



## Deaf Awareness Week Health Survey Results

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On September 19, 2004 at the Deaf Awareness Week (DAW) Kick-Off event held at the Memorial Art Gallery, a team of researchers from the new National Center for Deaf Health Research (NCDHR) at the University of Rochester Medical Center collected health information from 74 adults in a "pilot study." In this article, we share our findings and discuss what they mean about important health issues in the Deaf community.

To download the Rochester Deaf Health Task Force Report:

<http://flhsa.org/pubs/majorpubs.htm>

**Pilot study:** A "pilot study" is a small research project. Researchers do pilot studies to explore ideas for further research or to test new research surveys. At the DAW Kick-Off, we did both. Researchers can then use results from pilot studies to convince the government to pay to support more research in a certain area. This pilot study was to learn about deaf people's health and knowledge about health.

We used ideas from the Rochester Deaf Health Task Force's final report to plan this research. We decided to collect information that helps predict whether someone is likely to develop certain diseases, like heart disease. We asked people to fill out a questionnaire and we measured their blood pressure, height, weight, and waist size. We also asked them to take a health vocabulary quiz. Everyone who volunteered to give us this health information (we'll call them "participants" in this article) was given a report that listed the measurements we took from them and whether the measurements meant that they might have special health risks. Participants who said that they did not have a regular doctor were given information about healthcare offices in Rochester where the staff know sign language.

**Demographics:** As part of a research project it is important

to collect information about the research participants. Researchers ask questions about age, man/woman, race, education, and income. This is called "demographics." Demographics are a way to describe the group of participants. Knowing the group of participants is important for understanding the research results. For example, suppose all the research participants were young, the research would not tell us much about health of older people. For researchers working with deaf people it is also important to ask questions about their deafness and communication. Researchers only use demographics to help describe the group. Information

about each participant is kept private. For this pilot study we did not ask anyone their names so that all the information would be private.

In the pilot study there were 74 participants. Sixty-one said they were deaf, 5 said they were hard-of-hearing and 8 said they were hearing. Eighty-two percent were sign language users. Their were equal numbers of men and women. This was a highly educated group; over 81% had a college degree. Their average age was about 45.

**Research results:** In the pilot study we wondered about the health and health knowledge of deaf people. Below is some background information and what we learned from the pilot study's measurements and the health questions.

Blood pressure is described by two numbers, the "systolic" or top number and the "diastolic" or bottom number. The top number measures the pressure when the heart squeezes and the bottom number measures pressure when the heart is relaxed between heart beats. Healthy blood pressure should be 120/80 or lower. If the top number is often over 120 or the bottom number

is often over 80, many types of health problems could occur. High blood pressure is 140/90 or higher. Blood pressure from 120/80 to 140/90 is called "prehypertension." "Prehypertension" means a person does not have high blood pressure now but is at risk to have high blood pressure in the future. High blood pressure (either number) is a common problem in America. Forty-two percent of the deaf and hard-of-hearing participants had blood pressure that was higher than what is best for staying healthy (systolic >129 or diastolic >84). Twenty-one percent of the deaf and hard-of-hearing participants said they took blood pressure medicine. Four of the people who had high blood pressure apparently did not have a regular doctor.

Smoking puts people at risk for many diseases. Only 8 deaf and hard-of-hearing participants (11%) were smokers. A recent national survey of hearing people found that 21% are smokers. Other research we've done also suggests that deaf people smoke less than hearing people.

Cholesterol is a chemical in the blood that can lead to heart disease. Doctors recommend that all adults have a cholesterol test. Generally, a "total cholesterol" number below 200 is good. Over 65% of the deaf and hard-of-hearing participants said they had their cholesterol tested. Only 18% said they had high cholesterol. This is much better than the 33% of hearing people who say they have high cholesterol in national surveys. Twenty-four percent of the deaf and hard-of-hearing participants said they had not had their cholesterol tested. Eleven percent did not know if they'd had a cholesterol test or not.

"Body mass index" (BMI) is another measure we used. BMI is a measure of your body fat based on your height and weight. For most people, their BMI number should be between 18.5 and 25. If your BMI is over 25, it means you are overweight. If your BMI is over 30, it means you are extremely overweight or "obese." Being overweight

To learn more about blood pressure:

<http://www.nhlbi.nih.gov/hbp/index.html>



or obese can lead to health problems, including diabetes and high blood pressure. You can find out your BMI by typing in your height and weight at this web site: <http://nhlbisupport.com/bmi/bmicalc.htm>. In the DAW study, 42% of the deaf and hard-of-hearing participants were overweight and 27% were obese. This is about the same percentage of overweight and obese people in the hearing population, according to national studies. Fifty-five percent of the deaf and hard-of-hearing group said they exercise regularly.

**Health Knowledge:** A number of our deaf participants said they did not know important information about their health. Nine (15%) said they did not know if their weight was normal or not. When we measured and weighed these nine people, only one of them had normal BMI. Six were overweight and two were obese. Thirteen percent of the deaf and hard-of-hearing group did not know if their blood pressure was high, low, or normal before coming to the DAW event. Twenty-one percent did not know if they had high cholesterol or not. Twelve percent did not know if they ever had a cholesterol test. Perhaps most alarming, five deaf individuals said that they did not know if they were taking medicine for high blood pressure, high cholesterol, or diabetes. It is worrisome to us if people are taking medicines but don't know what they are for. Seventy-nine percent of the deaf and hard-of-hearing participants agreed that "I should learn more about health and illness."

We also measured health knowledge with an English vocabulary test. This same words are used to test hearing people about health knowledge. Some of the deaf and hard-of-hearing participants earned low scores on the health vocabulary quiz. Twenty-six percent earned scores that were lower than hearing high school students get on this same quiz. This was surprising to us because the deaf and hard-of-hear-

ing group who came to the DAW event was highly educated.

**Health:** Sixty-four percent of the deaf group said their health was "good." This is lower than survey results showing that 85% of hearing people say their health is "good."

**Doctors:** We asked about people's experiences with doctors. Thirty-four percent of the deaf participants agreed with the sentence "I have experienced problems communicating with my doctor." None of the hard-of-hearing participants agreed with that sentence.

We also asked if participants had a usual doctor or clinic to go to. If they needed medical care only 77% of the deaf and hard-of-hearing group reported having a doctor or doctors' office to go to. This is lower than the 90% of hearing people who have a usual doctor or doctors' office, according to national surveys. Other research shows that people who have a usual doctors' office to go to get better healthcare than people who don't.

**Deaf health research:** Fully 97% of the participants agreed with the statement "I think people doing science research about deaf people's health or illness is a good thing."

What do these research results mean for the Rochester Deaf and hard-of-hearing community? The good news is that smoking rates and high cholesterol rates were reported to be lower in our deaf and hard-of-hearing group compared to hearing people. Other health risks we found in the DAW group were about the same as for hearing people, including how many were overweight. But some of the health risks we found were worse than we find among hearing people. These included the number of people who did not have a regular doctor, the number who had not had their cholesterol tested, and the num-

ber how had high blood pressure. Also of concern to us was the number of people who answered "I don't know" to important health questions. Has your doctor ever checked your cholesterol level? Is it high or normal? Do you have high blood pressure? Do you have diabetes? Are you overweight? Do you know the reason for every medicine you take? People are at higher risk for developing serious diseases when they don't know these things. We hope the results of this research will encourage people to take better care of their health and to become active in helping to improve health and prevent disease in the Deaf and hard-of-hearing community. Supporting health research such as this DAW study is one useful way to do that.

### The new NCDHR web page:

<http://www.urmc.rochester.edu/cpm/NCDHR/>

**What's next?:** This pilot study taught us some things about the health of the participants. It also points to areas that need more research. We also want to learn about the health of the diverse deaf and hard-of-hearing people who did not attend the DAW Kick-Off or participate in the pilot study. NCDHR researchers will use results from this pilot study to ask the government to give money for more research on health and healthcare with deaf and hard-of-hearing people. This way we can learn more and find ways to improve the health of deaf and hard-of-hearing people and their families.

The NCDHR researchers want to thank the 74 people who participated in this study and the members of the Deaf community who allowed us to do this work at the DAW event. We look forward to doing more research and education projects with the Rochester area Deaf and hard-of-hearing communities. If you have questions about NCDHR, or ideas about other research projects we should do, please contact our secretary, Heather Pavey at 276-2120 TTY or via e-mail at [Heather\\_Pavey@urmc.rochester.edu](mailto:Heather_Pavey@urmc.rochester.edu).

This web page has a power point slide show that shows the increase in obesity in the US:

<http://www.cdc.gov/nccdphp/dnpa/obesity/trend/maps/index.htm>