GUNS AND AMMO

Firearms account for about 392 deaths per year in Oregon and, nationally, 100,000 hospital emergency room visits and $20 billion in costs. Living in a home with a gun is a well-established risk factor for accidental death, suicide and homicide with each household member at risk of gun-related injury when firearms are not safely stored. There is also evidence that alcohol use is associated with homicides, many of which are related to firearm use.

Thirty-two percent of Oregon high school students reported carrying firearms (guns, knives or clubs) in 1992. The epidemiology of weapon carrying and weapon storage among Oregonians was not otherwise well understood until recently. This CD Summary describes the findings of a survey of gun carrying and storage practices among Oregonians.

METHODS

Data were obtained from the 1992 and 1993 Oregon Behavioral Risk Factor Surveillance Survey (BRFSS), a random digit dialing survey of Oregon residents age 18 and older (response rate=75%). The survey consists of questions about health behaviors and demographics. Questions about firearm carrying and storage were added by the Oregon Health Division exclusively for the Oregon BRFSS (see box). “Firearm carriers” are persons who had guns in their households and who carried loaded firearms in the past month (excluding gun carrying for work or sports). Gun storage practices were classified as: 1) no household firearms; 2) firearms always or sometimes stored loaded and unlocked (unsafe storage); 3) firearms always stored unloaded and locked, and ammunition always stored locked (safe storage); and 4) all other practices.

Demographic characteristics of firearm carriers and those who have unsafe firearm storage practices are based on responses to survey questions about age, sex, race or ethnicity, county of residence, marital status, education level, income level, the presence of children younger than 18 years in the household (this question was asked only in 1993) and whether they lived in Oregon counties with fewer than 20, 20 to 69, or more than 70 people per square mile. Alcohol consumption is based on the number of times a person consumed five or more alcoholic beverages on one occasion (acute drinking) and on the consumption of 60 or more alcoholic beverages in the past month (chronic drinking).

Survey data from 6,702 respondents were combined for both years to produce weighted state-wide prevalence estimates and 95% confidence intervals. Census data (1990) on the number of households in Oregon (757,986) and the percentage of households in which adults lived with their own children younger than 18 years (48%) were used to estimate the number of households in Oregon with children younger than 18 years (360,040). To determine which characteristics were independently associated with carrying firearms and with living in households with unsafely stored firearms logistic regression models which included age, sex, race, county of residence, population density, education, income level, marital status, alcohol consumption, and children <18 years in the household were used.

RESULTS

More than 51% of the respondents reported that there were firearms in their households: 20.4% had long guns only, 4.3% had handguns only; and 25.8% had both. Of all adults, 10% (197,400) reported living in households with firearms that were always or sometimes stored loaded and unlocked. In contrast, 11.7% of adults (229,000) lived in households with firearms stored safely.

Although firearms in households with children were more likely to be stored in the safest manner than households without children, approximately 6% of households with children had guns stored in the least safe manner.

Characteristics associated with living in households with unsafe stored firearms included male sex, white race, having less than a college education, being married, having a household income more than $15,000, rural residence, and alcohol consumption. In contrast, the characteristics associated with safe gun storage practices were the presence of young children in the home and respondents between 18 and 35 years.

A total of 4.4% of adults (95,210) carried a loaded firearm in the past month for other than work or sport. Characteristics most strongly associated with carrying a loaded firearm included age younger than 65 years, male sex, high school graduate, and rural residence. Among those who lived in households with firearms, 9% carried firearms in the past month. Among persons who lived in households with firearms and who had ever used them, 14.5% carried firearms in the past month. Firearm carrying was more common during summer (5.2%) and fall (6.1%) than during winter (3.2%) and spring (3.2%).
The overall prevalence of adults living in households with firearms in Oregon (51%) was similar to the national estimate of 49% and to estimates from Michigan, Louisiana and Texas. About 1 of every 4 adults in Oregon carried a loaded firearm in the past month. An estimated 10% of all adults in Oregon lived in households with firearms stored unsafely. Although firearms tend to be stored more safely in households with children younger than 18 years, about 40,000 children lived in households with firearms stored unsafely. Episodic heavy alcohol use and chronic alcohol use were independently associated with living in households with firearms stored unsafely.

These data may underestimate the number of Oregon households with guns. One-quarter of the households contacted refused to participate, and there is no way to validate the responses of those who did. Despite these limitations, these findings suggest that increased attention to household firearm safety is necessary. Possible approaches include community education campaigns, firearm design modifications such as childproof safety devices, and education and training of firearm owners. The use of education and training for firearm users requires further study, since previous studies have demonstrated that persons who have had firearm training are more likely to store firearms safely.

Parents can be counseled to take some steps to reduce their child’s risk of injury from firearms:
- If a gun must be kept at home, it should be unloaded, separated from its ammunition and locked away.
- They should teach their children about how dangerous guns are and teach them not to handle or touch guns, even if there is no gun in the child’s home. Teach them to get help immediately from a parent or trusted adult if they find a gun.
- They should talk to their children about guns and violence, and how to handle strong emotions like anger or fear without striking or using a weapon.

REFERENCES