ISSUEFOCUS

The Y2K Problem

PART II How Might Y2K Affect You?

One of the places you might first experience the effects of the millennium bug is on the job, and every industry stands to be affected. If the bug triggers a crash, production and distribution will be disrupted. If the workplace shuts down while the glitches are fixed, you could be benched for the duration of the repair—from less than a day to several weeks.

Your personal and financial recordkeeping could be affected. All financial or business records-and these are numerous-rely on dates. Birth dates are used to verify eligibility for Social Security, Railroad Retirement, and pension and retirement plan benefits. If a computer interprets a date as invalid, you can't use a credit card, obtain a driver's license or use that driver's license as an ID to buy a six-pack of beer. Even worse, the company that issues the credit card you no longer can use could tell you the bill is 99 years overdue! Or your mortgage company doesn't have a record of your ever making a payment, and its computer could report that you owe 100 years' worth of interest!

Around the house you could be subject to numerous annoying inconveniences, particularly from some older models of video and computer products with microchips that are not Y2K compliant. How old is "older"? According to the Consumer Electronics Manufacturers Association, the only way to be sure about a product is to ask the manufacturer. And that advice applies to products still on the shelves at stores. While most home-appliance problems may be aggravating, they won't cause the "mis-

sion-critical" breakdowns that might occur with personal computers, home security systems and programmable thermostats

Some people have already experienced problems caused by the bug. On January 1, in Singapore, computerized taxi meters shut down. That same day police officer computers in Sweden ceased operating. Experts attributed these incidents to a so-called "nines problem" on dates like April 4, 1999, (the 99th day of 1999) and September 9, 1999, (the ninth day of the ninth month of 1999). A string of four nines was sometimes used by computer programmers to indicate that a date didn't exist or that the application or process should shut down. Other people have been inconvenienced when computers refused to accept credit cards with 20+ expiration dates in the year 2000 or beyond.

If microprocessors succumb to Y2K, major, as well as minor, interruptions of data and services could result. These chips control functions in all types of machines and appliances on land, in the sea and in the air—from microwave ovens and building elevators to Navy and civilian ships, from surgical and medical equipment in hospitals to communications and global positioning system satellites and receivers. No one knows which chips won't work properly in 2000, where some of them are located or how to test them.

A worldwide computer hookup increases vulnerability to the Y2K glitch. Most computer systems rely on other computer systems to provide data for their operations. So, if all systems aren't Y2K compliant, operations will be interrupted by whatever computers aren't compliant. For example, your supermarket's computer system may be all right; but what about its suppliers' systems and the systems of any subcontractors who deal with the suppliers? In this case,



availability of food items and other goods would be affected.

Is Anyone Trying to Fix This Problem?

Several federal agencies are behind schedule or have encountered problems fixing their computers. These agencies include the departments of Health and Human Services, State, Transportation, and Energy. However, the Social Security Administration, which began its Y2K effort in 1989, has squashed the bug, ensuring that beneficiaries will receive their monthly benefit checks without disruption. In addition, the Labor Department has assured us that payment of unemployment insurance benefits will continue even though a dozen states, the District of Columbia, Puerto Rico and the Virgin Islands have not completed Y2K fixes on computers that process federalstate benefits (like Medicaid and food stamps) and unemployment insurance programs.

In the private sector, large companies appear to be well-advanced in their Y2K-compliance efforts. The North American Electric Reliability Council studied the compliance efforts of the U.S. electrical power industry and is optimistic that widespread power failures



won't occur, although local brownouts and blackouts are a realistic possibility. telecommunications industry appears to be well-prepared, with few experts forecasting a complete loss of service, at least for domestic calls. A test late last year involving several stock brokerage firms in New York City indicated that the largest firms, at least, are prepared for the change. Although smaller and midsize firms may encounter problems, the financial industry appears better prepared than most other industries. This may be due in part to government insistence that it be ready and that firms inform investors of Y2K compliance as part of their required disclosure of information to investors.

Small businesses, on the other hand, lag behind in addressing the Y2K bug. According to testimony before the Senate Special Committee on the Year 2000 Problem, 83 percent of the companies that haven't begun to fix their year 2000 problem are small businesses (defined as companies with fewer than 2,000 employees). Many of these companies have hesitated because they don't think there is adequate information available to justify serious action. Many others don't realize how the bug will affect their operations. And others may not have the capital to pay for the effort to

cure the problem. Remember, though, that through the interconnectivity of worldwide computer systems, the noncompliance of these companies could dramatically affect the operations of companies and government agencies that are compliant.

Vaccinate Your Assets

First, determine how computers affect you and where you are vulnerable to their malfunction. Try to keep things in perspective: We can only trust that the electric, gas and telecommunications services will be reliable. We can, however, contact agencies and organizations that affect our lives, including (but not limited to) insurance companies: individual stock brokers or mutual funds; banks and credit unions; and the Social Security Administration, Railroad Retirement Board, the Canada or Quebec Pension Plan, and other agencies or companies that provide our pension or other benefits. Ask for assurance that they won't experience any Y2K-related disruptions. Obtain a copy of your Social Security statement (Form SSA-7004) through 1-800-772-1213 or at the website. www.ssa.gov. For a Railroad Retirement Form BA-6, or to ask about the agency's Y2K compliance, contact 1-800-808-0772 or the website. www.rrb.gov.

Begin compiling records of every transaction you have made over the past year, and maintain these records until after 2000. Keep your phone, electric and gas bills; income-tax returns; bank, brokerage, mutual fund and credit-card statements; canceled checks (or the monthly statement to back up your checkbook register); mortgage-payment receipts and/or annual interest statement, etc. These statements could back up your contentions about account balances or payments if computer files are lost or damaged.

Next, some experts believe there is a 70 percent chance that credit agencies could report bad information. At any rate, it couldn't hurt to get a copy of your credit report before and after 2000 and verify the accuracy of the information. Contact Equifax at 1-800-685-1111 or **www.equifax.com**; Experian,

1-888-397-3742 or **www.experian.com**; or TransUnion, 1-800-888-4213 or **www.TransUnion.com**

Since all electronic records are at risk, you should consider updating your personal records with paper copies. Doctors or pharmacists could lose information on your treatments or prescriptions—or on medications you shouldn't be given. Try to get your medical and pharmaceutical records on paper from your care providers. These would include immunization records for you and your family. Obtain copies of birth certificates and/or adoption papers. Keep an up-to-date file for all your insurance policies: health, life, casualty, auto, liability, etc., including (if possible) any expired policies. You might want to obtain or renew your passport and driver's license early in 1999, particularly if the expiration dates are close to January 1, 2000. Consider having all the members in your family obtain passports, too.

Bring your personal computer into compliance (Macintosh operating systems and most Mac applications can handle Y2K). However, don't just change the date to January 1, 2000; this might cause problems that could take a long time to correct. Software packages are available that scan your system and fix potential Y2K glitches. The National Software Testing Lab provides free software for this purpose on its web site, www.nstl.com. While you are fixing your operating system, don't forget your software. Older versions of software may not be compliant, and new versions sometimes contain Y2K glitches. To be on the safe side, check the manufacturer's web site or contact its consumer support representatives.

The President's Council on Year 2000 has established a toll-free hot line to answer questions about Y2K. The 24-hour service (1-888-872-4925) provides general information on household products, power and telephone company preparedness, and compliance of other economic sectors and the federal government. Also, specialists will take questions from 9 a.m. to 8 p.m. Monday through Friday. You may obtain additional information at www.y2k.gov and www.ftc.gov.