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**Occupational Disease
Information Session**

Presentation to Stakeholders

Occupational Disease Cost Review and Projection
Model

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Overview

- Background
- Scope and Data
- Frequency
- Reporting Lags
- OD Claim Costs
- OD Frequency and Costs by Class
- Recognition of OD in Benefit Liabilities and Premium Rates
- OD Projection Model
- Next Steps

Background

- The need for a review of the costs of occupational disease (OD) claims arose during the 2005 discussions with stakeholders on funding, and also during the consultation on OD Response Strategy Review
- The review helped to answer the following questions
 - what was the incidence and severity of OD claims, especially by type of claim and by industry
 - were the future costs of OD claims being adequately charged in premium rates
 - would the new protocols and procedures for adjudicating OD claims have any impact on expected future OD claims costs

Occupational Disease Cost Review

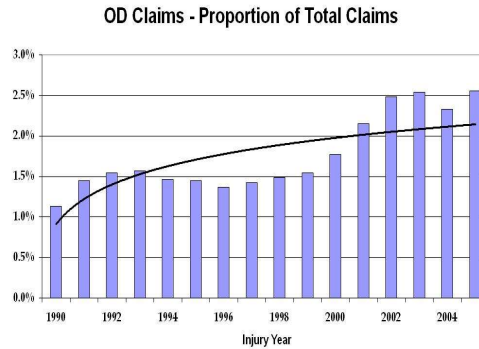
- Scope
 - included analyses of the reporting patterns of occupational disease (OD) claims, their frequencies and severity rates, and historical trends
 - also looked at the extent to which the current premium rate setting process captures OD claim costs
 - subsequent work focussed on the modeling of future OD claims
- Data
 - nearly 180,000 "approved" OD claims included from claim data as of June 2006 on injuries/diseases from 2005 and earlier injury years
 - included all types of claims
 - disability benefits paid to injured workers as pre-1990 worker pensions, future economic loss and loss of earnings benefits
 - survivor benefits
 - health care payments, and
 - other OD payments such as NEL and LMR payments
 - did not include:
 - denied or pending claims
 - PEIR (Program for Exposure Incidence Reporting)
 - Schedule 2 OD claims, or
 - Costs of firefighter claims as a result of the introduction of legislation (Bill 221) in 2007

Frequency

The proportion of total number of OD claims to total Schedule 1 claims has risen from about 1.5% in the early 1990s to about 2.5% in early 2000s.

Table 1a
OD Claims to Total Claims By Injury Year

1990	1.13%
1991	1.45%
1992	1.55%
1993	1.57%
1994	1.46%
1995	1.45%
1996	1.37%
1997	1.42%
1998	1.49%
1999	1.54%
2000	1.77%
2001	2.15%
2002	2.48%
2003	2.54%
2004	2.33%
2005	2.55%



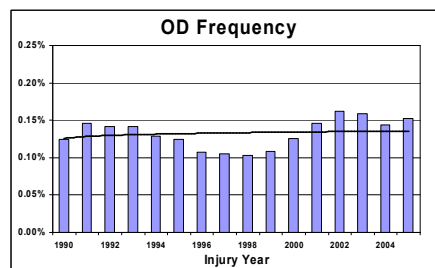
The solid line indicates the trend

Frequency cont'd

The incidence (frequency) of OD claims to total employment has remained relatively stable at about 15 claims per 10,000 employed, or 0.15%.

Table 1b

Injury Year	Employment	Matured OD	
		Claims	OD Frequency
1990	3,186,726	3,977	0.125%
1991	3,079,429	4,509	0.146%
1992	3,079,775	4,367	0.142%
1993	2,943,830	4,179	0.142%
1994	3,026,811	3,903	0.129%
1995	3,112,849	3,890	0.125%
1996	3,136,302	3,369	0.107%
1997	3,284,465	3,448	0.105%
1998	3,455,179	3,562	0.103%
1999	3,596,280	3,893	0.108%
2000	3,746,318	4,714	0.126%
2001	3,768,584	5,483	0.145%
2002	3,870,899	6,287	0.162%
2003	3,939,587	6,275	0.159%
2004	4,005,960	5,743	0.143%
2005	4,130,420	6,276	0.152%



The solid line indicates the trend

Reporting Lags

- Definition of reporting lag
 - expired time from date of injury/disease to date of registration
 - date of injury/disease is usually date of first medical attention, and is not date of first exposure to hazardous substances or conditions
- 96% of all OD claims registered within 1 year, and more than 98% registered within 5 years
- fatal claims are fewer, but are more costly and have a longer reporting lag likely due to time required to establish linkage to workplace exposures.

Type of OD Claim	Number of Claims	1 Year Lag	5 Year Lag
Fatal	3,776	73.1%	87.2%
Noise Induced Hearing Loss (NIHL)	56,936	92.7%	96.7%
Other OD Claims	119,270	97.6%	99.3%
All OD claims	179,442	95.5%	98.2%



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Analysis of OD Claim Costs

- Historical OD claim payments were fully loaded with expected future costs, based on 2005 valuation of benefits liability
- Due to large number of non-lost time injury claims, OD costs per claim (and for comparative purposes Schedule 1 costs per claim) expressed as cost per all claims
 - for example, 2007 Schedule 1 cost per claim (LTI) of \$21,300 can be re-expressed as \$6,319 cost per claim (all claims, and without Future Claims Administration Costs)
- OD costs per Schedule 1 claim is \$494, hence OD costs are about 8% (494/6319) of Schedule 1 claims cost.
- OD claims cost about \$27,000 per claim (all OD claims), which means OD claims are more than 4 times as costly as Schedule 1 claims, in spite of large number of less expensive NLTI claims



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OD Claim Costs by Type

- Most of the cost of OD claims is for health care, followed closely by survivor benefits and loss of earnings

Table 4

2007 OD Cost Per OD Claim						
Description	HC	LMR	LOE	NEL	SURV	Total
Sch 1 OD cost per OD claim	\$10,303	\$339	\$6,246	\$1,847	\$8,269	\$27,004

- Although there are a fewer OD cancer claims, they are much more costly than other claims, ranging from \$300,000 to more than \$500,000 per claim.
- NIHL is the largest category (about 57,000) with costs averaging about \$25,000 per claim.



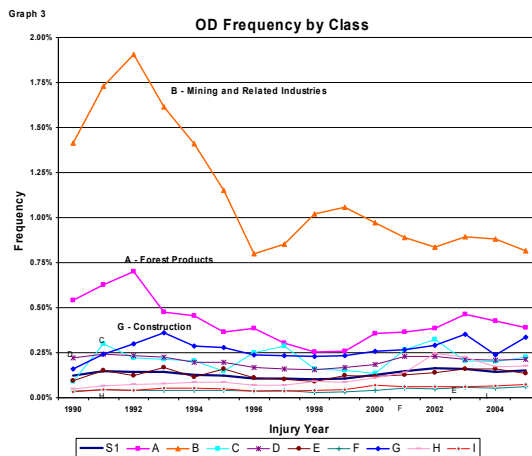
OD Frequency by Class

Schedule 1 frequency average is 15 per 10,000 (0.15%)

- Mining started with a frequency rate that was 10 times higher than Schedule 1 average, which improved significantly in early 1990s, but has levelled off at around 80 per 10,000 (about 5 times higher than average)
- Forestry has also improved its rate, but is still more than twice the average
- Construction (Class G) rate has not improved and become slightly worse

Table 12

Class	Name
A	Forest Products
B	Mining and Related Industries
C	Other Primary Industries
D	Manufacturing
E	Transportation & Storage
F	Retail and Wholesale Trades
G	Construction
H	Government & Related Services
I	Other Services



OD Costs by Class

Schedule 1 Total Costs per Claim (All) = \$6,319

- Mining and Construction classes have the highest OD costs per claim
 - proportion of Mining's total claims costs that are OD claims costs is the highest at 31%
 - by comparison, Construction's OD claim costs at 8% are about the same as Schedule 1

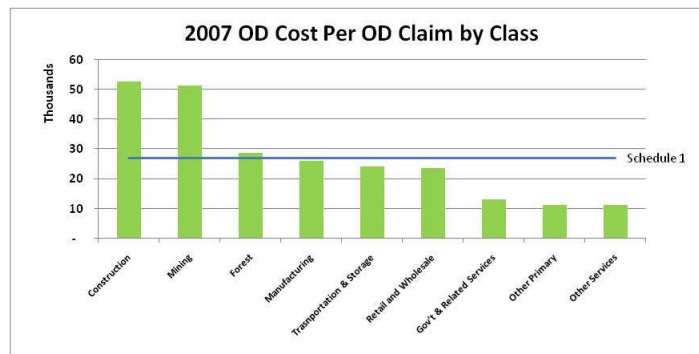
- About 10% of all Forestry and Manufacturing claims costs are OD claims costs

Description	HC	LMR	LOE	NEL	SURV	Total	All Costs To All Class Claims	OD Costs To All Class Claims	% OD Costs To Total
Sch 1 OD cost per OD claim	\$10,303	\$339	\$6,246	\$1,847	\$8,269	\$27,004	\$6,319	\$494	8%
Forest Products	\$17,524	\$233	\$4,828	\$1,644	\$4,653	\$28,882	\$10,798	\$1,051	10%
Mining	\$15,366	\$294	\$7,326	\$5,501	\$22,857	\$51,344	\$24,696	\$7,702	31%
Other Primary	\$5,435	\$535	\$3,471	\$556	\$1,368	\$11,364	\$6,196	\$245	4%
Manufacturing	\$10,614	\$391	\$5,666	\$1,969	\$7,381	\$26,022	\$5,720	\$544	10%
Transportation & Storage	\$10,727	\$133	\$4,499	\$1,167	\$7,792	\$24,318	\$9,436	\$255	3%
Retail and Wholesale	\$7,881	\$728	\$9,466	\$2,008	\$3,606	\$23,688	\$4,443	\$190	4%
Construction	\$15,772	\$283	\$12,200	\$3,787	\$20,739	\$52,781	\$14,421	\$1,085	8%
Government & Related Services	\$4,580	\$205	\$5,068	\$617	\$2,837	\$13,308	\$4,807	\$321	7%
Other Services	\$4,789	\$113	\$3,300	\$821	\$2,269	\$11,292	\$3,714	\$127	3%



OD Costs by Class

Schedule 1 OD Costs per OD Claim (All) = \$27,004

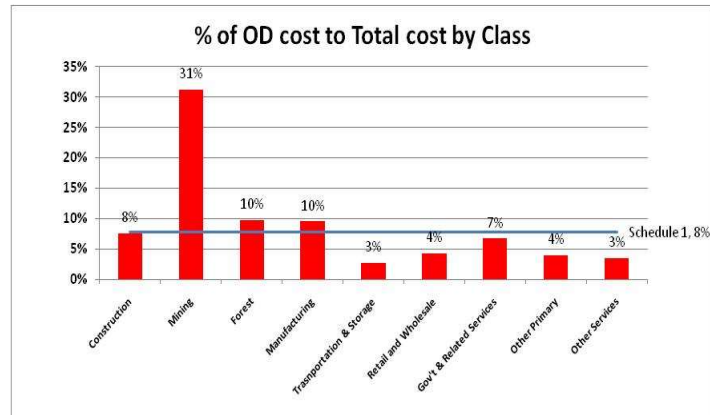


- Construction and mining OD claims costs per OD claim are approximately twice the overall Schedule 1 cost.



OD Costs by Class

Schedule 1 Percentage of OD Cost to Total Costs = 8%



- Almost one-third of Mining total claim costs are OD related

Recognition of OD Claims in Benefit Liabilities and Premium Rates

- Valuation of benefit liabilities
 - all claim counts are "matured", based on last 5 years of claim reporting lag experience
 - late reported claims (including late reported OD claims) are included in valuation process
 - "maturing" process for fatal claims may need to be strengthened as they take the longest to fully report and, although fewer in number, individual costs are large
 - no additional provision made for hazardous exposures or workplace conditions which may eventually lead to OD claims
- Premium rates
 - average cost per LTI determined for the previous year and then projected 2 years forward to the premium rate year
 - an additional margin of 5% is added to projected costs to cover unanticipated increases in claim costs
 - 5% margin is sufficient to cover late reported OD claims

OD Projection Model

- Projection model analyzes expected cost of future OD claims
- Data is incidence rates and costs from the cost review
- Model outputs future trends and costs in aggregate and by class, benefit type and diagnosis
- Assumptions are consistent with the assumptions in 2006 funding outlook, supplemented with information from WSIB OD specialists.
- Significant observations
 - OD costs are expected to rise faster than Schedule 1 costs
 - OD costs are about 8% of Schedule 1 in 2006 and rise to about 12% in 2014
 - Consistent with 2006 funding outlook which was based on 2% growth in Schedule 1 claim costs and 5% growth in OD costs

Next Steps

- Update cost review with OD claims data and information from new OD Services Division up to 2009
- Recalibrate assumptions in OD projection model in 2010