### **ANALYSIS**

An in depth analysis of claims by age group was undertaken to determine if young workers in the NWT/NU are at a higher risk for workplace injuries.

It has been determined that young workers are only slightly more at risk, with a 5% higher frequency of lost time injuries than, the WCB core claimant base age 25 to 45.

It was also determined that the composition of time loss claims for young workers differs in some significant ways. Unlike our core claimant group whose highest volume of time loss claims result from working in the Construction and Government Industries, young worker time loss injuries stem from the Retail Trade Industry. There is also a definite seasonal nature to young worker time loss claims (YWTLC) which spike in the summer. Twenty five percent (25%) of all YWTLC occur in July and August. It is also interesting to note that the cost per time loss claim for young workers is significantly lower than workers over 25.

#### QUALITY ASSURANCE NOTES

- 1% of time loss claims do not have the data required to make an age calculation and have been excluded from this analysis.
- Age of claimant is calculated as age at the time of injury.
- Young worker is defined as a worker between 15 and 24 years of age at the time of injury.
- Claimants under the age of 15 represent .1% of time loss claims (4 claims in 5 years, all in NT). As there is no corresponding employment data for this age group they have been excluded from the analysis.
- Less than 1% of time loss claims are coded as "jurisdiction unknown". These claims have been excluded from jurisdictional comparisons.
- Employment data by age grouping is not available through the Government of Nunavut Statistics Division. Therefore frequency calculations by age group can not be done for NU or NT/NU as a whole. Frequency calculations represent NWT data only.
- Employment data provided by the NWT Bureau of Statistics is limited to three age groups which are the basis of this review. (15 to 24, 25 to 45, and 45+)
- <u>Unless specifically broken down by year all averages are based on</u> five years of data between 2001 and 2005.

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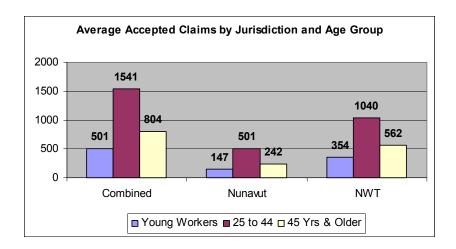
### **HIGHLIGHTS**

- There is an average of 501 accepted claims for young workers each year (147 NU & 354 NT). Represents 17% of all accepted claims in NU and 18% of all accepted claims in NT.
- There is an average of 137 time loss claims for young workers each year (40 NU & 97 NT). This represents 16% of time loss claims in each jurisdiction.
- In the NWT young workers represent 15% of the employment base and 16% of time loss claims. In order to bring this into balance (employment and TLC at 15%) the employment base would need to increase by 11% with no increase in injuries, or the number of time loss claims would need to be reduced by 9 per year (9.3%).
- The average cost per time loss claim: Young Worker: \$3,939; 25 to 45: \$6,994; 45+: \$11,710.
- The average Lost Time Injury Frequency for NWT young workers is 2.95, which is 5% higher than workers age 25 to 45, and 18% higher than workers over 45.
- Regardless of age sprains, strains and tears are the top nature of time loss injury. (Ranging between 32% and 36%.)
- Sub Class 6620 (Retail, Personal Service & Light Manufacturing) represents the highest number of young worker time loss claims (18%).
- The volume of time loss claims for young workers peaks during the summer months with 25% of all TL claims occurring in July and August.
- During this review some interesting highlights for workers 45 years of age and over were also noted:
  - Carpel Tunnel Syndrome does not appear on the list of top ten natures of injury until workers reach the age of 45 +. This injury represents 2% of time loss claims for this age group.
  - Workers who are over 45 at the time of injury represent 30% of time loss claims in the NWT yet they represent 45% of time loss claims cost and have an average cost per claim of \$11,710. This cost is almost triple the cost per claim for young workers and 67% higher than the cost for workers 25 to 45.

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### Average Accepted Claims by Jurisdiction and Age Group

On average there are 501 accepted claims for young workers every year (147 NU & 354 NT). This represents 18% of all accepted claims. There is little variation between jurisdictions on the percentage of claims young workers represent. 17% in Nunavut and 18% in the NWT.



#### **Average Accepted Claims by Age Group**

	Combined	Nunavut	NWT
Young Workers	18%	17%	18%
25 to 44	54%	56%	53%
45 Yrs & Older	28%	27%	29%

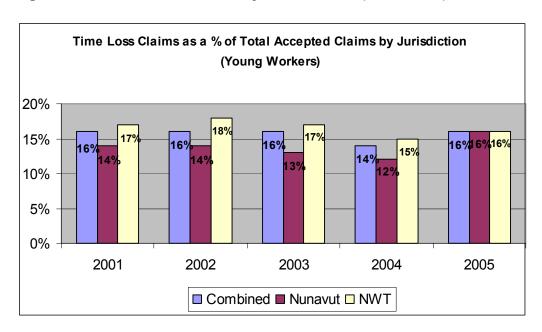
### Young Worker Time Loss Claims by Jurisdiction

On average there are 137 time loss claims for young workers each year (40 NU & 97 NT). This represents 16% of time loss claims in each jurisdiction. The chart below shows there is a variation in this representation between jurisdictions and over time.

The most significant change in the data was in Nunavut between 2004 and 2005, when there was a 4% increase in YWTLC (an additional 17 claims). Although they were not included in this analysis it is interesting to note that there were 4 time loss claims for workers under the age of 15 in the last five years (all in the NWT).

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# NWT - Representative Portion of Employment, Accepted Claims, Time Loss Claims & Time Loss Claims Cost by Age Group

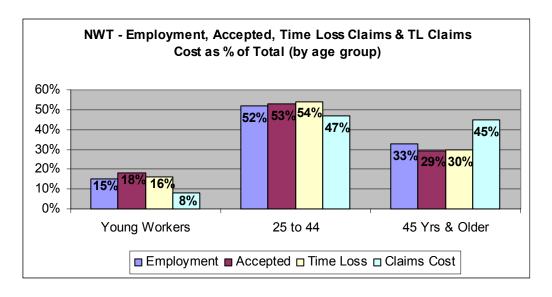
In the NWT young workers represent 15% of the employment base, 16% of time loss claims and only 8% of time loss claims cost. If we were to balance the employment representation to time loss claims the employment base would need to increase by 11% with no increase in injuries, or the number of time loss claims would need to be reduced by 9 per year (9.3%).

NWT - Employment, Accepted, Time Loss Claims & TL Claims Cost as % of Total (by age group)

				Time Loss
	Employment	Accepted	Time Loss	<b>Claims Cost</b>
Young Workers	15%	18%	16%	8%
25 to 44	52%	53%	54%	47%
45 Yrs & Older	33%	29%	30%	45%
Total	100%	100%	100%	100%

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NWT - Representative Portion of Employment, Accepted Claims, Time Loss Claims & Time Loss Claims Cost by Age Group (continued)



### NWT – Time Loss Claims Cost by Age Group

The percentage of time loss claims cost for NWT young workers is 8% (13% Medical – 6% Comp). In the NWT young workers represent 16% of time loss claims, yet their claims only represent 8% of costs, this results in a lower average cost per time loss claim of \$3,939.

When comparing workers over 45, to the core claimant base (age 25 to 45), they represent 24% less time loss claims but have a 67% higher average cost per time loss claim.

**NWT - Claims Cost for Time Loss Claims** 

				Avg Cost
	Medical	Comp	Total	per TL Claim
Young Workers	13%	6%	8%	\$3,939
25 to 44	41%	48%	47%	\$6,994
45 Yrs & Older	46%	46%	45%	\$11,710
Total	100%	100%	100%	\$7,924

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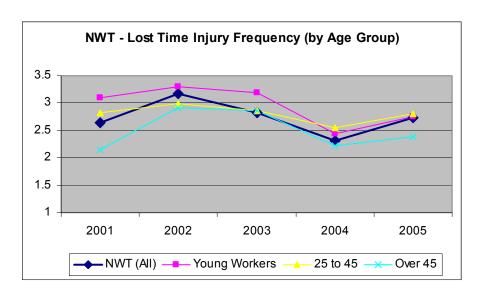
### **NWT Lost Time Injury Frequency by Age Group**

The average Lost Time Injury Frequency for NWT young workers is 2.95, which is 5% higher than workers age 25 to 45, and 18% higher than workers over 45. Lost Time Frequency means that for every 100 young workers 2.95 will have a work related time loss injury. (In comparison, if we looked at all reported claims it could be said that one out of every ten young workers (10%) will be involved in a preventable workplace accident reported to the WCB.)

Although we can not say for exact certainty what caused the reduction in the Young Worker Lost Time Injury Frequency between 2002 and 2004, it should be noted that in March 2002 the Workplace Safety: Safety and the Young Worker Program was launched, and in September 2003 a partnership for delivering the program in Yellowknife schools was initiated. Prior to 2004 the frequency for young workers was the highest of the age groups, 10% higher than 25 to 45 and 20% higher than those over 45. There was an increase in 2005 (with all age groups) but young worker frequency remained lower than the core age group of 25 to 45.

**NWT - Lost Time Injury Frequency (by Age Group)** 

	2001	2002	2003	2004	2005	Avg
Young Workers	3.10	3.29	3.18	2.44	2.74	2.95
25 to 44	2.83	2.99	2.85	2.55	2.81	2.81
45 Yrs & Older	2.14	2.92	2.87	2.22	2.38	2.50
NWT Overall	2.65	3.17	2.82	2.31	2.74	2.74



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### **Nature of Time Loss Injuries**

Sprains, strains and tears are the top nature of time loss injury regardless of age group. Ranging between 32% and 36%.

The majority of top ten natures of injury have only small variations between age groups with a couple of exceptions. 1) Young workers are more likely to have a higher occurrence of cuts and lacerations. This nature of injury drops by 6% after workers reach age 25. 2) The occurrence of fractures increases as workers age (5% young workers, 8% 25 to 45, and 12% over 45). 3) Carpel Tunnel Syndrome does not appear on the top ten nature list until workers are 45 and over.

Top 10 Nature of Time Loss Injury	Young Workers	Age 25 to 45	Age 45 and Over
Sprains, strains, tears	33%	36%	32%
Cuts, lacerations	15%	9%	9%
Bruises, contusions	14%	11%	13%
Back pain, hurt back	6%	7%	7%
Fractures	5%	8%	12%
Foreign bodies (superficial splinters, chips)	3%	3%	3%
Soreness, pain, hurt, except the back	3%	3%	3%
Punctures, except bites	2%	1%	1%
Crushing injuries	2%		1%
Dislocations	1%	1%	
Spasms or tremors		1%	
Carpal tunnel syndrome			2%
All Other	16%	19%	19%
Total	100%	100%	100%

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### Ranking of Time Loss Claims by Industry Sub-Class and Age Group

Below is the breakdown for each age group showing the top five industry subclasses by volume of time loss claims. For each age group the top five subclasses represent over 50% of all time loss claims.

For young workers the most prominent sub class is Sub Class 6620 (Retail, Personal Service & Light Manufacturing) which represent 18% of time loss claims. For workers age 25 to 45 it is sub class 4410 (General Construction Industry 14%, and for workers over 45 the primary sub class is 8810 (GNWT & GNU) 19%.

#### Young Workers Time Loss Claims by Industry Sub-Class (top 5)

		Young Worker	25 to 45	45 and Over
6620	Retail, Personal Services & Light Manufacturing	18% - Rank 1	7%	5%
4410	General Construction, Supply & Install	14% - Rank 2	14%	11%
8820	Authorities	9% - Rank 3	12%	10%
4430	Construction - Logging, Mobile Equip & Marine	7% - Rank 4	7%	9%
7760	Accomodation, Food and Entertainment	7% - Rank 4	4%	4%

#### Workers 25 to 45 Time Loss Claims by Industry Sub-Class (top 5)

		Young Worker	25 to 45	45 and Over
4410	General Construction, Supply & Install	14%	14% - Rank 1	11%
8820	Authorities	9%	12% - Rank 2	10%
8810	GNWT/GNU	4%	11% - Rank 3	19%
4430	Construction - Logging, Mobile Equip & Marine	7%	7% - Rank 4	9%
7740	Health & Welfare Services	2%	7% - Rank 4	7%

#### Workers age 45+ Time Loss Claims by Industry Sub-Class (top 5)

		Young Worker	25 to 45	45 and Over
8810	GNWT/GNU	4%	11%	19% - Rank 1
4410	General Construction, Supply & Install	14%	14%	11% - Rank 2
8820	Authorities	9%	12%	10% - Rank 3
4430	Construction - Logging, Mobile Equip & Marine	7%	7%	9% - Rank 4
7740	Health & Welfare Services	2%	7%	7% - Rank 5

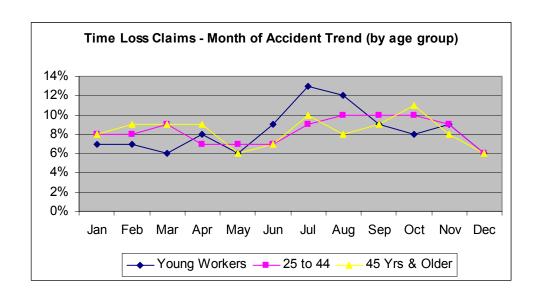
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### Time loss Claims Volume by Month and Age Group

The volume of time loss claims for young workers is unlike the experience of other age groups. Young worker claims are definitely seasonal in nature and peak during the summer months. 25% of all young worker time loss claims occurred in July and August.

#### Time Loss Claims Volume by Month (by age group)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Young Workers	7%	7%	6%	8%	6%	9%	13%	12%	9%	8%	9%	6%	100%
25 to 44	8%	8%	9%	7%	7%	7%	9%	10%	10%	10%	9%	6%	100%
45 Yrs & Older	8%	9%	9%	9%	6%	7%	10%	8%	9%	11%	8%	6%	100%



### **Program Suggestions From Your Friendly Neighborhood Stats Person**

- 1) Partner with North Wise (GNWT) and Service Canada Centre for Youth (HRSD) to deliver safety training to returning summer students (prior to summer claims spike).
- 2) Offer assessment rebates to employers who have their young workers take Workplace Safety: Safety and the Young Worker.
- 3) Develop a communications prevention advertising campaign targeting young workers in retail trade.

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