

vs average ratios, we still face a difficult choice: Which criterion should be used to choose between prenatal detection policies, Cost/Down syndrome detected or Miscarriages/Down syndrome detected? This choice is imposed by the existence of the disclosed trade-offs. A possible, albeit controversial, way out would be to attribute a monetary value, a cost, to procedure-related miscarriages, which will ultimately mean giving a dollar value to human life.

Our conclusion remains the same: there is a need to comprehensively inform decision makers about all outcome measures of adopting one screening policy or another. □

*Mateu Serra-Prat, MD, MPH*  
*Pedro Gallo, MA, MSc*  
*Albert J. Jovell, MD, DPH, PhD*  
*Marta Aymerich, MD*  
*M. Dolores Estrada, MD*

The authors are with the Catalan Agency for Health Technology Assessment, Generalitat de Catalunya, Barcelona, Spain.

Requests for reprints should be sent to Albert J. Jovell, MD, DPH, PhD, Catalan Agency for Health Technology Assessment, Travessera de les Corts 131-159, Pavelló Ave Maria, 08028 Barcelona, Spain.

## Reference

1. Serra-Prat M, Gallo P, Jovell AJ, Aymerich M, Estrada MD. Trade-offs in prenatal detection of Down syndrome. *Am J Public Health.* 1998;88:551-557.

## Carbon Monoxide Poisoning in the Aftermath of Hurricane Fran

Gasoline-powered generators are commonly used to provide emergency electrical power to households after a natural disaster, but the carbon monoxide produced by the generator can be a serious health hazard. A survey of 416 Midwest flood victims revealed that 54% thought it would be safe to operate a generator indoors with an open window and a running exhaust fan.<sup>1</sup>

We reviewed all cases of carbon monoxide poisoning in which the patient was treated with hyperbaric oxygen at the Duke Hyperbaric Center from September 6 to 9, 1996, immediately following Hurricane Fran. During this period, large areas of the Southeast were without electrical power. Thirteen individuals were seen whose poisonings were related to a generator in 5 separate incidents. Poisoning was severe, as reflected by a loss of consciousness in 3 of the patients and a mean carboxy hemoglobin concentration of 18.86 ( $\pm 6.87$  SD) for the group as a whole. Although there were no fatalities, one patient had persistent neurologic sequelae after treatment. In 4 of these cases, the generator had been placed outdoors but near a source of ventilation for the home, and in 9 cases the generator had been operated indoors.

A limitation of this study is that only individuals transferred for hyperbaric therapy were evaluated. If this tip of the iceberg contained 13 individuals, however, many more carbon monoxide poisonings of lower severity probably occurred.

Many people fail to follow the ventilation instructions included with carbon monoxide-producing equipment.<sup>1-4</sup> During a sustained electric power outage, public health officials should encourage radio and television stations to warn the public not to use gasoline generators indoors. □

*Bruce A. Cohen, MD, MPH*  
*Bryant W. Stolp, MD*  
*Guy DeL. Dear, MD*  
*Richard E. Moon, MD*  
*Linda M. Frazier, MD, MPH*

At the time of the study, Bruce A. Cohen, Bryant W. Stolp, Guy DeL. Dear, and Richard E. Moon were with the Duke University Medical Center, Durham, NC. Bruce A. Cohen is now with the Naval Undersea Medical Institute, Groton, Conn. Linda M. Frazier is with the University of Kansas School of Medicine, Wichita.

Requests for reprints should be sent to Bruce A. Cohen, MD, MPH, Naval Undersea Medical Institute, NSB New London, Groton, CT 06349-5159.

## References

1. Grief AL, Goldenhar LM, Freund E, Stock A, Halperin W. Carbon monoxide poisoning from gasoline-powered engines: risk perception among Midwest flood victims [letter]. *Am J Public Health.* 1997;87:466-467.
2. Cook M, Simon PA, Hoffman RE. Unintentional carbon monoxide poisoning in Colorado, 1986 through 1991. *Am J Public Health.* 1995;85:988-990.
3. Hampson NB, Kramer CC, Dunford RG, Norkool DM. Carbon monoxide poisoning from indoor burning of charcoal briquets. *JAMA.* 1994;271:52-53.
4. Cobb N, Etzel RA. Unintentional carbon monoxide-related deaths in the United States, 1979 through 1988. *JAMA.* 1991;266:659-663.