Briefings

edited by CONSTANCE HOLDEN

Anti-Panic Campaign

If you tend to panic, don't panic: The National Institute of Mental Health (NIMH) wants you to know that you suffer from a disorder that is treatable. On the heels of a consensus development conference held at the National Institutes of Health last September, NIMH has launched a campaign to provide hope to people who suffer panic attacks—onslaughts of terror accompanied by heart palpitations, feelings of suffocation, dizziness, and sweating. Panic disorder, which afflicts about 3 million Americans, is defined as experiencing at least four panic attacks in a month, or having only one but living in constant fear of getting another.

Most people head for a physician when they have a panic attack, since they usually assume they are suffering a heart attack or stroke, health officials said at a press conference held this month in Washington, D.C. And physicians often don't disabuse them of the notion. Many panic patients spend years getting expensive workups before getting a correct diagnosis. In fact, according to psychiatrist Fred Goodwin, head of the Alcohol, Drug Abuse, and Mental Health Administration, panic sufferers account for up to half of all negative angiographies.

Now NIMH wants both doctors and patients to know that panic disorder runs in families, and is strongly associated with drug and alcohol abuse, depression, and suicide attempts. And it can be brought to heel with antidepressants, anti-anxiety medication, cognitive therapy, and behavioral therapy aimed at desensitizing people to conditions that trigger attacks.

The panic initiative is NIMH's second major public information campaign, the first being one on depression launched in 1987. Both disorders affect females twice as often as males. Goodwin said researchers speculate that "the same neurological mechanisms" may underlie both.

Polio Vaccine Ruling

A U.S. District Court judge has ruled the government liable for injuries caused over several decades by oral polio vaccine, asserting that the federal Division of Biologics Standards (DBS)—now known as the Office of Biologics Research and Review—violated its own regulatory standards. Lawyers for the seven plaintiffs believe the decision could end up costing the government more than $30 million. The government is appealing the ruling.

This case is only the latest in almost two decades of court battles over Albert Sabin's vaccine. In his 20 September opinion, Maryland Judge J. Frederick Motz wrote that the regulatory violations were "unreasonable and a breach of the duty of care....DBS officials arrogated to themselves the power to define what constituted an acceptable risk, thereby undermining the rule of law and threatening long-term public confidence in the regulatory system itself." He said the DBS did not follow its own neurovirulence standards and also allowed attenuated vaccine viruses to be put through more tissue cultures than the regulations allowed during manufacture. He further found a causal link between the violations and two of the plantiffs' injuries. "The government," concluded Motz, "cannot simply now rewrite history to retell events as it wishes they had unfolded."

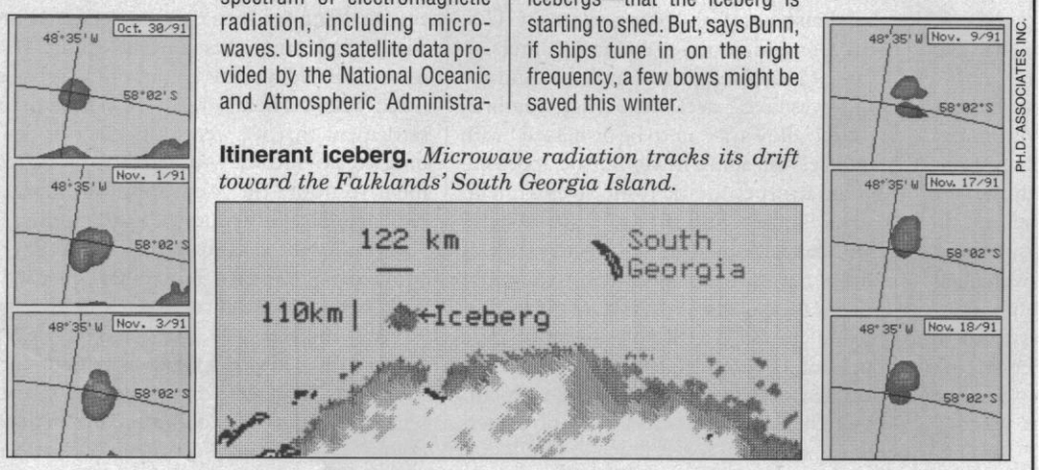
Marc Moller, an attorney for the plaintiffs, says the ruling is important for polio vaccine history: Sabin's oral vaccine was said to be superior to the killed virus vaccine developed by Jonas Salk. But, other than a 1955 industrial accident, Salk's has harmed no one, while Sabin's has harmed several hundred. Moller says the case also highlights serious problems in the drug regulatory system. "But for our piece of litigation," says Moller, "the government's willingness to play footloose with the law whenever it was comfortable to do so would not have been exposed."

Keeping Tabs on a Big Berg

Sometime in August, an iceberg the size of Connecticut (about 5000 square miles) detached itself from the winter ice sheet covering Antarctica's Weddell sea and started drifting northeast. The route of this unusually large chunk of ice may cross the shipping lanes running between Antarctica and Argentina. There, it could endanger research ships and commercial vessels plying the South Atlantic, especially at night or in fog. But thanks to researchers at three Ontario-based research organizations—the Canadian Center for Remote Sensing, the Institute for Space and Terrestrial Sciences, and a consulting firm, Ph.D. Associates Inc.—the frozen phenom is being tracked by microwave radiation.

Like other objects, icebergs emit a characteristic spectrum of electromagnetic radiation, including microwaves. Using satellite data provided by the National Oceanic and Atmospheric Administration, the Canadian team is for the first time mapping an iceberg's progress by using mathematical algorithms to translate electromagnetic emissions into a map of ice concentration, says Ph.D. Associates environmental scientist Susan A. Stubbs. In this way, the researchers can generate a new map every day to plot the iceberg's 9 miles-a-day northeast drift.

The mammoth berg, which apparently broke in half last week, is still hundreds of miles from the shipping lanes, says Stubbs' colleague Frank E. Bunn. But he says that if it doesn't soon beach itself on South Georgia Island, it "could become one of the most dangerous hazards in recent times for South Atlantic shipping." There's also a hazard presented by the growlers—mini-icebergs—that the iceberg is starting to shed. But, says Bunn, if ships tune in on the right frequency, a few bows might be saved this winter.



Itinerant iceberg. *Microwave radiation tracks its drift toward the Falklands' South Georgia Island.*

Beating Those Vibration Blues

Take a close look at tennis pro Andre Agassi's racket and you'll see a rubber band snaking around the bottom ends of its main vertical strings. The elastic is a low-tech technique for damping vibrations that can tire players and hamper their ability to control shots. But Agassi could have taken a more scientific route to vibrationless ground strokes, had he only consulted with Ahid Nashif. The Cincinnati-based Anatrol Corporation's mechanical engineer would have suggested Agassi