

however, tests showed that the redundancies would be less effective, preventing roughly 89% of the catastrophic failures caused by pilot error.

Like all pilots at Danville and other airlines, Reiger regularly went through a physical exam given by the Federal Aviation Administration (FAA), which tested coordination, eyesight, and reflexes, among other things. He had passed his most recent physical and was cleared by the FAA to fly. If Reiger did become symptomatic, however, the FAA would bar him from taking the controls. Despite the safeguards and the FAA's required annual physical, Reiger's uncertain medical condition made him a risk both to his coworkers and to Danville passengers.

Genetic Testing and Screening

At that point, the FAA and Danville, along with most other airlines, had no policy in place about genetic screening, and there were no FAA plans in the foreseeable future to introduce that testing. Since the mapping of the human genome, genetic tests could be performed (or were being developed) to identify the presence of genes for almost 5,000 diseases. The benefits as well as the drawbacks of genetic testing were readily identified. With genomics (the study and application of genetic testing), those individuals without symptoms could find out whether they or their children were susceptible to a particular disease. With that knowledge, they could seek prophylactic treatment, if available. In all instances, people who carried an inherited gene base could make a more informed decision about a myriad of important choices such as whether or not to have children.

The drawbacks—most notably, potential discrimination in employment or health insurance coverage based on test results—immediately became a controversial topic. People feared that genetic testing could adversely affect them if the information ended up in the possession of employers, insurers, mortgage companies, or any other institution with power over their economic future.⁴ Because of that potential for discrimination, scientists involved in the Human Genome Project and politicians immediately sought to put safeguards in place. The Constitution offered a modicum of protection, as did Congress's 1974 Privacy Act. But specific federal regulations that protected people from genetic discrimination in employment did not exist.⁵ The only federal legislation in place at that point was the Health Insurance Portability and Accountability Act of 1996 (HIPAA), which stated that "genetic information shall not be considered a preexisting condition in the absence of a diagnosis of the actual condition." That protection was limited, however, as it did not prohibit rate increases based on the results of genetic testing, it did not cover individuals not in a group plan, and it offered no protection against discrimination by employers⁶ Only a handful of states, including California, had laws

⁴ Sharona Hoffman, "Ask the Expert: Your Genetic Privacy," *National Women's Health Report* 22, no. 6 (December 2000): 6.

⁵ Anita Silvers and Michael Ashley Stein, "An Equality Paradigm for Preventing Genetic Discrimination," *Vanderbilt Law Review* 55, no. 5 (1 October 2002): 1,139.

⁶ Robert A. Curley Jr. & Lisa M. Caperna, "The Brave New World Is Here: Privacy Issues and the Human Genome Project," *Defense Counsel Journal* 70, no. 1 (1 January 2003): 22.