to address an injury and have been combined as “Injury Related Dollars”, while REHAB dollars are generally education costs and are reported separately.

2.31 Part of Body Injured

The most common “Part of Body” descriptions for claims between 1990 and 1999 are illustrated in Figure 11.

Figure 11: Percentage of Claims By Part of Body Injured

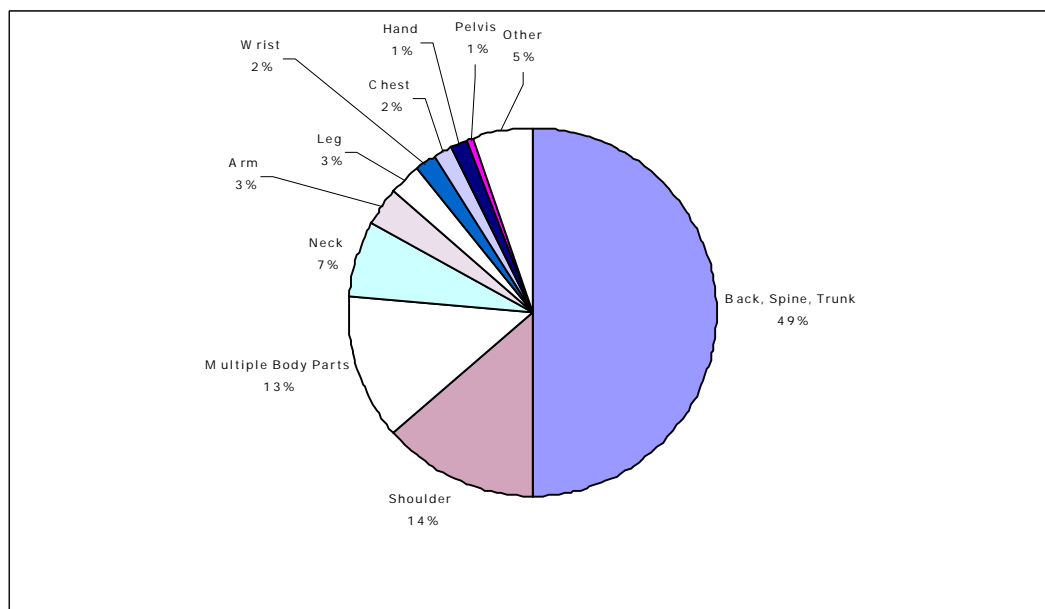


Table 5 provides a detailed summary of the most common “Part of Body” descriptions associated with claims starting between 1990 and 1999.

Table 5: Benefit Weeks and Dollars By “Part of Body”

Description	TEL + EEL Weeks	% Of Total TEL + EEL Weeks	Rehab Weeks	Injury Related Dollars	% Of Total Injury Dollars	Rehab Dollars
Back, Spine, Trunk	96,160.6	50.1	30,576.9	35,784,530.8	48.3	9,306,615.9
Shoulder	26,180.2	13.6	10,348.9	10,266,338.4	13.9	2,987,458.3
Multiple Body Parts	24,189.7	12.6	8,857.9	9,918,068.3	13.4	2,719,189.6
Neck	12,976.8	6.8	5,767.1	5,410,413.1	7.3	1,767,394.2
Arm	6,438.6	3.4	2,670.2	2,720,057.4	3.7	722,452.2
Leg	5,215.8	2.7	1,254.0	2,029,668.8	2.7	360,962.8
Wrist	3,674.9	1.9	1,018.5	1,455,254.9	2.0	287,291.1
Chest	3,405.5	1.8	916.4	1,087,051.9	1.5	272,378.7
Hand	2,469.8	1.3	260.3	842,306.6	1.1	64,004.5
Pelvis	1,539.7	0.8	771.7	714,334.2	1.0	240,888.9
Sub-total	182,251.4	94.9	62,441.9	70,228,024.4	94.9	18,728,636.1
<i>Other</i>	<i>9,876.6</i>	<i>5.1</i>	<i>1,763.0</i>	<i>3,813,070.3</i>	<i>5.1</i>	<i>488,747.6</i>
Total	192,128.0	100.0	64,204.9	74,041,094.7	100.0	19,217,383.8

Note: percentages may vary slightly from pie chart due to differences in rounding.

As illustrated in Table 5, approximately 1 in 2 workplace injuries were due to injuries of the “Back, Spine or Trunk”. Overall, injuries to this region of the body accounted for 48.3% of the total dollars paid by WHSCC. Back, spine or trunk injuries also have the highest proportion of re-training requirements, accounting for approximately 47.6% of all Rehabilitation weeks.

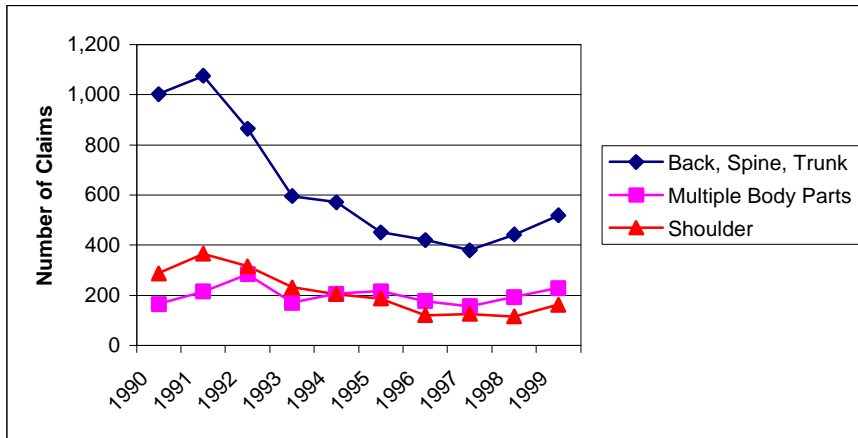
Table 6 provides a breakdown of the number of claims and the number of time-loss weeks (TEL+EEL), by year, for the top three ‘Part of Body’ categories presented in Table 5.

Table 6: Part Of Body - Number of Claims Versus Time Loss Weeks per Year

Year	Number Of Claims - Back, Spine, Trunk	TEL + EEL Weeks – Back, Spine, Trunk	Number of Claims - Multiple Body Parts	TEL+EEL Weeks - Multiple Body Parts	Number of Claims – Shoulder	TEL+EEL Weeks – Shoulder
1990	1,002	29,619.9	166	2,833.3	288	5,199.1
1991	1,075	20,152.7	215	5,542.1	366	7,271.6
1992	865	9,890.7	285	4,489.2	316	2,446.1
1993	596	6,302.5	171	5,51.7	232	1,805.6
1994	572	8,948.3	207	2,528.9	205	2,585.6
1995	451	5,371.9	217	2,867.5	188	2,499.3
1996	421	5,646.2	177	1,708.2	121	901.8
1997	380	3,408.7	157	811.3	126	1,128.8
1998	442	3,227.1	194	1,664.9	116	1,195.4
1999	519	3,592.7	229	1,192.6	163	1,147.0
Total	6,323	96,160.6	2018	24,189.7	2,121	26,180.2
% Decrease 1990 - 1999	48.2%	87.9%	-38.0%	57.9%	43.4%	77.9%

The number of claims per year from Table 6 is presented graphically in Figure 12.

Figure 12: Number of Claims by Most Common "Part of Body" Category and Year



The number of lost-time weeks associated with all three “part of body” categories described in Table 6 and Figure 12 above, have decreased from 1990 to 1999. Back, spine or trunk injuries had decreased through the mid-nineties, but have shown a moderate increase in 1999, still accounting for 35.6% of all lost-time weeks (to date) associated with claims starting in that year. It is imperative to note that the number of EEL weeks included in the above table is accurate to Feb. 5, 2001 only, and by nature of the benefit type, will increase on a weekly basis for many of the claims included in this report. The number of “multiple body part” injuries have increased by 38.0% and the number of claims due to shoulder injuries has decreased by 43.4%. Interestingly, all three “Part of Body” categories have begun to show moderate increases through the late 90’s.

2.32 Type of Accident

The percentage of lost-time weeks by “Type of Accident” description, for claims between 1990 and 1999, is illustrated in Figure 13.

Figure 13: Percentage of Lost-time Weeks By Type of Accident

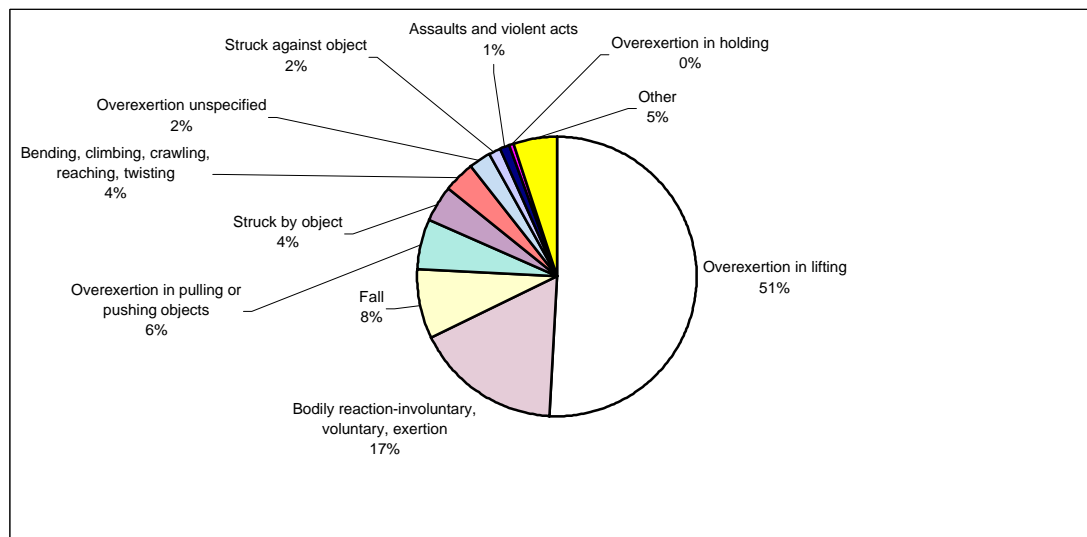


Table 7 provides a summary of the most common accident types reported by public health system employees, including the lost-time weeks, rehab weeks and associated dollars.

Table 7: Benefit Weeks And Dollars By “Type of Accident”

Type of Accident	TEL + EEL Weeks	% Of Total TEL + EEL Weeks	REHAB Weeks	Injury Related Dollars	% Of Total Injury Dollars	REHAB Dollars
Overexertion in lifting	97,581.6	50.8	32,353.3	34,988,621.5	47.3	9,803,032.9
Bodily reaction-involuntary, voluntary, exertion	32,601.1	17.0	9,353.6	12,182,009.5	16.5	2,710,733.3
Fall	15,528.3	8.1	4,237.5	5,996,434.3	8.1	1,206,233.3
Overexertion in pulling or pushing objects	11,184.7	5.8	4,588.2	4,576,857.8	6.2	1,351,798.6
Struck by object	7,992.7	4.2	2,768.9	3,040,072.0	4.1	821,623.8
Bending, climbing, crawling, reaching, twisting	6,730.9	3.5	3,722.1	3,415,203.3	4.6	1,124,292.4
Overexertion unspecified	4,787.4	2.5	2,202.2	2,435,943.6	3.3	675,417.1
Struck against object	2,913.9	1.5	626.8	1,153,776.1	1.6	178,467.0
Assaults and violent acts	2,221.6	1.2	536.9	691,516.9	0.9	151,455.0
Overexertion in holding	943.3	0.5	537.1	511,665.5	0.7	187,383.8
Sub-total	182,485.3	95.0	60,926.6	68,992,100.4	93.2	18,210,437.2
Other	9,642.7	5.0	3,278.3	5,048,994.2	6.8	1,006,946.6
Total	192,128.0	100.0	64,204.9	74,041,094.7	100.0	19,217,383.8

Approximately half of all time-loss injuries between 1990 and 1999 were related to overexertion in lifting which accounted for 47.3% of total “injury related dollars” and 50.4% of the re-training weeks paid out by WHSCC.

Table 8 provides a breakdown of the number of claims and the number of time-loss weeks (TEL+EEL), by year, for the top three ‘Type of Accident’ categories presented in Table 7.

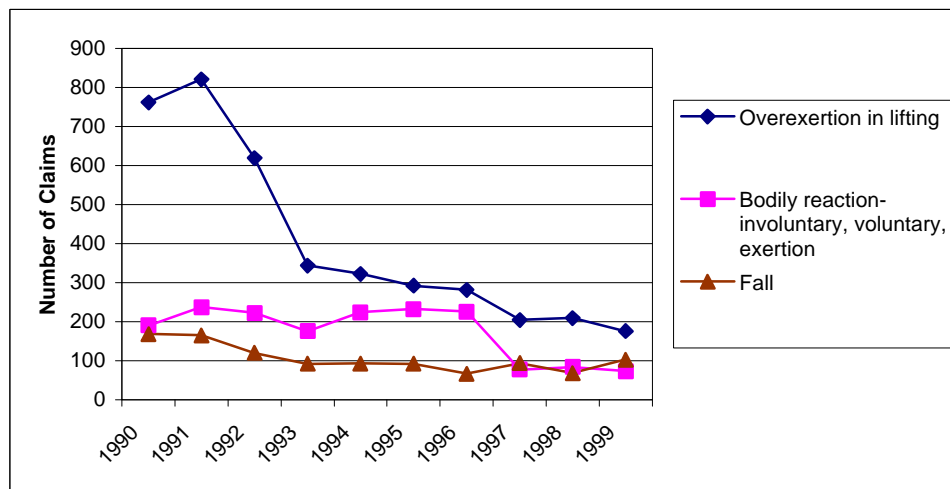
Table 8: Type of Accident - Number of Claims And Time-loss Weeks Per Year

Year	Number of Claims Overexertion in lifting	(TEL + EEL) Weeks - Overexertion in lifting	Number of Claims Bodily reaction-involuntary, voluntary, exertion	(TEL+EEL) Weeks - Bodily reaction-involuntary, voluntary, exertion	Number of Claims - Fall	(TEL+EEL) Weeks – Fall
1990	762.0	32,032.5	190.0	6,026.4	168.0	2,927.8
1991	821.0	21,772.0	237.0	7,409.5	165.0	5,287.2
1992	619.0	9,957.9	222.0	2,931.8	120.0	1,698.6
1993	344.0	6,558.9	176.0	2,363.0	92.0	416.2
1994	322.0	8,813.9	224.0	4,500.6	93.0	1,473.9
1995	292.0	6,293.9	232.0	2,938.6	92.0	914.1
1996	281.0	4,343.6	226.0	3,392.0	67.0	492.5
1997	204.0	2,674.0	77.0	966.0	94.0	759.2
1998	209.0	3,097.2	84.0	1,137.0	68.0	879.6
1999	176.0	2,037.7	73.0	936.2	103.0	679.2
Total	4,030.0	97,581.6	1,741.0	32,601.1	1,062.0	15,528.3
% Decrease	76.9%	93.6%	61.6%	84.5%	38.7%	76.8%

Based on data provided in Table 8 above, both the number of claims and the number of lost-time weeks associated with “overexertion in lifting”, “bodily reactions”, and “falls” have decreased considerably over the 10 year reference period. It is noted, however, that the number of EEL weeks included in the above table will increase with time and re-evaluation at a later date is required.

The number of claims, as presented in Table 8, is provided graphically in Figure 14.

Figure 14: Number of Claims Per Year By Most Common Type of Accident Categories



2.33 Nature of Injury

Table 9 provides a summary of the most common “Nature of Injury” categories reported by Health Board employees, including the lost-time weeks, rehab weeks and associated dollars.

Table 9: Benefit Weeks And Dollars By “Nature of Injury”

Nature Of Injury	TEL + EEL Weeks	%TEL+EEL Weeks	REHAB Weeks	Injury Dollars	% Injury Dollars	REHAB Dollars
Sprains, strains, tears	165,984.3	86.4	55,989.2	62,843,993.0	84.9	16,717,869.3
Contusion, crushing, bruise	7,234.9	3.8	2,038.0	2,949,583.6	4.0	572,436.9
Fractures	3,058.5	1.6	375.6	993,416.3	1.3	93,278.5
Multiple injuries	2,034.6	1.1	526.2	828,421.4	1.1	143,602.9
Herniated disc	1,654.0	0.9	240.9	651,432.8	0.9	81,925.9
Multiple symptoms	1,459.3	0.8	359.3	428,932.1	0.6	123,822.0
Soreness, pain, hurt, except the back	1,253.7	0.7	703.0	715,832.9	1.0	225,796.1
Back pain, hurt back	1,049.6	0.5	729.2	600,849.3	0.8	240,713.1
Dermatitis	920.6	0.5	268.9	223,288.6	0.3	82,214.8
Non-specific allergic reaction	798.7	0.4	366.8	197,163.6	0.3	162,203.3
Sub-total	185,448.1	96.5	61,597.1	70,432,913.5	95.1	18,443,862.7
Other	6,679.9	3.5	2,607.8	3,608,181.1	4.9	773,521.1
Total	192,128.0	100.0	64,204.9	74,041,094.6	100.0	19,217,383.8

The vast majority (86.4%) of workplace injuries reported to WHSCC involved a sprain, strain or tear as the primary nature of the injury. In 1999, “Sprains, strains, and tears” accounted for approximately 55.9% of lost-time weeks and 55.8% of the Rehab weeks paid by WHSCC to public health system employees. Further analysis revealed that 86.9% of all EEL benefits are caused by a sprain, strain, or tear. Thus, the 55.8% calculated for 1999 will certainly increase as time passes and will, in the future, account for a greater proportion of the lost-time weeks associated with claims beginning in that year. This finding is in keeping with provincial WHSCC statistics which report that the majority of lost-time claims are due to sprains and strains primarily of musculoskeletal origin⁷. The research brief goes on to report that the most common sprain or strain is the back injury, responsible for one out of every three lost-time incidents.

The percentage of Lost-time weeks (TEL + EEL) as provided in Table 9 is presented graphically in Figure 15.

Figure 15: Percentage of Lost-time Weeks By Nature of Injury

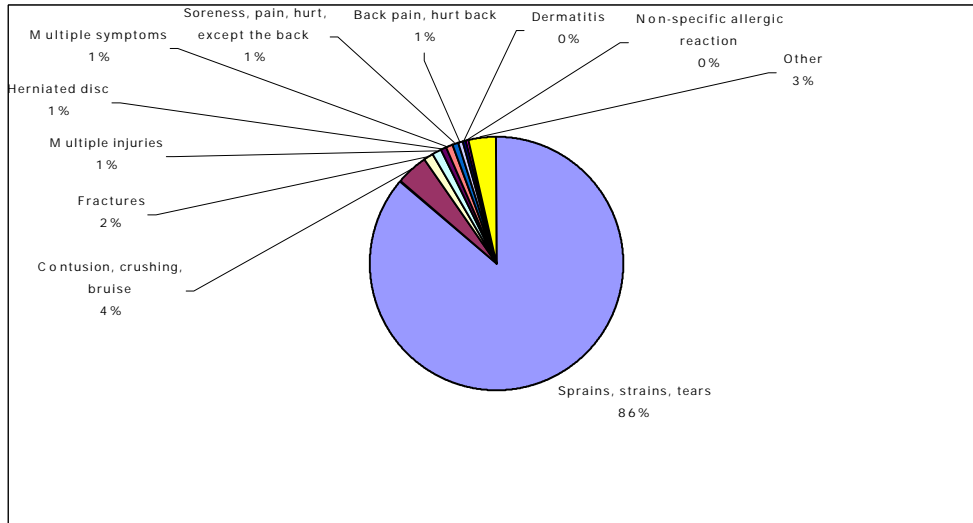


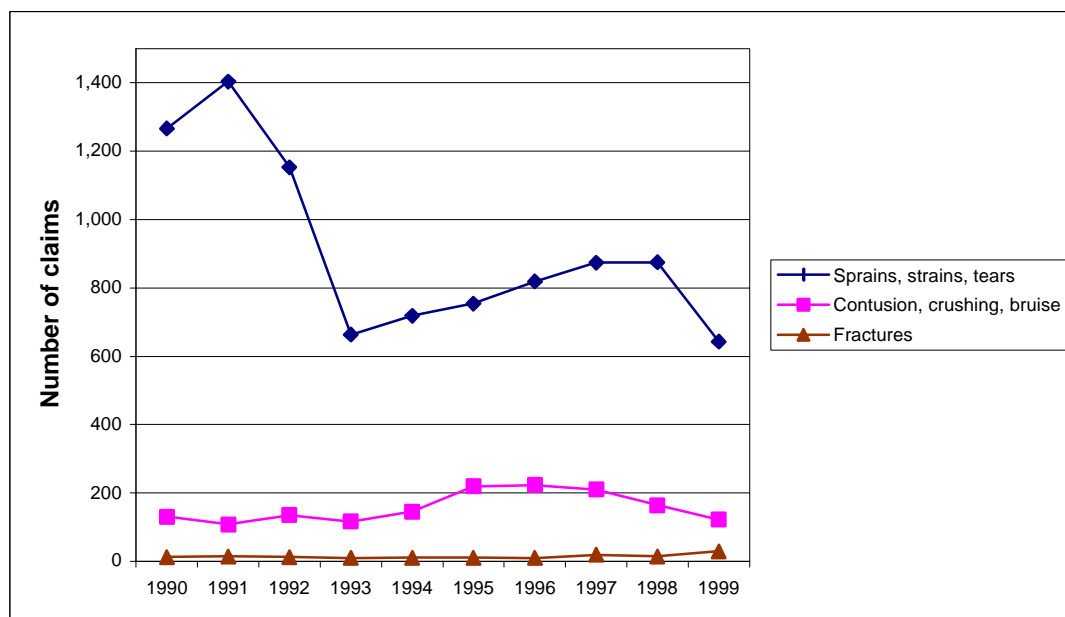
Table 10 provides a breakdown of the number of claims and the number of time-loss weeks (TEL+EEL), by year, for the top three ‘Nature of Injury’ categories presented in Table 9.

Table 10: Nature of Injury - Number of Claims And Time-loss Weeks Per Year

Year	Number of Claims - Sprains, strains, tears	TEL+EEL Weeks - Sprains, strains, tears	Number of Claims - Contusion, crushing, bruise	TEL+EEL Weeks - Contusion, crushing, bruise	Number of Claims - Fractures	TEL+EEL Weeks - Fractures
1990	1,266.0	43,740.7	131.0	1,272.7	13.0	69.6
1991	1,403.0	37,079.8	108.0	830.8	15.0	1,543.9
1992	1,153.0	17,743.7	135.0	1,336.3	13.0	86.0
1993	663.0	11,343.8	117.0	475.8	10.0	87.7
1994	718.0	16,827.2	146.0	1,134.7	11.0	391.2
1995	754.0	10,688.2	220.0	794.1	11.0	63.4
1996	819.0	9,242.5	223.0	290.3	10.0	87.2
1997	874.0	6,882.3	210.0	735.5	19.0	125.0
1998	875.0	6,788.4	164.0	173.9	15.0	384.8
1999	643.0	5,647.9	122.0	190.8	30.0	219.8
Total	9,168.0	165,984.3	1,576.0	7,234.9	147.0	3,058.5
% Decrease 1990-1999	49.2	87.1	6.9	85.0	-130.8	-216.0

As illustrated in Table 10, there has been almost a 50.0% decrease in the number of injuries reporting a “sprain, strain or tear” as the nature of the injury. While the number of “contusion, crushing or bruise” injuries increased in the mid-nineties, the number for 1999 shows only a moderate decrease of 6.9% from the 1990 total. The number of claims by nature of injury is provided graphically in Figure 16.

Figure 16: Nature of Injury Claims By Year, 1990 – 1999.



2.34 Source of Injury

Table 11 provides a detailed summary of the most common “Nature of Injury” categories reported by public health system employees, including the lost-time weeks, rehab weeks and associated dollars.

Table 11: Benefit Weeks And Dollars By “Source of Injury”

Source Of Injury	TEL + EEL Weeks	%TEL+EEL Weeks	REHAB Weeks	Injury Dollars	% Injury Dollars	REHAB Dollars
Person – other than injured worker	86,831.6	45.2	30,154.8	32,673,383.5	44.1	9,493,574.0
Bodily motion	43,236.7	22.5	15,287.6	17,332,435.6	23.4	4,466,648.7
Fixtures furnishings	6,815.0	3.5	2,419.0	2,471,113.2	3.3	707,841.9
Pots/pans/dishes/trays	4,881.4	2.5	1,219.1	1,513,720.0	2.0	322,154.1
Bags/sacks	4,278.2	2.2	1,386.9	1,657,027.6	2.2	356,281.4
Boxes, crates, cartons	4,165.9	2.2	1,540.8	1,551,368.0	2.1	402,831.1
Floors, walkways, ground surfaces	3,973.7	2.1	978.6	1,488,089.2	2.0	269,627.3
Floor, wall, window coverings	3,742.9	1.9	1,302.3	1,704,894.5	2.3	384,286.7
Tanks, bins, etc	2,768.8	1.4	766.5	848,915.6	1.1	211,984.6
Stairs, steps	1,761.7	0.9	129.3	427,925.0	0.6	34,045.0
Sub-total	162,455.9	84.6	55,184.8	61,668,872.1	83.3	16,649,274.7
Other	29,672.1	15.4	9,020.0	12,372,222.6	16.7	2,568,109.0
Total	192,128.0	100.0	64,204.9	74,041,094.6	100.0	19,217,383.8

Approximately 45.2% of workplace injuries for public health sector employees during the ten-year reference period involved a “person – other than the injured worker” as the source of the injury. This was followed by “bodily motion” which accounted for 22.5%

of reported injuries. In 1999, the percentage of lost-time weeks associated with the top two “Source of Injury” categories reported in Table 11 have reversed with “person - other than injured worker” decreasing to 28.0% while the percentage associated with “bodily motion” has increased to 39.7%.

The percentage of total lost-time weeks (TEL + EEL) 1990-1999, by “Source of Injury” is illustrated in Figure 14.

Figure 17: Percentage of Total Lost-time Weeks 1990-1999 By “Source of Injury”

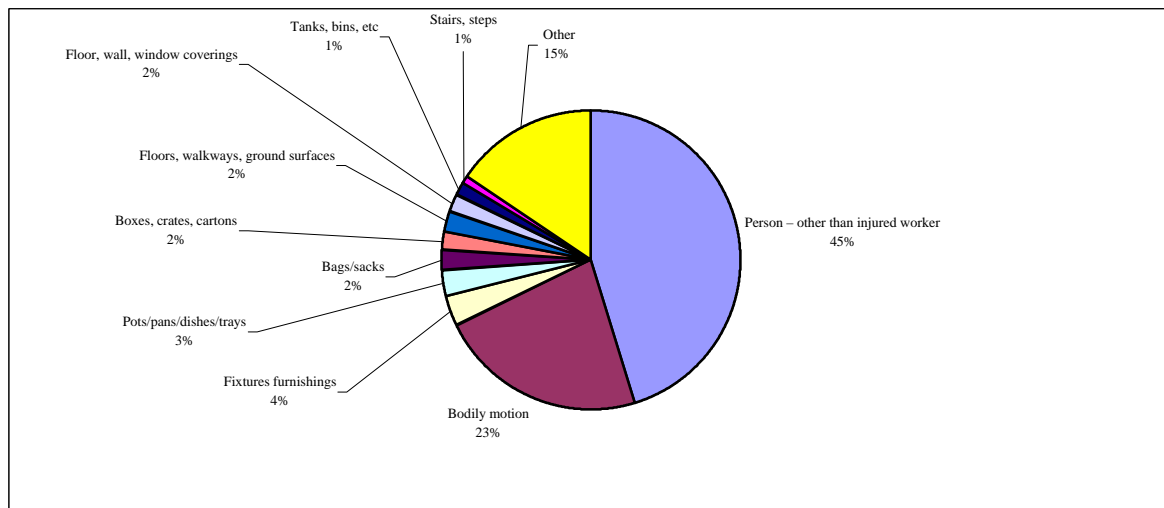


Table 12 provides a breakdown of the number of claims and the number of time-loss weeks (TEL+EEL), by year, for the top three ‘Source of Injury’ categories presented in Table 11.

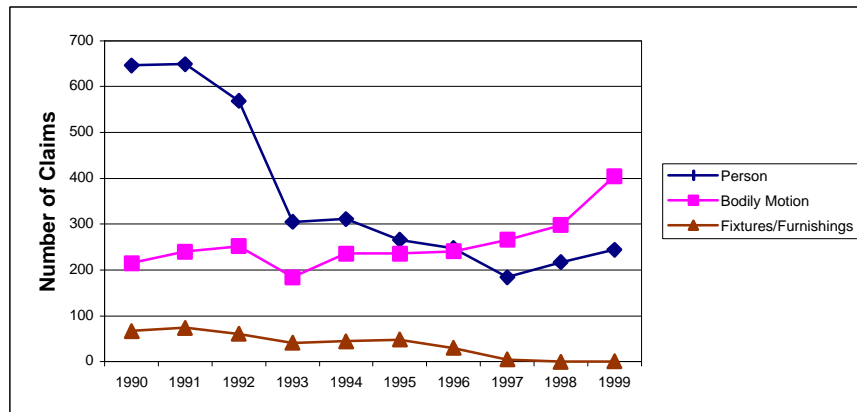
Table 12: Source of Injury - Number of Claims And Time-loss Weeks Per Year

Year	Number of Claims - Person	TEL+EEL Weeks - Person	Number of Claims - Bodily motion	TEL+EEL Weeks - Bodily motion	Number of Claims - Fixtures furnishings	TEL+EEL Weeks - Fixtures furnishings
1990	646.0	27,361.3	215.0	7,404.2	67.0	2,303.5
1991	649.0	17,757.2	240.0	7,292.9	74.0	2,052.0
1992	569.0	9,690.5	252.0	3,863.3	61.0	453.9
1993	305.0	6,812.1	184.0	2,393.7	41.0	531.6
1994	311.0	7,395.8	236.0	4,770.8	45.0	688.4
1995	266.0	5,296.4	236.0	2,954.0	48.0	517.2
1996	248.0	3,341.3	241.0	3,583.8	30.0	262.2
1997	184.0	2,580.3	266.0	3,352.4	5.0	5.4
1998	217.0	3,770.7	298.0	3,611.7	0.0	0.0
1999	244.0	2,826.1	405.0	4,009.9	1.0	0.8
Total	3,639.0	86,831.6	2,573.0	43,236.7	372.0	6,815.0
% Decrease 1990-1999	62.2	89.7	-88.4	45.8	98.5	100.0

As shown in Table 12, decreases in both the number of claims and the number lost-time weeks occurred for both ‘person-other than injured worker’ and ‘fixtures, furnishings’. Bodily motion, however, had an increase in the number of associated claims versus a decrease in the number of associated lost-time weeks.

The number of claims, per year, for the source of injury categories provided in Table 12 is presented graphically in Figure 18.

Figure 18: Number of Claims By Top Three Source Of Injury Categories and Year



2.4 Statistics For 1999

In 1999, there were 1073 lost-time claims with approximately 10,052 lost-time weeks (TEL + EEL) and a further 5218 weeks of upgrading or retraining. There was over 5.4 million dollars paid out by WHSCC in injury related dollars and an additional 1.67 million dollars paid for upgrading or retraining. Injury descriptions for Health Board employees in 1999 can be summarized as follows:

- The top “Nature of Injury” reported was “Sprains, strains, or tears” attributable to 45.0% of lost-time claims and 5595 lost-time weeks.
- The main “Source of Injury” was “Bodily Motion” attributable to 36.0% of lost-time claims and 3957 lost-time weeks.
- The “Back, spine or trunk” was the main “Part of Body” injured attributable to 34.4% of lost-time claims and 3593 lost-time weeks.
- The most common “Type of Accident” for Health Board employees in 1999 was “Bending, climbing, crawling, reaching, twisting” attributable to 23.4% of lost-time claims and 2277 lost-time weeks.
- The Health Board occupational category with the highest number of lost-time claims in 1999 was Graduated Nurses – Except Supervisors with 282 (26.3%) lost-time claims. Nursing Assistants/LPNs had the second highest number of lost-time injuries for the year with 272 (25.3%).
 - For Graduate Nurses Except Supervisors, 135 (47.9%) of the 282 claims involved a sprain, strain, or tear with 65 (48.0%) affecting the back, spine

or trunk. A total of 2872 lost-time weeks, or 55 person years, have been lost by Health Board nurses due to injuries beginning in 1999 (accurate to Feb. 5, 2001). A further 1487 weeks of upgrading/retraining was required by these injuries.

- For Nursing Assistants/LPNs, 137 (50.3%) of the 272 claims involved a sprain, strain or tear with 53 (38.7%) affecting the back, spine or trunk. A total of 3445 lost-time weeks, or 66.2 person years, have been lost by Health Board nursing assistants/LPNs due to injuries beginning in 1999 (accurate to Feb. 5, 2001). A further 2098 weeks of retraining/upgrading was required by these injuries.

¹ Association of Workers' Compensation Boards of Canada. Work Injuries and Diseases, Canada 1997-1999. National Work Injuries Statistics Program.

² Workers' Compensation Board of Nova Scotia. Retrieved [September, 2001] from the World Wide Web: <http://www.wcb.ns.ca>.

³ Workplace Health and Safety Compensation Commission. Injured Workers Handbook. Reprinted June 2001. <http://www.whscc.nf.ca/pubs/pdf/handbooks/InjuredWorkersHandbook.pdf>

⁴ Workplace Health and Safety Compensation Commission (1998). Lost Time Injuries By Industry, 1993-1997. Research Brief. <http://www.whscc.nf.ca/pubs/briefs/december98.pdf>

⁵ Workers' Compensation Board of British Columbia (2000). Health Care Industry - Focus Report on Occupational Injury and Disease. <http://www.worksafebc.com/reports/industry/focushealthcare.pdf>

⁶ Workplace Health and Safety Compensation Commission (1999). The Economic Impact of Injury – A Perspective on Injury Costs. Research Brief. <http://www.whscc.nf.ca/pubs/briefs/april99.pdf>

⁷ Workplace Health and Safety Compensation Commission (1999). Ten Year Analysis of Lost-time Claims. Research Brief. <http://www.whscc.nf.ca/pubs/briefs/june99.pdf>

⁸ Workplace Health and Safety Compensation Commission (1999). Demographic Change – Effects On The Workers Compensation System. Research Brief. <http://www.whscc.nf.ca/pubs/briefs/july99.pdf>