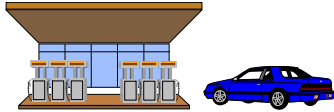


WorkSafeBC Hearing Loss Prevention Section - March 20, 1997 (updated for CU's June 2002)

## Noise Survey Project Report



*Are noise exposures in these industries higher than the limits in the new Noise Regulations?*

### **“Borderline” Noise Exposures**

This project was initiated as a result of the lowering of the exposure limit in the new Noise Regulations to 85 dBA  $L_{ex}$  from 90 dBA  $L_{ex}$ . The industries selected for sampling were those where worker noise exposures were suspected to be between 85 and 90 dBA  $L_{ex}$ , and therefore were likely affected by the new exposure limit. The consultant obtained 167 personal noise exposure samples for workers in the following nine different types of businesses: autobody, automotive service/repair, brake/muffler, dry cleaners, garment manufacturing, hospitals, laundries, tar/gravel roofing, and tire installers.

Written reports of the sampling were sent to the 29 firms which participated in the project, along with copies of our new hearing conservation publications.

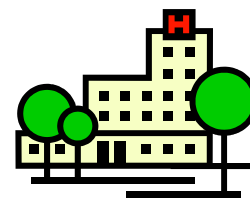
Results of the sampling are summarized on the reverse of this sheet. Mean noise exposures which exceeded 85 dBA  $L_{ex}$  are in **bold** figures. Note that where there was only one person in a particular occupation to sample, no range or standard deviation is reported. This sheet may be given out to employers in these industries, especially if the firm is considering asking for an exemption from noise measurement re: O.H.& S. Regulation, Part 7 Section 7.4. Some highlights of the results are:

**Automobile Repair/Service:** All occupations had exposures over the limit, except for customer service, managers and partsmen.

**Garment Industry:** No workers had exposures over the limit, except for the operator of a Gerber Cutting Machine. This computer controlled fabric cutter has a dust collector /vacuum exhaust (already fitted with a "silencer") which is the dominant noise source.

**Dry Cleaning:** No exposures over the limit, except for workers using a "spotting" machine, a high pressure steam gun applying solvents to pre-treat stains.

**Hospitals:** Pot and dishwashing, physical plant engineers and laundry workers had mean noise exposures over the limit.



### Glossary

$L_{ex}$ , or noise exposure level, is the sound level, energy averaged over eight hours, which would give the same daily noise exposure as the varying noise over a typical full shift.

**Mean** is the arithmetic average of a number of noise exposure levels.

**Standard deviation, S.D.**, is a measure of the variance around the mean.

Occupation	Mean L <sub>ex</sub> dBA	S.D.	Sample Size	Range dBA L <sub>ex</sub>
<b>Automobile 764006</b>				
<b>Repair/Service</b>				
Autobody Technician	90	4.3	13	83-96
Detailer	97		1	
Painter	94	7.7	2	88-99
Customer Service, Manager, and Partsman	80	2.4	8	77-83
Brake/exhaust Mechanic	88	3.6	13	82-95
Auto Mechanic	87	5.2	37	77-102
Tire Installer	87	4.1	10	81-96
Service Manager-Tire Shops	86	1.9	3	84-88
<b>Garment Industry 715008</b>				
Presser	79	3.1	4	75-81
Sewing	77	4.9	5	70-82
Cutting/Laying	70		1	
Maintenance	83		1	
Form Topper	82		1	
Button Machine Operator	81		1	
Surveyor	79		1	
Laundry	82		1	
Shipping	78		1	
Plant Foreman	84		1	
Layer	75		1	
Gerber Cutter	86		1	
All samples combined	79	4.3	19	70-86

Occupation	Mean L <sub>ex</sub> dBA	S.D.	Sample Size	Range dBA L <sub>ex</sub>
<b>Laundry Service 764020</b>				
Laundry Worker	85	4.5	17	79-94
Vehicle Maintenance	89		1	
Asst. Chief Engineer	86		1	
Production Manager	84		1	
All samples combined	85	4.3	20	79-94
<b>Dry Cleaning 764020</b>				
Presser, Shirt Unit, Utility/Foreperson, Front Counter	78	1.7	12	75-81
Dry Cleaner/Pre-spotting	87	.7	2	86-87
All samples combined	79	3.5	14	75-86
<b>Hospitals 766001</b>				
Food Services Worker-- Food Preparation	80	2.3	4	78-84
Pot Washing/Dishwashing	85	2.2	8	80-88
Sterilization	78	2.2	2	77-80
Physical Plant Engineer/ Steam Plant Engineer	88	6.5	3	81-93
Maintenance Worker/Plumber/Electrician	81	6.6	3	76-86
Laundry Worker	86	4.5	2	83-89
<b>Tar/Gravel Roofing 721036</b>				
Roofers	91	4.2	5	88-98