# ACOUSTICAL EVALUATION OF HEALTHCARE FACILITIES



Noise in your workplace may affect your health. Find out how you can help researchers learn more.

## ARE YOU A PRIMARY CAREGIVER?

Are you interested in how noise in your workplace may affect your health?

If so, you might be interested in participating in a UBC research study that aims to measure how noise in healthcare facilities affects things like worker stress, productivity, communication, and relationships with residents.

# WHAT IS THE PURPOSE OF THIS STUDY?

Noise is often a problem in healthcare facilities. Their open design, multi-use purpose, and the presence of many people and machines can contribute to problems for employees.

However, we need to learn more about the specific effects of acoustical conditions on healthcare workers, so that we can develop appropriate strategies to reduce noise.





HSA Health Sciences Association of British Columbia









#### WHAT WOULD I NEED TO DO?

Your participation would take place over 3 days, and would involve:

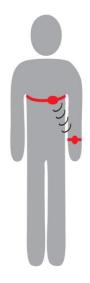
- Meeting with the study team to learn about the study, complete a questionnaire, and collect testing materials
- Providing saliva samples 5 times per day during two consecutive work days (10 samples in total)
- Keeping a brief log of your activities during the time you provide saliva samples
- Wearing a heart rate monitor during two work days
- Wearing a noise monitor during two work days
- The survey will be repeated after two weeks for a total of six days



WHY ARE YOU MEASURING MY HEART RATE? Your heart rate may vary in response to stress. These variations are a sign of wear and tear on your nervous system.

### NOISE DOSIMETER (MONITOR)

• Clipped onto lapel, close to ear



#### HOW DO I TAKE A SALIVA SAMPLE?

In a sample holder, you will be given ten (10) cotton rolls. To take a saliva sample you open *the holder, take one cotton roll, place it into your mouth and chew on it for 1 minute.* When you are done simply place the chewed cotton roll back into a Ziploc bag that will be provided. The sample holder will keep track of when you took your sample.

#### WHY ARE YOU TAKING MY SALIVA?

We are taking your saliva to allow us to measure cortisol. This substance is produced naturally by the body every day, and it can be used as an indicator of the stress you experience.



You will be asked to chew on a cotton roll to collect saliva samples. The special sample holder that we are using for this study records each time that a cotton roll is removed.

Lid cap Cotton roll Cotton roll container Reservoir

### HOW WILL MY PRIVACY BE PROTECTED?

All your personal information and the data collected about you will remain confidential. Only the study researcher will be able to view your information. Any results published of yours will be combined with other caregivers and could not be used to identify you. None of your personal information or results will be shared with another co-worker, your employers, or union.

# WILL I BE INFORMED OF THE STUDY RESULTS?

We will provide all who volunteer with a summary of their own measurements, as well as a summary of the overall project findings.

### WHERE CAN I GET MORE INFORMATION?

If you would like more information about the study, or if you have questions, please contact:

Yat Chow, Study Coordinator phone: 604.827.5791 e-mail: yat.chow@ubc.ca

### HELPFUL RESOURCES AND LINKS

For information about effects of community noise,

http://www.hc-sc.gc.ca/hl-vs/iyh-vsv/lifevie/community-urbain-eng.php

For information about effects of noise on the health of people living near airports, <u>http://www.hc-sc.gc.ca/hl-vs/iyh-</u> vsv/environ/noise-bruit-eng.php

To learn more about noise and health as well as global initiatives to remediate to this problem, <u>http://www.euro.who.int/Noise</u>

Also check the guidelines proposed by the WHO to regulate noise emission at work, and in the community at

http://www.who.int/docstore/peh/noise/guidelines 2.html



School of Population and Public Health University of British Columbia 3<sup>rd</sup> Floor, 2206 East Mall Vancouver, BC V6T 1Z3 Canada

