



**EMERGENCY BROADCASTING IN WISCONSIN**

**NORTHWEST**

SR: WHSA-FM  
LP-1: WDSM/KZIO  
LP-2: KDAL-AM/FM

**NORTH CENTRAL**

SR: WHBM-FM  
LP-1: WOJB-FM  
LP-2: WCQM-FM

**NORTHEAST**

SR: WXPR-FM  
LP-1: WHDG-FM  
LP-2: WRHN-FM

**CENTRAL**

SR: WHRM-FM  
LP-1: WSAU/WIFC  
LP-2: WRIG/WDEZ

**EAST CENTRAL**

SR: WPNE-FM  
LP-1: WGEE/WIXX  
LP-2: WHBY/WAPL

**SOUTHEAST**

SR: WHAD-FM  
LP-1: WTMJ/WKTI  
LP-2: WEMP/WMYX

**SOUTH**

SR (E): WERN-FM  
SR (W): WHHI-FM  
LP-1: WIBA-AM/FM  
LP-2: WOLX-FM

**WEST**

SR: WHLA-FM  
LP-1: WIZM-FM  
LP-2: WKTY/WTRV

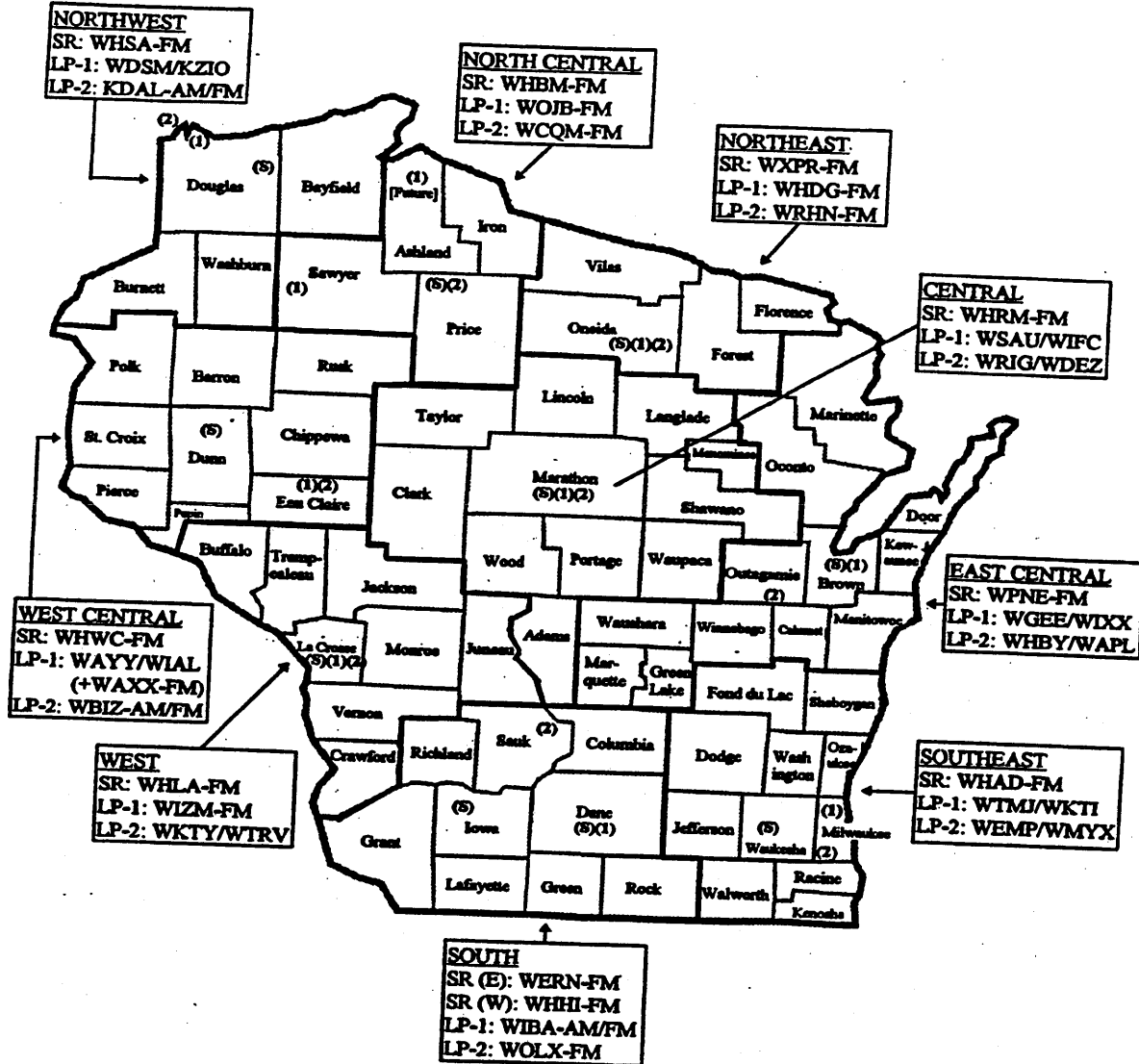
**WEST CENTRAL**

SR: WHWC-FM  
LP-1 WAYY/WIAL  
(+WAXX-FM)  
LP-2 WBIZ-AM/FM

**LEGEND**

SR= STATE RELAY STATION  
LP-1= LOCAL PRIMARY-1  
STATION  
LP-2= LOCAL PRIMARY-2  
STATION

Figure 1



Documentation on satellites' Y2K compliance, however, is lacking both in regard to space operations and ground transmission. The FCC gathered information from satellite service providers through its survey sent to Wireless, Common Carrier and International firms (for a copy of the survey, see <http://www.fcc.gov/year2000/assessment.html>). In its March 1999 Communications Sector Report, the FCC characterized the response rate as "mediocre," and added that "satellite operators still have a responsibility to evaluate and confirm earth station and terrestrial equipment compliance. Some antenna controls and earth stations contain large computers and complex electronics that are date and time dependent. Responses from earth station manufacturers concerning earth station compliance were inconclusive."

At this time, therefore, the Public Media Subcommittee can offer no firm assurances on the Y2K compliance of satellite technology, other than the fact that those in the industry and broadcast station personnel say that the equipment under their direct control should be ready.

### **Emergency Broadcasting in Wisconsin**

The Public Media Subcommittee believes that fundamental competitive pressures will continue to drive media organizations toward Year 2000 readiness, even if such progress is difficult to quantify. We have confidence that the majority of media outlets will be internally ready to conduct business as usual on Jan. 1 and afterward. But as a supplement to the assessment information presented above regarding the individual sectors, and as part of an effort to calm citizens made most anxious by potential Year 2000 problems, we thought it useful to examine the state's plans for emergency broadcasting.

The ability of officials to get important communications to the public is, of course, crucially important regardless of Y2K. But because the possibility of interruptions in utility services remains for most individuals and businesses one of the worst-case scenarios imaginable in relation to Y2K, any assurances about plans in place to help cope with such extreme scenarios are relevant. Neither the Blue Ribbon Commission nor the Public Media Subcommittee expects widespread utility outages during early 2000. But even if they were to occur, the Governor and other leaders almost certainly would be able to get messages to citizens, based on the Emergency Alert System established in the state.

The system is set up to originate the message from the office of Wisconsin Emergency Management at the Department of Military Affairs. The message then travels by ISDN phone lines to the Wisconsin Public Radio network studio (messages also could be originated directly from the studio in Vilas Communication Hall, in case there were any trouble with the transmission from Wisconsin Emergency Management). From there the message goes to 10 State Relay stations on the FM band, nine of which are Public Radio stations (see figure 1); the nine Public Radio stations are all directly fed information via microwave (WXPR in Rhinelander, the one State Relay station that is not a Public Radio station, gets its feed over the air from Public Radio Station WHRM in Wausau). The vendor that supplies the microwave system has indicated that it too has backup power generation.

Every other broadcaster in the state is required to monitor its respective State Relay station for EAS information, so any other station that's up and running should be able to receive and broadcast the emergency message. Citizens can hear messages directly from the State Relay stations as well. Each region of the state also has access to state government-initiated messages and locally initiated messages through larger commercial stations designated as Local Primary 1 (LP-1) stations. A Local Primary 2 (LP-2) station network also serves as another backup layer.

All of the Public Radio State Relay stations have backup power capability through diesel generators that, with their tanks full, could sustain broadcasting for three to four days (WXPR also has backup power at its transmitter that would allow the station to receive and transmit emergency messages). Through the use of generators and the ability to move some studio functions to transmitter sites, all but one of the LP-1 stations have contingency plans in place that would enable them to continue broadcasting in the case of an electrical outage. The one LP-1 station that doesn't is in a region where the LP-2 station has a generator that could keep it on the air indefinitely.

The power of the signals the State Relay, LP-1 and LP-2 stations can generate is sufficient to conclude that, even in the case of widespread power outages, if a Wisconsin citizen has a battery-operated radio, there is virtually no location within the state where he or she couldn't pick up an emergency broadcast (this is also the FCC's assessment of the Wisconsin system's coverage capability). The signal power of the State Relay stations alone provides good reception to approximately 80 percent of the state.

There are possible variations to the system that allow for additional flexibility. Standard EAS methodology limits the message to 1 minute, 40 seconds. If the Governor wanted to make a longer address during an emergency, officials would use EAS messages to alert stations that an address was upcoming, and then use the WHA-TV studio to produce a signal that could be picked up by all the Wisconsin Public Radio stations, all the Wisconsin Public Television stations, and any other TV and radio stations up and running (even on weekends, WHA personnel have the studio for the "Weekend" program set up, and could readily get a live broadcast on the air). In summary, subcommittee members believe the depth of contingency planning built into the state's emergency broadcasting strategies makes it highly unlikely that any Year 2000 disruptions could prevent Wisconsin citizens from receiving crucial communications, provided they have battery-operated radios available.

###

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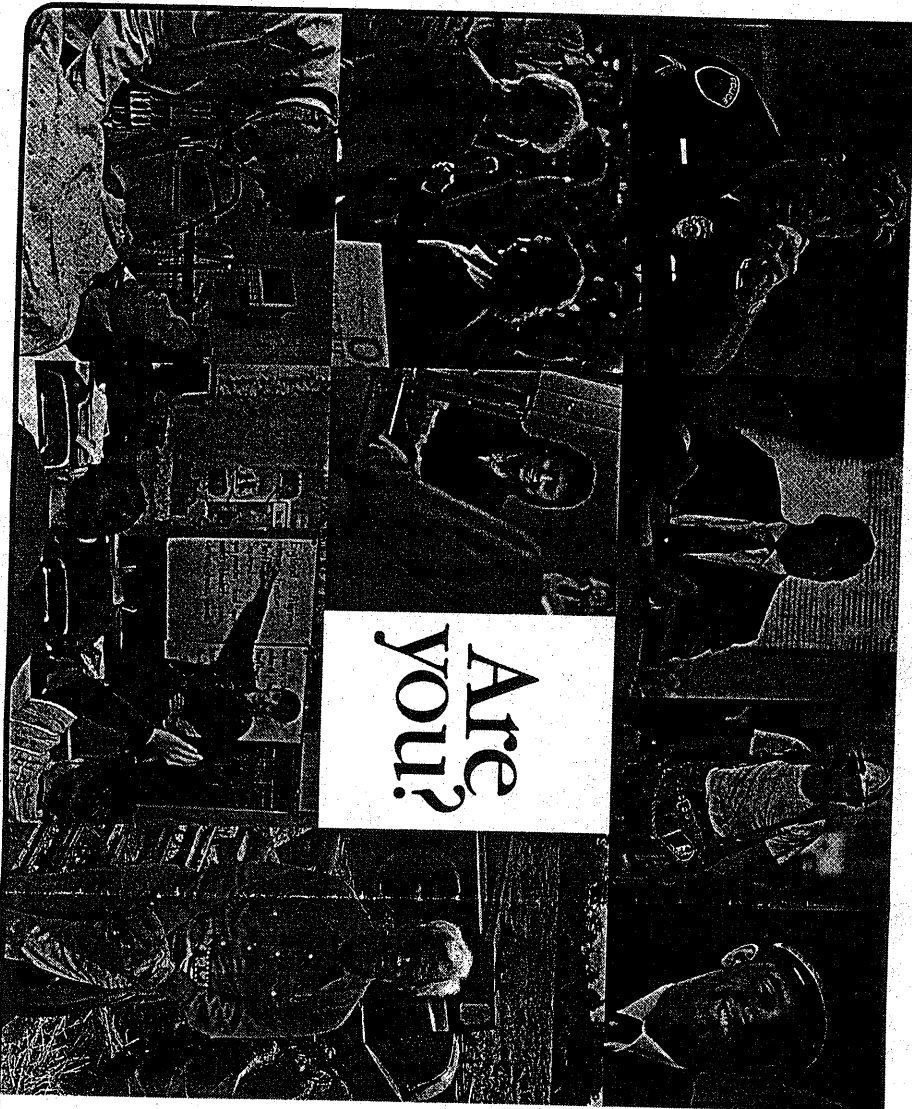
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# Right now, many people are Working toward Y2K solutions.



Are  
you?

From your financial professionals, utility workers and healthcare providers to your government employees, safety officials and...you. By all of us working together, we can help everyone enter the new year with solutions to any potential Y2K problems. So, learn what could happen, and what you might need to do to prepare. After all, the people you're counting on are counting on you, too.

Get the facts before you act. And become part of the solution. Call us at **1-800-422-7128**. Or visit our Web site for up-to-date news and information at: **www.y2k.state.wi.us**



## Graphic Standards

**Questions:**  
Any questions about customizing or electronic artwork, please contact Thomas Solberg at the Department of Administration at 608-266-7738.

**Local Customization:**  
Simply add your local message in the blank area below the state Y2K logo. When customizing the bottom portion of the ads, be sure to use the typeface listed below for visual consistency.

**Recommended Fonts:**  
Garamond Bold (headlines)  
Garamond Light (text)

Use these numbers if the Garamond Bold font is not readily available.

414 608  
715 920  
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## **Coping: The year 2000 (Y2K) computer problem**

On January 1, 2000, consumers may be faced with problems caused by the so-called "millennium bug". The year 2000 (Y2K) problem is caused by computer software use of two-digit dates, such as "98" for 1998. When 1999 becomes the year 2000, the internal clocks of many electronic devices, including personal computers, will encounter the digits "00" to designate the year 2000. The information may be misinterpreted as "1900" and cause computing errors or other big problems.

Although, the effect of the Y2K problem is not fully predictable, the deadline is certain.

Bill Gates of Microsoft says there could be incorrect results in pension and Social Security plans or in mortgage rates. "It could shut down automated air conditioning systems or keep gas from pumping properly,"

says Gates. "It could interfere with anything based on date calculations."

If you retire in 2001 and the computer interprets "01," as 1901, it could decide that you retired before you were hired and so your pension is zero.

"There will be a headache," says Gates, "but how much pain it will cause remains to be seen. Companies all over the world are working hard to prevent it." So are Wisconsin and United States government agencies.

By checking out Y2K concerns now, consumers can prevent problems within their control and prepare for problems they can't control.

### **Dealing with potential problems outside your home**

A consumer can ask banks, mortgage companies, hospitals,

and other institutions how they are dealing with year 2000 problems. And when buying new products, consumers should ask for documentation that potential problems have been remedied.

### **At home**

The Y2K problems that you can prevent are most likely the ones in your own home. Even though many consumer products do not display date functions, some may fail in the year 2000. The first step in finding potential Y2K problems is to take an inventory. Make a note of everything in your home and garage that uses electricity. Many electronic products we own have clock functions, for instance, to keep track of the time it takes to make a pot of coffee, wash a load of dishes, or pop a bag of popcorn. Do consumers need to worry about these products working in the next millennium? Sources are in disagreement.

"The only home electronics most people need to worry about," writes Elizabeth Wise in USA Today, "are most newer VCRs [because they keep track of the year] and older computers. According to the Federal Trade Commission's Elaine Kolish, some older cameras and camcorders that have date-stamping functions might have trouble, but newer models are generally Y2K ready.

However, others believe that even embedded systems, items that do not have a clock display or whose clocks do not display the date, may break down. Computer chips in home appliances may be keeping track of the date even though the date isn't displayed or actually needed in the system.

You may have problems with your home furnace when the clock strikes midnight in the year 2000. For example, the thermostat controlling the furnace may have a date function or have a computer chip with the date function even though the date function isn't utilized.

One utility company expert says that if the date can't be set, then the risk of having problems is much lower.

### **Checking which products have Y2K problems**

Once you identify the potential sources of your Y2K problem, there are two ways to find out whether the products will continue to operate in the new millennium: testing the item and asking the manufacturer or vendor.

#### **Testing appliances:**

To test most appliances with programmable clocks, advance the date to Dec. 31, 1999, 11:58 p.m. and wait two minutes to see what happens. If the date appears as Jan. 1, 2000, the product should be fine. A problem product may show a date of Jan. 1, 1900, 1980, or 1999. Also, make sure the clock recognizes that 2000 is a leap year. Conduct the same test described above, but this time set the date to Feb. 28, 2000, 11:58 p.m.

Check critical products with the manufacturer or vendor. Helpful websites are listed in this fact sheet or you can call us.

#### **Home medical devices**

Home medical devices may be of concern. Do-it-yourself testing is out of the question. Doctors advise that you contact the

manufacturer. You can also search for this information on the Federal Food and Drug Administration's web page entitled Biomedical Equipment Y2K Status Database at [www.fda.gov/cdrh/yr2000/year2000.com](http://www.fda.gov/cdrh/yr2000/year2000.com)

### **How about personal computers?**

A substantial percentage of home computers are vulnerable to the year 2000 bug.

The problem most likely does not include machines made by Apple Computer, however. Apple's Macintosh computers are thought to be immune. Computers purchased before 1997 are more likely to have the Y2K problem than more recent models. One survey found 93 percent of PCs made before 1997 had Y2K flaws. Of those made in 1997, only 47 percent showed problems.

The year 2000 problem could well become a headache for consumers who use software—such as personal finance programs, personal information managers and spreadsheets—that relies heavily on date calculations.

To test software that performs date-based calculations, simply

attempt several calculations that bridge the new year, and others that bridge the leap year, checking the answers for accuracy.

There's going to be lots of aggravation with home computers says one computer technologist: "Lots of little things coming apart at the seams. The help desks are going to be swamped."

"In an e-mail program, for example," writes John M. Moran in the Hartford Courant, "the result might be the nuisance of having new messages appear at the bottom of a chronological listing instead of at the top. Loan interest and investment return might be miscalculated—potentially a more serious matter."

Checking your computer hardware is not easy. Advancing the date manually is not recommended because it may be difficult to reset the clock. Also even a brief leap in the date, if read by some software applications, may cause problems with their warranties.

The best way to test computers is with special software available for free at the web sites of the National Software Testing

Service at [www.nstl.com](http://www.nstl.com), and Viasoft at [www.onmark.viasoft.com](http://www.onmark.viasoft.com).

### Ask the manufacturer

Contacting the manufacturer is a sensible, but challenging, way to find out if the product is Y2K ready. It may be difficult to get a straight answer from manufacturers because at the moment many are concerned about the legal consequences of saying anything. Also, the answer they do give may change as their testing program progresses.

### Calling the manufacturer

If you want to call the manufacturer, call 800 number information: 1-800-555-1212 and ask for the company's toll-free number.

### Web Sites

Companies are beginning to post up to date Y2K compliance information on their web sites.

The following web sites contain valuable information regarding desktop and laptop computers:

- **Vendor 2000**

<http://www.eds.com/vendor2000>

The world's largest database of compliance information detailing

thousands of hardware and software components and their progress towards compliance.

- **State of Wisconsin**

<http://y2k.state.wi.us/>

Home page for the State's "Countdown 2000" project. Download the "Countdown 2000 Handbook;" links to other government and private sector Y2K resources and research.

- **Microsoft**

<http://www.microsoft.com/technet/year2k/>

Information about the status of the various Microsoft products and available fixes for older versions of their software.

Microsoft posts its Y2K test criteria on its web page. It provides one example of the issues you should consider when getting information about compliance:

- ✓ The product stores and calculates dates consistent with a 4-digit format throughout its operational range.

- ✓ If the product allows the user to enter a 2-digit short cut for the year, the product recognizes the year consistent with a 4-digit format.

- ✓ The product will correctly execute leap year calculations.

✓ The product does not use special values for dates within its operational range for data.

✓ The product will function into the 21st century through the end of year 2035.

• **IBM**

[www.ibm.com/IBM/year2000](http://www.ibm.com/IBM/year2000)

General Y2K information, as well as IBM and non-IBM product compliance data.

• **Greenwich Mean Time**

<http://www.gmt-2000.com>

Provides a comprehensive discussion of date problems we'll be facing in the future. Has independently tested thousands of PCs. Also offers Check 2000 diagnostic tool.

• **National Software Testing Laboratory**

[www.nstl.com](http://www.nstl.com)

Independently tests PCs for year 2000 compliance. Lists certified products and lets vendors use its logo on certified products. Has software available for download.

The following is a list of computer companies, compiled by Ziff-Davis Net, whose web sites provide the latest Y2K information about Y2K compliance.

Acer Inc

Apple Computer

Compac Computer

Dell Computer

Digital Equipment Corp

Gateway Computer

Hewlett-Packard

IBM

Micron Electronics

Microsoft

Netscape

Novell

Packard-Bell

### In summary

Once aware of the locations of your Y2K problems there are a number of possible solutions:

⌚ **Ignore it:** Older products may not make the switch to the year 2000, but these items may still serve your needs.

⌚ **Fix it yourself:** Some appliances may accept the year 2000 and continue to work properly, once the date is set manually.

⌚ **Update and upgrade:** Computers that don't switch to 2000 automatically will likely need hardware upgrades or operating system and application updates. Check the manufacturers for details as they develop. Many software companies are developing Y2K updates to their old programs,

and software to "patch" problems is also available. Remember; avoid scams by sticking only to the solutions offered by the manufacturer. Unless you are told otherwise, this should ensure compatibility and compliance with your warranty.

⌚ **Replace it:** You may have been considering replacing your old equipment. It may be wise to purchase new items now to avoid date glitches that an older system is more likely to encounter. If you decide to purchase new hardware or software before the year 2000, make sure it is compliant and that you understand the manufacturer's compliance standards. Be certain it is warranted against any Y2K failures.

### Scams

The Bureau of Consumer Protection expects con artists to call consumers and claim to be preparing their bank accounts, credit card accounts, and Social Security accounts for the year 2000. The Bureau advises consumers not to give out this kind of information. Ask the caller to send the information in writing. Then verify any written request for personal information by calling your local bank or the

number on your credit card statement to verify the request. The Bureau also expects consumers to encounter unqualified consultants offering advice and charging to repair year 2000 problems. Before agreeing to purchase any such services, first check out the credentials of the person or business and speak to a number of sources.

If you think you are being scammed, call the toll free hotline of the Wisconsin Department of Agriculture, Trade, and Consumer Protection:

**Toll-free: 800-422-7128**

**Fax: (608) 224-4939**

**TTY: (608) 224-5058**

**Web:**

***<http://badger.state.wi.us/agencies/datcp>***

**E-mail:**

***[datcphonenumber@wheel.datcp.state.wi.us](mailto:datcphonenumber@wheel.datcp.state.wi.us)***

l/cpic/facts/Y2K221 4/99

# Educated opinions about Year 2000 problems

Educated opinions about Year 2000 problems can be found at many internet websites. Mitch Ratcliff offers insight as a strategic consultant who serves early-stage internet companies and established corporate clients entering the digital economy. Ratcliff has given the Department of Agriculture, Trade and Consumer Protection permission to reprint his columns.

## BANKING

September 03, 1998

### Consumer Alert FAQ: Money And Banks

By Mitch Ratcliff - ZDY2K

**Q:** With the caveat that nothing I say should be construed as investment advice, my opinion: Banks and financial services companies are pretty safe places for your money, regardless of the times or technical problems. They will not "lose" money, though it may be misplaced or temporarily inaccessible due to Y2K problems. Your concern should be, I think, with liquidity and accessibility of money. In that regard, there are several issues:

- Some ATM systems may malfunction. If you rely on your debit card, put aside some cash to pay for necessities. Errors in the system will not result in money being pulled out of your account, though you should keep receipts at all times, anyway.
- Some automatic deposits or payments systems may be fouled up. This means you may want to be sure to get printed statements for each month during the next couple years, so that you can use the print-outs to prove a deposit/payment was made or, at least, was available to a system which malfunctioned.
- If you recall, a recent satellite outage shut down Point-Of-Sale terminals all over the country. Plastic is dependent on a lot of technology, some of which may fail. If you rely on credit cards

instead of cash, carry some extra cash. The Federal Reserve plans to put \$50 billion in extra cash into circulation during 1999 to make this possible without causing inflationary pressure.

- Regarding your bank; if you don't get printed statements, do so. Start balancing your checkbook immediately upon receipt of the statement, so that you have recent and accurate records to use if your account is damaged by a Y2K-related error.
- Don't put your money under the mattress. Throughout history, this has proved a bad strategy for the individual and society on the whole. The more demand for cash, the higher the cost of cash — it drives inflation and inflation leads to panics that are more destructive than the technical glitches we're talking about. Fear is the greatest threat we face going forward, so become well educated about the specific systems you use in your financial life in order to prepare a rational reaction to any problems you might encounter.

## FINANCIAL SERVICES

September 22, 1998

### **SEC suggests questions for your broker and mutual fund**

- ZDY2K

The Securities and Exchange Commission has released a series of questions that investors should ask of their brokers, mutual fund representative and money managers:

- What is your firm doing to become year 2000 compliant?
- How can I be satisfied that your firm will be ready on time?
- If your firm is not ready, how could I be affected?
- Assuming that your firm will be ready, what is being done to make sure that the exchanges, clearing agencies, and other market participants are also ready?
- Are there provisions to test operations with the exchanges, clearing agencies, and other market participants before 2000? Will your firm be participating in any industry-wide tests?
- What will happen if I want to sell some stock in December 1999 or early January 2000 and your firm or some other market participant is having computer problems and my sale is delayed or possibly can't be executed at all on the day I placed the order? What will your firm do for me in that situation?
- Is your firm's research department evaluating companies' compliance with year 2000 and the effect their compliance might have on their bottom line before you make buy and sell recommendations?
- How can I be assured that my interest and dividend payments will not be affected on January 2000?

### **Investors in public companies**

As an investor, you should query the companies in which you own stock, asking the following:

- What is the company doing to prepare its computers for the year 2000?
- What will be the effect of the year 2000 problem on the company?
- Is the year 2000 only an internal operational problem for the company, or will it have an effect on the company's products and/or services?
- What is the company's schedule for fixing and testing your systems? Can you send me a copy of the company's schedule?
- How do the company's costs in addressing the year 2000 problem affect its bottom line? Do these costs have a material financial effect? Can I see something in the company's recent reports or other public statements in which the company discusses its approach to the year 2000 problem?
- Even if you don't believe the costs or potential effects of the year 2000 are material, can you tell me how much the year 2000 problem will cost the company?
- Have any of the company's officers or members of the board bought personal liability insurance specifically for year 2000 problems?
- As a manufacturer or supplier of *computer equipment, software, medical equipment, computer services*, are you concerned about the potential liabilities associated with the company's products or services?
- What is your best assessment of corporate exposure to legal actions arising from equipment or software failures associated with the company's products or services?

## PHONES

September 01, 1998

### Consumer Alert FAQ -- Telephone

By Mitch Ratcliffe - ZDY2K

**Q: Will my telephone work in the next millennium?**

**A: The answer is a very conditional "yes, depending...."** Each link in the telecommunications chain can experience a different set of problems. The telephone in your home will absolutely positively work, if it does not include any clock functions. Telephones with date-aware features manufactured more than two years ago should be considered suspect, and you should check with the manufacturer to see if it is compliant.

Office telephone systems, especially the PBXes that direct traffic between the network and desktop telephones, are much more susceptible to Y2K glitches, as they tend to rely on date and time functions to store and forward voice mail and intra-office messages. If the PBX fails, the condition of your telephones won't matter much, since no calls will be getting through -- in or out.

Telephone networks in the U.S., in general, are making good progress on Y2k upgrades. However, there are many small local exchanges out there that may not be ready for the millennium. Ironically, the rural telephone systems, where many Y2K survivalists claim it will be safer to hide out New Year's weekend 2000, are more likely to experience telephone failures than urban centers.

Some telephone networks will fail. The reason is three-fold, according to Congressional testimony by A. Gerard Roth, vice president of technology programs at GTE's Corporate Year 2000 Project Management Office:

- Ownership is fractured. Since no one owns the telephone network from end-to-end, it is impossible to coordinate remediation.
- Complexity. A telephone network involves so many different systems, from switching and routing to service management and billing, that it is impossible to test 100 percent of a system in production settings. Testing on a live network is impossible. After all, what if your test breaks something critical to the telephone service being delivered today?

How widespread these failures will be is impossible to predict. Potential ripple effects from a single critical system - such as a computer that controls the exchange of calls between a local and national telephone network - could spread a failure across many systems.

The cell phone or PCS phone is your best bet for a guaranteed voice connection, as most of these systems are relatively new. Likewise, the consumer's tendency to replace a cell phone every couple years has replaced most of the handsets that may have been non-compliant. In all likelihood, no cellular networks will fail due to Y2K problems.

September 04, 1998

### Consumer Alert FAQ: Elevators

By Mitch Ratcliffe - ZDY2K

**Q: Will elevators operate reliably in 2000?**

**A: Elevators in and of themselves -- the embedded systems and software that run them -- are mostly date-independent.** However, in busy office buildings, where the elevators are programmed to distribute themselves to different floors to accommodate changing traffic patterns, do rely on the date. If a system becomes confused, it won't stop working, but it may act like it is Saturday on a Thursday, sending all the elevators to the wrong places, so that passengers wait longer to catch a ride to their office or the ground floor.

Many buildings shut down electrical services during evenings and weekends. If a building operates on bad date information, it might shut down banks of elevators on the assumption that they are not needed. But these problems can be worked around pretty quickly by reprogramming the schedule not to shut off systems on the weekend. I suggest that you have your building reprogrammed well before New Years Day, because the technicians may not be available on the first Monday in January, 2000.

The other thing to consider is the impact of electrical failure due to a Y2K problem. If the power fails due to a Y2K problem, no elevators. Would I worry about being trapped in an elevator? Since January 1, 2000 falls on a Saturday, when most people aren't at work, the answer is no. If I lived in a high-rise apartment, I'd consider the benefits of a Stairmaster today... just to be prepared.



## TRANSPORTATION

September 17, 1998

### Consumer FAQ: Will My Car Run In 2000?

By Mitch Ratcliffe - ZDY2K

**Q: Will my car run on Jan. 1, 2000?**

**A: Yes.** There is absolutely no hard evidence that any cars or trucks will suffer from systems failure due to the date rollover. None. All suggestions that the computers in your car will fail due to Y2K are speculation. The situation has been made worse by the auto industry's silence on the matter. We searched the major auto manufacturers' sites and found no information about Year 2000.

Here are the facts as we know them: Cars and trucks contain computers, but the systems are not date-dependent. Even if they were date-dependent, they wouldn't constitute a threat to your life. These computer control the engine timing, fuel mixtures, and brakes, among other functions. If the computers were to fail, it would not cause a life-threatening accident. For instance, power brakes would not fail because the computer stopped operating; these systems are power-assisted, not completely dependent on the computer for their operation. If you still don't believe that the computers do not represent a serious threat, consider that cars have included computational devices for more than a decade. Computers have not caused widespread problems with vehicle operation or safety.

Would failure of these computers prevent the car from running? Perhaps, but as we say, there are no date-dependencies in computers that control the engine. A failed computer might cause the fuel mixture to be too rich, flooding the engine.

Stephen Burkett has offered a \$100 reward to anyone who could provide concrete that cars will suffer from Y2K problems. Others have raised the bounty to \$395, and I have tossed in my own \$50 to bring the current total to \$445. So far, no one has even tried to claim the money, because there doesn't seem to be any proof in support of the claim that cars will cease to run on Jan. 1, 2000. Go ahead, make my day, find a bug.

September 01, 1998

### Consumer Alert FAQ -- Should You Fly?

By Mitch Ratcliffe - ZDY2K

**Q: Should I fly on January 1, 2000?**

**A: No. Instead, watch the Rose Bowl.** However, that's not to say that planes will fall from the sky at midnight on December 31, 1999. The real problems will come with airline logistics systems, the computers that handle your reservations, route your baggage and make sure your meals are non-fat or kosher.

The other critical issue to consider is the question "Where do you want to go that day?" If you're headed out of the U.S., particularly outside of Western Europe, the air traffic control systems in many countries may be seriously fouled up by Y2K problems. By fouled up, we don't mean that air traffic controllers sitting at their screens will be steering planes into collisions, rather the systems that manage scheduling and hand-offs of flights between air traffic control centers may be affected.

So, what you'll face on New Year's Day 2000 is headaches, not danger.

But did we mention that the headaches will start well before the turn of the century? Non-compliant computers will choke on "00" dates when a new process is started during 1998 or 1999 that reaches into the new millennium. So, for instance, if an airline uses a non-compliant computer to make your reservation, when you show up at the airport there may be no record of your itinerary.

A critical date to keep in mind is August 21, 1999, when the Global Positioning System's (GPS) internal clocks run out of memory and will reset to zero, which GPS receivers will read as 1980. Since this network of satellites is the backbone of global navigation, it may wreak havoc on travel. You see, the GPS receiver uses the difference in the response time of several satellites to triangulate its position on or above the Earth. If receivers suddenly record an 18-year difference in transmission/receiver latency, you can see how things might get *confused*.

## DESKTOP SYSTEMS

September 10, 1998

### Daily Fix -- Anticipating Y2K Problems

Understanding your computer use helps in planning  
By Mitch Ratcliffe - ZDY2K

When and how will you encounter the Year 2000 problem for yourself? Don't be fooled. Anyone who claims to offer a pat answer to this question is a fraud, but there are some tactics for assessing your systems.

Keep in mind, at every turn in the Y2K process, that your systems will react differently than others to date-related problems. So, if you hear about a symptom of Y2K problems from a friend, don't expect your computers to act the same way. Each computer or network is a unique combination of software and hardware that sometimes interact in unexpected ways. Just like every kid who picks up a flu bug at school is likely to respond in similar but unique ways so will your computers.

You need to understand one critical concept in order to assess the probability that you'll have Y2K problems by a certain date: problems with dates can occur when you open a process -- an inventory item, an order, an account, or an analysis -- that reaches into 2000. If you have a date-related problem, starting that process will cause errors. This is why many pundits predict that Jan. 1, 1999, will be the real beginning of the Y2K problem, because many companies that perform projections a year in advance will be afflicted at the start of business in 1999.

Consumers working with a financial management application, like versions of Quicken for DOS prior to V.5, may already have date-related errors. If you're calculating a 30-year mortgage in many versions of Quicken, for example, the upper limit for dates is 2027, 29 years from now.

There are two ways a Y2K problem might strike:

**Application or system failure.** A crash that occurs when you perform a calculation that reaches into the next century may indicate you've hit a Y2K error. A system crash may be related to errors in the system's real time clock or BIOS that occurred when an application requested a date beyond Year 2000. While these may look dramatic, they are probably less damaging than the other type of Y2K error.

**Bad data.** In many cases, an application will not give any indication that it has encountered a date-related error. Instead, it will generate bad data. For instance, it may calculate inventory costs for a product you've ordered for delivery in 2000 as an item you have to warehouse for 100 years. Now, that data might be passed on to another application, like a spreadsheet or an executive information system, providing a corrupted view of costs and changing the projected earnings for the company. In

a large organization, where the individual impact of such errors will be minute, it may be months before discrepancies become so large that someone notices.

Whether you're looking at a business system or your home computer, begin with a few minutes of reflection on the length of time related to the information you process. If you haven't opened a new process that reaches past Jan. 1, 2000, you can set a date to begin auditing your data for date-generated errors. Should you already be well into processes that extend into 2000, you may already have a problem and should start your analysis by re-examining existing data for errors.

## UTILITIES

September 01, 1998

### Consumer Alert FAQ -- Utilities

By Mitch Ratcliffe - ZDY2K

**>Q: What about electricity, gas and sewer service? Will I be able to flush in the new millennium?**

**A: Sewer systems that control access and egress to the home are not date dependent.** However, the sewage treatment plant in your community does use a number of date-dependent systems, so you may be flushing directly into the local water supply.

Electricity and heating oil and gas networks are another issue, one that will have a very direct impact on at least one percent of the population for at least a few hours or days during the Y2K transition. Why one percent? That's assuming that the utilities industry can repair its systems to the very best standard of quality, and that only half of the remaining systems fail, directly impacting a proportional number of homes. In reality, the utilities industry is far from solving 98 percent of its Y2K problems and, because of the ripple effect that spreads around a failed system, the consequences are unpleasant for far more than one percent of the population.

Think of the utilities that serve your home as more than electrical current or natural gas flowing through a pipe. They are the terminal your home uses to interact with networks of producers, brokers and transmission services, which collect power or gas from many different places to supply your needs. Systems can fail anywhere along that supply chain.

Do you need to stockpile water and oil, or buy an electrical generator? Only if your utility can't provide you specific answers in response to your questions about Y2K readiness.

# Y2K

THE YEAR 2000 BUG

## Small Business and Farm Computers

**Y**ou undoubtedly have heard about the year 2000 problem with computers, commonly known as Y2K. You may have read articles or heard comments that range from calling Y2K a passing fad to a good reason to stock up on food, fuel and batteries and move to the North Woods.

Seriously, there could be some problems, and the first question you may ask is, "how can this affect my small business or farm computer?" The Y2K

bug can cause problems with your computers in four ways. It can hit your hardware (clock, etc.), commercial and custom software, and can also crop up when you exchange data with other computers.

### Hardware

Your computer processes the date from two sources. Your computer's BIOS, or Basic Input-Output System, provides basic instructions to the computer. The BIOS stores something called a century byte, which is the number 19. The real-time clock in the computer gives the second 2 digits (97, 98, 99 etc.) and when they are combined you get the complete date. Under this scenario, at January 1, 2000, the century byte will deliver "19" and the real time clock will deliver "00." The computer will then process the date as 1900 rather than 2000. If your computer was built prior to 1997, chances are your clock will process the date as "1900." (Note: Apple Computer states that its Macintosh computers built since 1984 are Y2K compliant.)

The easiest way to check your computer for this date problem is to go to the "DOS" prompt and type in the word

"Date" and press the "Enter" key. Now enter the date as December 31, 1999 (12-31-99) and press the "Enter" key.

Next type in the word "Time" and press the "Enter" key. Now enter the new time as 11:59 p.m. (23:59), press the "Enter" key and wait one minute. (You have just told your computer it is one minute before

**"The Y2K bug can hit your hardware (clock, etc.) and commercial and custom software. It can also crop up when you exchange data with other computers."**

midnight on December 31, 1999 and you are waiting one minute to see how it will react.)

After waiting a minute, type in the word "Date" and press the "Enter" key again. If your computer responds with "01-01-2000", your computer is year 2000 compatible. Now reset your computer's date and time to the current date and time and your are finished.

However, if your computer gives the date "1900" or "1980" you have a problem. You need to do one of two things. First, you can upgrade your BIOS. This involves contacting your computer's manufacturer and requesting a compliant BIOS. If that's not possible, you'll need to buy a new computer.

### Commercial Software Programs

Another issue centers on what might be called a "pivot year." This is a short-term fix that has been placed in some commercial software to fix the Y2K problem. For example if you enter a date in the

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### How Did We Get To This Point?

Why didn't those smart computer people foresee the Y2K problem back when they were developing computers so we wouldn't have to deal with it now? The answer lies in the limited memory of early personal computers.

When computer programs were first developed, information-storage space was very expensive. In 1985, some personal computers offered an "internal disk drive" as an option. It featured about one megabyte of information-storage space. The cost of that one-megabyte "internal disk drive" was nearly \$2,000! Most "internal disk drives" today are measured in gigabytes, or 1,000 megabytes. Today a typical four-gigabyte "internal disk drive" sells for less than one-tenth the price of a one-megabyte drive in 1985. That adds up to 4,000 times the storage space today for 1/10 the price.

To save limited memory and make computers operate faster, programmers permanently set the first two digits of the year to "19," and allowed the computer's clock to add only the last two digits. So, when the next New Year's day rolls around, many computers may read the year as 1900 instead of 2000.

**THE YEAR 2000 (Y2K) BUG** refers to computer software and microchips that may malfunction when the calendar changes on January 1, 2000, affecting many aspects of modern life. This publication is part of a series of fact sheets presenting information on the Y2K bug for local governments, businesses and individuals.

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popular commercial spreadsheet Excel, the program makes some assumptions on date. If you enter "00" to "29" in a date cell, Excel assumes 2000 to 2029. But if you enter "30" Excel assumes 1930. This means Excel has postponed the Y2K problem for 30 years, because the Excel programmers assume

that everyone will have upgraded their computers and commercial software by then. If you wish to find out about other software products, you will need to contact the manufacturers; using their web sites is the best method.

### Custom Software Programs

If you have software built for you or have software particularly designed for your industry, you have the most to lose. The first step is to contact your software vendor for a

Y2K certificate. If that vendor is no longer in business (and even if they are), test the software on a stand-alone computer with dummy data. If the software fails that test you may wish to contact the vendor again. However, these types of software may not have active programmer support and therefore will not be fixed. Your best option is to move your inventory files to another program before the year 2000.

### Exchanging Data

Even after you have upgraded, checked and secured your computer for Y2K, sharing a file from a client or colleague who has not upgraded to Y2K can re-contaminate your system. One solution is to install a program on your computer that checks all files for Y2K problems (similar to an anti-virus

checker). These programs generally cost \$30 to \$50. Information about these programs is available from computer vendors and through vendor web sites.

### What Else Can I Do?

The most important thing that you can do to prepare for Y2K is to make sure you have paper copies of all your records for the 1999 year. Start keeping all the paper information you receive from your financial institutions and other vendors now and be prepared to help them correct any mistakes their computers have made. The mistakes your computer may make can be corrected (with effort) if you have paper copies. Keeping paper copies will not prevent Y2K computer problems but it will allow you to correct the mistakes if they occur.

**Government Tax Breaks:**  
If you purchased a new Y2K-compliant computer and software between January 1, 1998 and June 30, 1999, you are eligible for a 100% depreciation expense in the year you purchased the system. Please discuss this depreciation item with your accountant for the appropriate way to make the claim.

This publication and more information on Y2K are available from UW Cooperative Extension on the Web at [www.uwex.edu/ces/admin/Y2K](http://www.uwex.edu/ces/admin/Y2K). An EEO/Affirmative Action Employer, UW-Extension provides equal opportunities in employment and programming, including Title IX and ADA requirements. The information presented here provides general guidance on Y2K issues. UW-Extension assumes no liability for errors or omissions in content. UW-Extension's Y2K educational programs are conducted in cooperation with the Wisconsin Department of Administration and the Governor's Blue Ribbon Commission on Y2K Preparedness.

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#### Additional Information:

Wisconsin Bankers  
Association  
[www.wisbank.com](http://www.wisbank.com)

CNET:  
The Computer Network  
[www.y2k.com](http://www.y2k.com)

Equipment Vendors  
Index  
[www.vendor2000.com](http://www.vendor2000.com)

State of Wisconsin  
<http://y2k.state.wi.us>

Microsoft Year 2000  
Resource Center  
[www.microsoft.com/technet/topics/year2k](http://www.microsoft.com/technet/topics/year2k)

# Y2K

THE YEAR 2000 BUG

## Manufacturing Production and Technology Systems

Like all businesses, manufacturers need to take steps to avoid being bitten by the Y2K bug. Manufacturers must search out potential Y2K problems throughout their operations. Typical uses of computers and chips that are susceptible to Y2K include:

### What is Y2K Compliance?

The first and most important step is to raise awareness about Y2K by educating and involving all levels of your organization in identifying and solving the problem. Any manufacturing systems that are immune from Y2K must:

- Handle date information before, during and after midnight, December 31, 1999, including but not limited to: accepting date input; providing date output; and performing calculations, and comparisons on dates or portions of dates.
- Function accurately and without interruption before, during and after January 1, 2000.
- Respond to two-digit year date input in a way that resolves ambiguity as to the century in a disclosed, defined, and predetermined manner. Interfacing software must make the same century assumptions when processing two-digit years.
- Process 2000 as a leap year.
- Correctly handle date fields containing non-date information, and correctly handle a date held in a non-date field.
- Correctly process any date with a year specified as "99" and "00"; regardless of other subjective meanings attached to these values.

**Business Computer Systems** – Business applications and computer systems that support the day-to-day operations of the organization. These systems include all business applications supported by the organization's information technology group. Examples are: product design, material planning, production scheduling, marketing, sales, purchasing, and personnel.

**Technical Infrastructure** – Vendor supplied or custom developed software, hardware, complete systems and equipment related to the technical infrastructure of the organization. Examples include data center hardware and software, database software, disaster recovery facilities, networks, servers and desktop machines, e-mail, satellite, telephones and video, and all non-application software.

**End User Computing** – Application related software on the desktop such as: spreadsheets or databases (often constructed by the desktop user), departmental systems not maintained by the central IT group, and ad hoc reporting systems working off copies of production files. In some cases results of desktop calculations may be fed back into the corporate systems, and these errors can lead to re-contamination.

**Suppliers, Agents, Service Providers (Banks, Utilities, etc.)** – Relationships

with external organizations which can affect the operation of one's own organization.

**Manufacturing, Warehousing, Servicing Equipment** – Highly automated equipment used in manufacturing, material storage, distribution and servicing. A failure or error in these areas can interrupt core business and leave the organization idle. Many operations are not in themselves date dependent, but may be providing date based feeds to other processes, or function on machines that are date dependent.

**“In some cases results of desktop calculations may be fed back into the corporate systems, and these errors can lead to re-contamination.”**

**Environmental Operations in Plants, Offices and Other Sites** – Examples include HVAC, security and access, elevators and escalators, PBX and wireless communications, fire and alarm systems, externals such as power suppliers, on-site medical facilities and all EPA activity.

**The Organization's Products** – products supplied to a final customer or to a further assembly process. The product may contain microprocessors with date-related functions.

### Testing Systems for Y2K Compliance

Testing is a critical aspect of any Y2K project. Testing verifies that the repaired or replaced system operates properly when the date changes, and that existing business functions (such as accounting, inventory control, and order tracking) continue to operate as expected. Testing also verifies that interfacing systems are not adversely affected. Test computer programs and other systems including network operating systems, vendor-supplied software, building infrastructure systems, PCs, and machinery with embedded microchips.

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## Y2K and Environmental Regulations

If you have time-dependent environmental monitoring equipment in your business, consider potential permit violations related to Y2K testing and modifications. Refer to the Environmental Protection Agency (EPA) Y2K Enforcement Policy in the sidebar below.

## Installing Y2K Compliant Systems

Before installing a replacement or repaired system, develop installation and contingency plans. The installation plan lists all the files and programs that need to be moved into production, and all the steps to make your changed system work.

The plan may include testing in production to ensure that the installed systems are working as expected.

Contingency plans list the possible problems and steps to address them. Make backups of the files from your old system in case your first attempt fails. You may want to install the year 2000 ready system and run it in parallel with the old system and compare results.

## Preventing Contamination

Don't get contaminated! Once systems are year 2000 compliant, take steps to make sure that subsequent changes do not contaminate those systems with the Y2K bug. A system may become contaminated if a programmer makes changes to a repaired system and inadvertently changes the logic that handles the century change. A vendor-supplied package also may become contaminated if subsequent releases of the package don't include the year 2000 changes.

Retest the year 2000 changes as part of any subsequent system modification effort and consider testing new releases of vendor-supplied packages. Save test data and test cases that were used to test the original changes and use them whenever you are testing other changes to that system.

### EPA enforcement policy

The Environmental Protection Agency's (EPA) enforcement policy is designed to encourage prompt testing of computer-related equipment to ensure that environmental compliance is not impaired by the Y2K computer bug.

Under this policy, EPA states its intent to waive 100% of the civil penalties that might otherwise apply, and to recommend against criminal prosecution, for environmental violations caused during specific tests that are designed to identify and eliminate Y2K-related malfunctions.

This policy is limited to testing-related violations disclosed to EPA by February 1, 2000, and it is subject to certain conditions, such as the need to design and conduct the test well in advance of the dates in question, the need to conduct the tests for the shortest possible period of time necessary, the need to correct any testing-related violations immediately, and other conditions to ensure that protection of human health and the environment is not compromised.

## Y2K Checklist for Manufacturers

Examining how severe and widespread the problem is in your business will take time and resources. Begin by creating a checklist for year 2000 readiness. Following are example questions that apply to every manufacturer. Add questions specific to your facility.

- YES  NO Is your company aware of the Year 2000 problem?
- YES  NO Does your company have the management commitment and funding to beat the Y2K bug?
- YES  NO Is your company required to be Year 2000 compliant by any customers/suppliers?
- YES  NO Will your material systems be able to plan and procure raw materials, manufacture, ship and communicate shipment, etc. to your customers in the Year 2000?
- YES  NO Will you be able to pay employees, produce financial statements, and conduct normal business not directly related to supplying your customers with goods and services in the Year 2000?
- YES  NO Have your business systems been upgraded to handle Year 2000?
- YES  NO Will you plan and conduct full system tests of critical systems before the end of 1999?
- YES  NO Do you have a plan in place to address Systems Software Year 2000 issues in your data centers?
- YES  NO Have you examined your PC and server-based office automation and determined that they will continue to properly function on 01/01/00?
- YES  NO Have you assessed the impact external providers might have on your operations, and taken action to ensure they can provide uninterrupted service to your organization?
- YES  NO Have you examined equipment on your factory floor and warehouse areas looking for date-dependent devices, and implemented a plan to upgrade or replace?
- YES  NO Have you examined your HVAC, security/access, elevators, PBX, fire and alarm systems, etc. and implemented a plan to upgrade or replace?
- YES  NO Have you looked over your products for microprocessors and taken appropriate corrective action including solving those problems that are already in the field?

This publication and more information on Y2K is available from UW Cooperative Extension on the Web at [www.uwex.edu/ces/admin/Y2K](http://www.uwex.edu/ces/admin/Y2K). An EEO/Affirmative Action Employer, UW-Extension provides equal opportunities in employment and programming, including Title IX and ADA requirements. The information presented here provides general guidance on Y2K issues. UW-Extension assumes no liability for errors or omissions in content. UW-Extension's Y2K educational programs are conducted in cooperation with the Wisconsin Department of Administration and the Governor's Blue Ribbon Commission on Y2K Preparedness.

### Additional Information

UW-Extension  
Small Business  
Development Center  
phone 608/263-2221

Wisconsin Manufacturing  
Extension Program (WMEP)  
phone 608/240-1740  
[www.wmep.org/](http://www.wmep.org/)

The National Institute of  
Standards and Technology  
[www.nist.gov/y2k](http://www.nist.gov/y2k)

The Small Business  
Administration  
[www.sba.gov/y2k/](http://www.sba.gov/y2k/)

U.S. Environmental  
Protection Agency  
<http://es.epa.gov/oeca/eptdd/oc2k.html>

U.S. Government CIO  
Committee on Y2K  
[www.itpolicy.gsa.gov/mks/yr2000/cioy2k.htm](http://www.itpolicy.gsa.gov/mks/yr2000/cioy2k.htm)

# Y2K

YEAR 2000 BUG

G O V E R N M E N T I

## Local Government Planning and Preparation

Local governments throughout Wisconsin are giving considerable attention to the Year 2000, or Y2K, technology problem. Like the private sector, many local govern-

ments have been looking at their internal operating systems and functions. That means local governments have been checking systems for 911 emergency reporting and dispatching, building security and environmental controls, personnel, budgeting and taxation, street lighting and traffic control, and sanitation and water.

Local governments have also been working with vendors and business partners to ensure that purchased goods and services will be operating on and after January 1, 2000. And, local governments have been maintaining records on the outcome of this work so that citizens can be assured that an organized approach to Y2K issues will protect their communities from serious problems.

However, much more remains on the agenda to fully prepare Wisconsin citizens and communities for the millennial date change. The next challenge for most local governments will be to prepare community information and education programs to share their Y2K progress with the general public. Working with utilities, financial institutions, health care providers, and other community-based organizations, local government leaders need to ensure that citizens are informed of accomplishments, next steps, and individual responsibilities to help resolve Y2K problems. Public information and education can minimize panic, distrust and skepticism.

### Alternatives for Organizing Local Government Efforts

There are as many organizational options for dealing with Y2K as there are local governments in Wisconsin. Every community can select the option that it feels best suits local needs and circumstances. While there is no single mold to guarantee success, there are some standards that can make the process of preparing for Y2K easier and more effective.

The first is to involve elected officials and professional staff in developing plans to deal with Y2K problems. By getting involved early, elected officials help to ensure that local government strategies respond to a broad range of citizen interests. The role played by local elected officials should be the same as that of a CEO in a corporation – providing visible and tangible leadership for the community on an important issue.

Local government professional staff should also be involved in local Y2K program activities. Working as a team, this group can provide leadership for the inventory and assessment of potential problems, and for remediation and testing procedures. Teams assembled in most communities have included the directors of the following offices or functions:

- Information Technology
- Legal Counsel
- Law Enforcement
- Social Services
- Emergency Management
- Public Health
- UW-Extension
- Nursing Home
- Building Management
- Transportation

One member of the working group should be named lead administrator for the project, and the group should meet and report on their activities at regular intervals.

There is also a pattern to the process many local governments are using to manage Y2K problems. The management strategy for local government is similar to that being used in the private sector. The steps in

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### Sizing Up Citizen Concerns

How concerned are Wisconsin residents about Y2K, and what preparations are they taking? A recent poll\* offered these results:

**Awareness** – Almost all respondents (97%) said they were aware of the overall problem, and 52% said they were either very concerned or concerned about its potential effects.

**Specific Concerns** – Most respondents identified concerns about possible power failures (83%), banking problems (76%), disruption in government services (66%), and food shortages (53%).

**Personal Preparations** – Respondents were less likely to specify how they plan to address potential Y2K problems. For example, 15% said they would purchase gas generators to provide power if utilities failed, 22% said they were changing travel plans, and 30% said they would take money out of the bank. The greatest number of respondents (40%) said they would store additional food and water in preparing for Y2K.

**Government Preparations** – Asked about government preparations for Y2K, 41% said they would not change government efforts, while 47% said they would increase the current level of government activity. Only 4% said they would decrease the amount of work government was undertaking to address Y2K problems.

\*Source: Poll of Wisconsin residents by St. Norbert's College and Wisconsin Public Radio, Spring, 1999. The poll asked 398 participants six questions about the Year 2000 technology problem.

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the process include:

- Developing an inventory of Y2K problems
- Setting priorities for corrective actions
- Assigning responsibilities for corrective actions
- Testing and continued testing of the solutions
- Evaluating outcomes and reassessing priorities
- Preparing contingency plans for unanticipated problems
- Developing a public information/education plan

While most of the steps in this process are common for Y2K project management plans, local government officials should pay particular attention to evaluating outcomes, reassessing priorities and developing public information and education programs.

### Evaluating Outcomes and Informing the Public

Evaluating the outcomes of Y2K activities and reassessing priorities is important because the problems are interdependent and may shift depending on the results of our work. For example, banking and other financial institutions have made considerable effort to ensure that personal finances will remain safe with those institutions. They have encouraged customers

to avoid withdrawing and holding large sums of money in unsecured settings at home or elsewhere. However, banking and law enforcement officials remain concerned about the results of their public information programs, and continue their efforts to remind us of the problems large withdrawals may create.

Similarly, local governments need to evaluate the outcomes of their Y2K work, assess their progress, and consider new priorities.

Finally, local governments need to keep the public informed of their accomplishments in dealing with Y2K problems. Communication helps to break down barriers that otherwise may create uncertainty and fear. An active program of public information and education will not only help citizens understand the work that is being done by local government and the

private sector, but their individual responsibility in preparing for the Year 2000.

### Organizing Community Outreach Efforts

More and more communities are focusing attention on community outreach and forming partnerships to ensure that information is passed on to the general public. Partnerships help limit duplication of effort, make efficient use of scarce resources, and help to avoid confusion over conflicting recommendations. A successful strategy for Y2K outreach usually includes public forums co-sponsored by local governments, civic organizations and the business community.

Working with the private sector and civic organizations is critical, because many citizen concerns deal with goods and services beyond the control of local government. For example, the first and most often asked questions relate to heat and electrical service; that is "will I have power?" (See the Wisconsin Public Service Commission web site listed below.) After utility service, the next questions generally deal with concerns about personal finance and banking, health care, food and water storage, and public safety. Notice that only one of these areas of interest – public safety – is solely the domain of government. For the most part, government is dependent on the work of other sectors to address the issues of most concern to citizens.

Local officials working with the private sector and civic organizations on community outreach programs can have a significant influence on Y2K preparedness. Specifically, outreach programs can:

- Mitigate public concern, distrust, and panic
- Bring organization and direction to strategies and activities that reflect community interests
- Create an environment of credibility and accountability for a potentially serious set of issues.

Finally, outreach programs enable local officials to help create an environment that encourages individuals and families to consider their own liabilities and establish household priorities. Families that are well prepared for the Year 2000 will be less likely to draw on public services that may be more strained this New Year than in other years.

### Government/Private Partnerships

A subcommittee report of the Governor's Blue Ribbon Commission on Y2K Preparedness identified government efforts as one means by which Wisconsin is working to "fend off potential Year 2000 problems." The report recognized partnerships among local government and the private sector for serving the informational needs of citizens and communities.

This publication and more information on Y2K are available from UW Cooperative Extension on the Web at [www.uwex.edu/ces/admin/Y2K](http://www.uwex.edu/ces/admin/Y2K). An EEO/Affirmative Action Employer, UW-Extension provides equal opportunities in employment and programming, including Title IX and ADA requirements. The information presented here provides general guidance on Y2K issues. UW-Extension assumes no liability for errors or omissions in content. UW-Extension's Y2K educational programs are conducted in cooperation with the Wisconsin Department of Administration and the Governor's Blue Ribbon Commission on Y2K Preparedness.

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### Additional Information:

[http://www.uwex.edu/lgy2k\\_resources.htm](http://www.uwex.edu/lgy2k_resources.htm)

<http://www.y2k.gov/java/y2kinformation.html>

<http://y2k.state.wi.us/>

<http://www.psc.state.wi.us/y2k/>

<http://www.tma2000.org/>



# Y2K

THE YEAR 2000 BUG

## Home and Neighborhood Planning

Local and state governments, businesses, and community organizations in Wisconsin have been busy identifying and correcting Y2K problems and preparing for potential disruptions.

Most experts who have been working on solutions to Y2K problems feel that there will not be widespread power outages and chaos. However, they recommend that individuals and families prepare for the possibility of localized, short-term failures in basic services.

Unfortunately, the type of failures cannot be predicted, and will vary from area to area.

The Y2K bug will affect some computers, but it may also affect devices and systems that rely on computer microchips. These computer chips are used in everything from automobiles and home VCRs, to telephone switching equipment, electric power plants and medical equipment. So, the Y2K bug may directly affect families and neighborhoods, and every household should prepare for possible problems.

### Assess Risks and Impacts

Individuals and families should first identify the risks they may actually face because of Y2K, and then focus their efforts on managing those risks. Here are the first steps every family should take:

- Determine if you have any devices that are date-sensitive and that may malfunction with the Year 2000 date change. Check personal computers, both hardware and software. Less obvious but more important are household items that may be controlled by date-sensitive computer chips. These include home or portable medical devices, home security systems, and some thermostats and other environmental control systems.

- Assess factors in your personal situation that may add to the impact of Y2K problems. Medical conditions or isolation from neighbors, for example, can present additional risks.
- Assess the impact on your family if you lose important services such as electricity and water for several days.
- Monitor local newspapers, radio, and television for information from emergency government officials on their preparedness for Y2K, and attend community meetings that address Y2K issues. Assess the Y2K readiness of your community and how it may affect your own preparations.

### Take Corrective Actions

If you find potential problems with date-sensitive personal or home equipment, take corrective action early to eliminate the problems.

- If you suspect a device is not Y2K-compliant, check the vendor's web site or contact the vendor for Y2K compliance information. (Check the Vendor2000 web site on the back page for this information.)
- Update or replace critical devices that are non-compliant. Most home entertainment devices that use dates, such as VCRs, are not critical and can be manually reset after the year 2000 begins.

### Prepare for Service Interruptions

Because of the possibility of localized loss of services, the unpredictability of where they may occur, and the fact that Y2K will arrive in winter, individuals and families should prepare for the Year 2000 in the same way they would prepare for a bad winter storm – with several additional precautions.

The Federal Emergency Management Agency (FEMA) and the American Red Cross recommend preparing a family emergency plan and building an emergency supply kit over the months preceding

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### What Can I Do?

Individuals and families can take some important steps to minimize the impacts of Y2K on their lives:

- ✓ Assess the risks and potential impacts of Y2K in your home and neighborhood.
- ✓ Take corrective action to fix or replace household equipment that may not be Y2K compliant.
- ✓ Make preparations to deal with localized, short-term interruptions in essential services and infrastructure.
- ✓ Work with neighbors and local government to provide mutual support.

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January 1, 2000. The supply kit is intended to provide basic family supplies for three days. The *Family Disaster Supplies Kit* brochure is available from Red Cross local chapters, or from their web site listed below. (See sidebar for essentials; check with the Red Cross for the complete list.)

You should also make some additional preparations:

## What Do I Need for an Emergency?

- ✓ **Water:** one gallon per person per day, stored in plastic containers. Rotate stored water once every three months. (Ask your county UW-Extension office for the Y2K fact sheet *Storing Water for Short-Term Emergencies*.)
- ✓ **Food:** at least a three-day supply of non-perishable food. Replace stored food every six months. (Ask your county UW-Extension office for the Y2K fact sheet *Storing Food for Short-Term Emergencies*.)
- ✓ **First aid kits:** one for home; one for each car.
- ✓ **Tools and supplies:** including an adjustable wrench (for turning off gas and water lines), eating utensils, non-electric can opener, battery powered radio, flashlight, extra batteries, matches, fire extinguisher, and sanitation supplies.
- ✓ **Clothing and bedding:** at least one complete change of clothes and footwear per person.
- ✓ **Special items:** including baby supplies, prescription drugs, extra eyeglasses, games, books and important family documents.

- Prepare a family emergency plan and make sure all family members are familiar with it. (The brochure *Your Family Disaster Plan* is available from local Red Cross chapters or from their web site listed below.)
- Have a week's supply of all family members' prescription drugs on hand.
- Keep vehicle fuel tanks full, as you would during a normal winter.
- Gather extra blankets in case your home's heating system will not work.
- Have at least one non-cordless phone available. Regular phones do not need electrical power to operate, as long as the phone lines are working. A back-up cellular phone is a good idea.
- Contact your county's emergency management director or the local Red Cross chapter to locate emergency shelters in your area.
- Y2K failures may cause unexpected power surges. Protect sensitive electrical equipment with surge protectors. Back up important files and programs on your computers.
- Be prepared to take action to prevent water pipes from freezing if heat in your home is lost.

- Have a reasonable amount of cash and a credit card available to cover unexpected expenses.
- Keep copies of credit card transaction slips and monthly statements. Also keep bank statements throughout 1999. (Ask your county UW-Extension office for the Y2K fact sheet *Personal Finances and Consumer Fraud*.)
- In late 1999 request a statement of account on mortgages and loans to protect yourself if your bank's records are lost or corrupted.

## Work with Your Community

Remember, when the Year 2000 comes, you will not be alone – you are part of a community. To be safe, you will still need to plan for taking care of yourself and your family for about three days. If needed, your emergency government office and local officials will take actions to ensure public safety and provide emergency shelter.

There are some things you can do to help your community:

- Be aware of your community's plans and preparations for Y2K.
- Know the location of the nearest fire station; plan the quickest route there to report an emergency.
- Know the location of your community's emergency shelters.
- Help neighbors plan and prepare for Y2K. Hold neighborhood meetings to share information.
- Talk with neighbors to identify persons in your area who may need extra help in an emergency. If an emergency does occur, check with all neighbors to see if they are all right.
- Check with neighbors to share phones and mobile radios if needed.

Hopefully, the impacts of Y2K will be minor and brief. Being prepared, though, is a wise course of action, and will help ensure that you and your family will enter the Year 2000 in safety and comfort.

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This publication and more information on Y2K are available from UW Cooperative Extension on the Web at [www.uwex.edu/ces/admin/Y2K](http://www.uwex.edu/ces/admin/Y2K). An EEO/Affirmative Action Employer, UW-Extension provides equal opportunities in employment and programming, including Title IX and ADA requirements. The information presented here provides general guidance on Y2K issues. UW-Extension assumes no liability for errors or omissions in content. UW-Extension's Y2K educational programs are conducted in cooperation with the Wisconsin Department of Administration and the Governor's Blue Ribbon Commission on Y2K Preparedness.

### Additional Information:

Gartner Group Year 2000  
Risk Assessment  
<http://gartner12.gartnerweb.com/public/static/home/00073955.html>

American Red Cross  
<http://www.redcross.org/disaster/safety/supplies.html>  
<http://www.redcross.org/disaster/safety/displan.html>

Equipment Vendors  
Index  
<http://www.vendor2000.com>

State of Wisconsin  
Year 2000 Project  
<http://y2k.state.wi.us/>

UW-Extension Local  
Government Center  
[http://www.uwex.edu/lgc/y2k\\_resources.htm](http://www.uwex.edu/lgc/y2k_resources.htm)

# Y2K

## Travel Planning and Precautions

**I**f you're trying to decide between safety and celebration this New Year's, you're not alone. Millions of would-be travelers are trying to estimate the travel risks posed by the Y2K bug. While no one can guarantee a problem-free transition to the Year 2000, following a few travel guidelines will help make your trip safe and enjoyable, no matter where you go or how you get there.

### Reservations

Reservation systems for airlines, trains, cruise ships, car rental and hotels could malfunction when the clocks turn over to January 1. Luckily, travel industry computers passed the first test this past January, successfully handling the first reservations for the year 2000. While this is an excellent signal that reservation systems will handle the New Year's date change, it's no guarantee.

Common sense precautions include:

- If possible, plan your trip so you leave a week or so before New Year's and return a week or so after.
- Have every travel or lodging provider send you written confirmation of your booking on its own letterhead. The confirmation should show all your deposits and prepayments.

### Air and Rail Travel

Finding a flight to your destination may be challenging, getting through busy airports may cause some headaches, but experts state that airline safety should not be a major concern. While some people have expressed fear of flying over the New Year's holiday, the Federal Aviation Administration states that all critical components of the air traffic control system have been adjusted for the year 2000. In addition, no essential navigational systems will shut down because systems in planes use a 1024-week internal cycle, not the calendar year.

However, the Y2K bug may affect less critical parts of air travel. You may arrive at your destination only to find escalators, baggage handling, ticket reservation, security systems, and runway lighting out of order. The potential readiness of airport support systems will vary depending on the location and the management policies of airport. For example, airports in smaller communities may have more Y2K related problems than those in larger cities. Likewise travel to certain foreign locations, especially in Africa, South America and Eastern Europe, could be a problem.

Common sense precautions include:

- If possible, avoid connecting flights.
- Expect delays and allow plenty of time.
- Recognize that certain foreign destinations are less prepared for Y2K.
- Have your tickets in hand well before departure and call to reconfirm a day in advance.

Trains could be interrupted by electrical outages and failures in their traffic and communication systems. Because trains often share tracks, problems with one train could cause problems with others as well. If you are traveling by train, be on the safe side and bring along enough food, water and reading material to get you through long delays.

### Highway Travel

Automobiles are equipped with numerous computer microchips used for power-train management, climate control, anti-lock brakes, traction control, and others systems. However, auto industry experts are not aware of any computer chips that would render autos inoperable or unsafe. General Motors (GM), for example, reports that they have analyzed microchips in their cars and found that most electronic systems have no date-related functionality and, therefore, pose no Y2K related problems. GM says that those few systems that have date-related functions were found to be "Y2K ready."

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### Travelers Show Concern about Y2K

With the Year 2000 soon upon us, opportunities abound for once-in-a-lifetime New Year's celebrations. As many as 50 million Americans could travel over the New Year's holiday, and travel agents are offering everything from around the world flights on the Concord to expeditions to the summit of Mt. Kilimanjaro.

But while some are looking for the perfect place to spend New Year's, 2000, others are concerned that the Y2K bug will make New Year's travel unsafe. When an internet poll asked people if they would want to travel on January, more than half of the respondents said "no," citing safety as the number one concern.

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Having a car that is Y2K compliant may do you little good should other systems related to auto travel fail. Conceivably, electric power outages or faulty processing systems could slow down fuel deliveries, leading to spot shortages and higher prices. Similarly, shipping problems could lead to delays in getting replacement parts for your car.

While power outages could affect traffic control systems, these systems generally are not based on calendar year cycles, thereby minimizing widespread Y2K impacts.

Common sense precautions include:

- If you are concerned about your vehicle's Y2K readiness, contact your dealer or call the manufacturer's consumer assistance number.
- Have routine service on your car done before year's end.
- Get in the habit of filling your tank regularly, as you would during a normal winter.

### Lodging and Food Service

The Y2K bug could affect many systems in today's lodging operations, including elevators, central heating, credit card authorization, central reservation interface, security, door-locking systems, telephones, and fire alarms. In addition, many food service operations must manage their perishable inventory very carefully and often depend on weekly or daily deliveries from suppliers. This reliance on outside vendors and services makes food service particularly susceptible to Y2K disruptions. If food deliveries are slowed, how long can the business provide food service? If the utility fails to supply electricity, how long can the emergency generators run? If airline service or highway travel is disrupted, how long can a hotel cater to a guest who cannot leave?

Common sense precautions include:

- Arrive early in the day at lodging facilities.
- Avoid changing hotels on January 1; after that, keep your moves to a minimum.

- Consult the Red Cross Y2K Readiness Checklist (see web site below); the list suggests having a 3-day stock of water, nonperishable foods and personal care products.

### Financial Services

Automatic Teller Machines (ATMs) are a vital convenience when traveling. Concerns that Y2K may disrupt the ATM system focus on possible problems with the computer microchips that control ATM mechanical components, and with the computer networks that complete transactions. Financial institutions and the government agencies that regulate them have been working diligently to ensure that all computerized systems will be Y2K ready. However, non-compliance by small community banks or credit unions could ripple through the banking system and cause ATMs to malfunction.

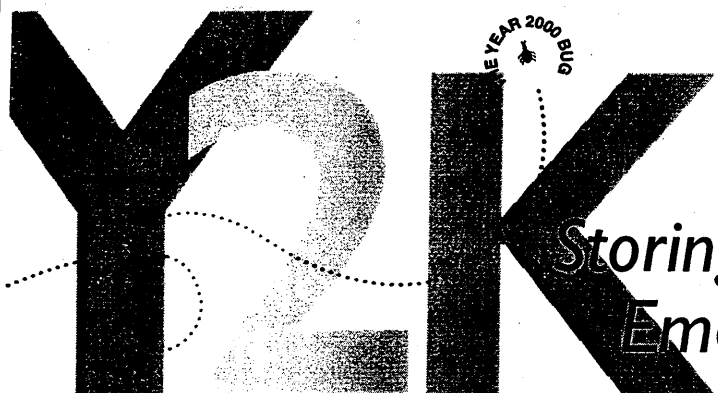
Credit cards are another critical convenience in traveling. Travelers could have problems if out-of-town banks, merchants or hotels are unable to process credit (or debit) card transactions, or will not accept a personal check. While VISA, for example, states that it has completed 99 percent of its own compliance testing, the company concedes difficulties could develop if key partners don't successfully complete their Y2K programs.

Common sense precautions include:

- Bring and safely store enough cash and travelers checks to get you through your trip in case you are unable to return home on schedule.
- Hold on to all travel receipts prior to and after January 1 to ensure proper posting of charges and payments.

In conclusion, if you are one of the many Americans who plan to travel over the New Year's holiday, make preparations in the event inconveniences do occur. Before you travel, seek updated information from travel businesses on their preparations and recommendations. Make contingency plans just as you would if you had stayed home, and do not rely solely on the travel industry to satisfy all of your needs. Then, go and enjoy the celebration.

This publication and more information on Y2K are available from UW Cooperative Extension on the Web at [www.uwex.edu/ces/admin/Y2K](http://www.uwex.edu/ces/admin/Y2K). An EEO/Affirmative Action Employer, UW-Extension provides equal opportunities in employment and programming, including Title IX and ADA requirements. The information presented here provides general guidance on Y2K issues. UW-Extension assumes no liability for errors or omissions in content. UW-Extension's Y2K educational programs are conducted in cooperation with the Wisconsin Department of Administration and the Governor's Blue Ribbon Commission on Y2K Preparedness.



## Storing Food for Short-Term Emergencies

**W**ill the Y2K bug cause disruptions in the systems that distribute food and water? No one knows for sure, but many people are considering storing extra food and water, the way they would in preparing for a major winter storm.

Planning ahead for situations when you may need an emergency food supply is a good idea. How much and which foods to store will depend on the members of your household, your preferences, special health conditions, ability to use the food in an emergency, space for storage, and how far you live from a market. Planning for short-term emergency food needs may be as simple as

**“Canned foods keep almost indefinitely as long as cans are undamaged. However, for the best quality and nutritional value, replace canned goods every year.”**

increasing the quantities of some staple foods and non-perishable foods that you normally have on hand.

### Preparing a Three-Day Emergency Food Supply

A three-day emergency food supply should be sufficient for most situations. In addition to your short-term food supply, store water, personal hygiene items, flashlights, blankets and other supplies for emergency use. The food supply needs to be non-perishable; select foods that require no refrigeration, minimal or no preparation or cooking, and little or no water. Try to select foods that are compact and lightweight.

*Include the following foods:*

- Ready-to-eat canned meats, fruits and vegetables
- Soups – canned or “dried soups in a cup”
- Smoked or dried meats like beef jerky

- Dried fruit
- Juices – canned or powdered
- Milk – powdered, canned or shelf-stable brick pack
- Staples – sugar, salt, pepper, instant potatoes and rice, coffee, tea, cocoa
- Ready-to-eat cereals, instant hot cereals, crackers
- High energy foods – peanut butter, jelly, nuts, trail mix, granola bars
- Cookies, candy, other snacks
- Foods for infants, elderly persons or those with special diet needs

### Gathering and Storing your Emergency Food Supply

It is important to store foods your household normally eats, plus some favorite treats. Each household requires different amounts of food, based on the individual needs of the household members. Choose quantities of food based on the needs for your household. Don't forget to store animal food for pets.

Avoid stocking foods high in salt that will increase thirst. Store single servings or one-meal sizes to avoid leftovers, since refrigeration may not be available. Canned foods keep almost indefinitely as long as cans are undamaged. However, for the best quality and nutritional value, replace canned goods every year. Use the older canned goods in cooking and buy new items for the emergency stockpile. Finally, store emergency food and supplies where they will be safe from insect and rodent pests, and possible flooding.

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*continued from front***Other Items to Store**

Complete your emergency food supply kit by including the following items:

- Water (see Fact Sheet: *Storing Water for Short-Term Emergencies*)
- Chlorine bleach, one gallon of 5.25% sodium hypochlorite
- Disposable plates, cups, tableware, plastic bags
- Can opener, other utensils, paper towels, packaged hand wipes
- Covered two-quart saucepan
- Canned heat burner and extra fuel
- Charcoal for outdoor cooking
- First aid kit
- Flashlight and extra batteries, candles
- Matches in a waterproof container
- Radio with batteries
- Personal items: clothes, personal hygiene supplies

**Preparing a Two-Week Emergency Supply**

The same general suggestions apply for a two-week emergency food supply. However, for two weeks or more of emergency eating it might be wise to pay more attention to nutrition needs than is necessary for short (three-day) survival conditions. Plan food supplies so that at least one well-balanced meal could be eaten each day.

One way to develop a two-week emergency supply is to increase the amount of basic foods you normally keep on your shelves. Keep the supply fresh by rotating non-perishable staple items in storage.

To help you plan a two-week food supply, make a list of all family members, indicating any special dietary needs. List all staple foods in cupboards and freezer. Make a meal chart, indicating where food can be

found each day. Add notes to each day's list that indicate how much water and what utensils are needed for preparation. Keep track of cooking directions for products such as rice, instant cereals, dry potatoes, and dry milk.

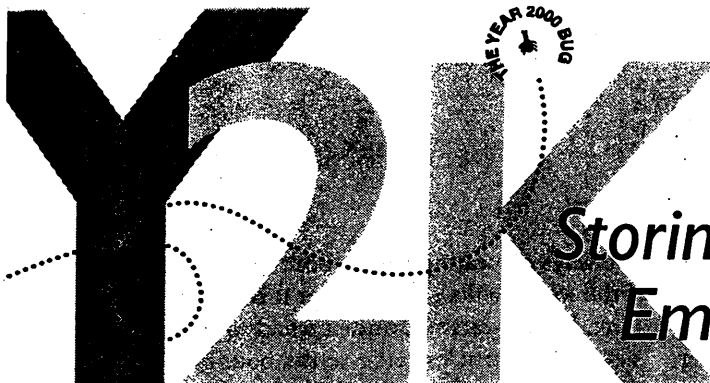
**Dry Food Storage**

Many dry food items (rice, wheat, flour, corn meal, etc.) can be stored for extended periods of time. You may want to consider these items when planning your emergency food supply.

Grains and other dry goods benefit from storage in a cool, dry location. Choose packaging that can be tightly sealed such as food storage bags, plastic containers with tight-fitting lids, and metal canisters. Store all dry goods in a cool location, away from sunlight and heat. Basements or pantries off the kitchen are often a good choice for food storage. Make sure the food storage area is free of insect and rodent infestation.

Unopened dry and canned goods will keep for at least six months if properly stored. After one year, quality may begin to decline. Many canned and packaged foods require refrigeration once opened. This includes canned foods, salad dressings, condiments and jams and jellies. Remember to take this into account when planning your food supply. If kept for more than one day, opened canned goods should be transferred to glass or plastic storage containers to avoid a metallic taste in the food.

**Additional Information:**



# Storing Water for Short-Term Emergencies

**W**ill the Y2K bug cause disruptions in the systems that distribute food and water? No one knows for sure, but many people are considering storing extra food and water, the way they would in preparing for a major winter storm.

Most people can live only a few days without water. In preparing to store water for emergencies, keep at least a three-day supply of water for each person in your household (one gallon per person per day, on average – see below). Stocking water reserves and learning how to purify contaminated water should be among your top priorities in preparing for an emergency.

**How Much Water Do I Need?**

Store a total of at least one gallon per person, per day. This is a good estimate, although everyone's needs will differ, depending upon age, physical condition, activity, diet and climate.

A normally active person needs to drink at least two quarts of water a day. Hot environments can double that amount. Children, nursing women and ill persons will need more. You can minimize the amount of water your body needs by reducing your activity and staying cool. You will need additional water for food preparation and hygiene.

**Storing Emergency Water Supplies**

Plastic, glass, fiberglass or enamel-lined metal containers are suitable for storing water supplies. Never use a container that has held toxic (poisonous) substances. No matter how well you clean these containers, tiny amounts of toxic substances may remain in the container's pores. Intact, durable plastic containers, such as soft drink bottles or those you purchase water in, are best. You can also purchase food-grade plastic buckets or larger containers. Milk jugs and other containers that previously held food items are almost impossible to adequately clean. Use these only when other containers are not available. Long-term care facilities should avoid using plastic milk jugs. Pathogens can remain in the jugs and present problems for residents.

For ease of use, water containers for personal use should be no larger than one or two gallons. (If contamination or a leak occurs in a stored container, you also lose less of your supply by using smaller containers.) Two-liter (about ½ gallon) plastic soft drink bottles also work well. Five- or ten-gallon storage drums (intended for water or food) will work well for larger supplies. Thoroughly wash the container

and lid immediately before filling it with treated water (see below). Use clean, hot water and detergent. Rinse well with hot water after washing.

Before storing your water, treat it with a preservative, such as chlorine bleach, to prevent the growth of microorganisms. Use liquid household chlorine bleach that contains 5.25% sodium hypochlorite and no soap. Do not use scented or "color safe" bleach or bleaches with added cleaners. Add 16 drops of bleach, or ¼ teaspoon, per gallon of water and stir. Two liter soft drink bottles are about ½ gallon in size; use 8 drops or ⅛ teaspoon bleach for each of these bottles. Mix the water and bleach thoroughly and let stand for at least 30 minutes before using the water. To store water, seal your water containers tightly, label them "Purified Drinking Water," date them and store them in a cool, dark place.

Water can also be stored in the freezer. This will keep the water at an acceptable quality for a longer period of time and will help keep any food in the freezer from thawing in the event that the power goes out.

You can also purchase water from a grocery or other supplier to use in an emergency. "Bottled" water most often comes in one-gallon jugs. Check to see if there is a date on the jug that specifies the expected shelf life of the water. Purchased water does not have to be purified before storage – it is ready to use as supplied. If no shelf life is given, expect jugs of purchased water to last at least three months. After that time, replace bottled water just as you would replace water supplies that you prepare at home.

**Replacing Emergency Water Supplies**

The length of time that water can be stored depends on the original quality of the water, the temperature at which it is stored, and how much light it is exposed to. Stored water may eventually develop a disagreeable appearance, taste, or odor. Plan to replace your emergency water supply every three months. Under emergency conditions, water that tastes flat can be aerated by pouring the water back and forth between

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the container and a clean bottle. To increase the shelf life of water stored in translucent containers (those you can see into), group the containers together in dark plastic bags to keep out the light. Store the water supply away from gasoline, kerosene, pesticides or other chemicals. Plastic water storage bottles can allow the vapors from these chemicals to enter the bottle and contaminate the water.

### Finding Water in Emergencies

If you haven't put water away in preparation for emergency use during disasters, you do have some other options. Most homes have hidden sources of water that can be used in an emergency. But remember during a natural disaster, consider all water from wells, cisterns, and other delivery systems unsafe until tested.

The tank of your hot water heater or water pressure tank can supply many gallons of emergency water.

First, turn off the electric or gas supply to the heater. Turn off the gas at the intake valve or turn off the electric circuit breaker or unplug the unit. You can obtain water by opening the drain valve at the bottom

**“The tank of your hot water heater or water pressure tank can supply many gallons of emergency water ... pipes and plumbing also carry several gallons of water.”**

of the tank. Pipes and plumbing also carry several gallons of water. As a last resort, you can use water in the reservoir tank of your toilet (not the bowl), but purify it first (see below).

### Purifying Emergency Water Supplies

When a safe supply of water is not available, or your usual supply of water becomes unsafe for drinking, you must treat the water before it can be used for drinking, cooking or brushing teeth. In addition to having a bad odor or taste, contaminated water can contain microorganisms that cause diseases such as dysentery, cholera, typhoid and hepatitis. There are

two ways of treating water: boiling or adding bleach. If the water looks cloudy, filter it before purifying. First, let the water sit undisturbed so that any suspended particles settle to the bottom. Then filter the water through layers of clean cotton or paper towels, cheesecloth, or coffee filters.

Boiling is the safest method of purifying water. Place the water in a clean saucepan or other cooking container. Bring the water to a rolling boil and continue boiling for 10 minutes, keeping in mind that some water will evaporate. Let the water cool before drinking, keeping it covered during cooling.

You can also use liquid household bleach which contains 5.25% sodium hypochlorite to purify water. Place the water (filtered if necessary) in a clean container and add bleach. Add 16 drops of bleach (¼ teaspoon) per gallon of water. Mix thoroughly and let stand (covered) for 30 minutes. If the water does not slightly taste and smell of bleach, repeat the bleach treatment and let stand another 15 minutes.

Note: If an emergency arises quickly, fill large clean containers and bathtubs with water. This water can be purified immediately before use, if needed. Ice, soft drinks and fruit juices are water substitutes for drinking in emergencies.

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This publication and more information on Y2K is available from UW Cooperative Extension on the Web at [www.uwex.edu/ces/admin/Y2K](http://www.uwex.edu/ces/admin/Y2K). An EEO/Affirmative Action Employer, UW-Extension provides equal opportunities in employment and programming, including Title IX and ADA requirements. The information presented here provides general guidance on Y2K issues. UW-Extension assumes no liability for errors or omissions in content. UW-Extension's Y2K educational programs are conducted in cooperation with the Wisconsin Department of Administration and the Governor's Blue Ribbon Commission on Y2K Preparedness.

#### Additional Information:

Federal Emergency  
Management Agency  
[www.fema.gov](http://www.fema.gov)

American  
Red Cross  
[www.redcross.org](http://www.redcross.org)

USDA Consumer  
Information Line (Y2K)  
Phone  
1-888-USDA-4-Y2K

U.S. Consumer Gateway  
[www.consumer.gov/  
year2000.htm](http://www.consumer.gov/year2000.htm)

Year 2000 and the  
Food Supply  
[www.usda.gov/aphis/  
FSWG/](http://www.usda.gov/aphis/FSWG/)



THE YEAR 2000 BUG

# Personal Finances and Consumer Fraud

**O**rganizations that use computerized systems might be affected by the Year 2000 date change. Banks and savings institutions are among the companies that could be especially affected by the Y2K bug. Here are a few common sense suggestions regarding your personal finances. These suggestions are generally wise steps to take at any time.

## Keep Informed

Financial institutions and the government agencies that regulate them have been working diligently to ensure that all their computerized systems will be ready for the Y2K date change, and will be able to handle the transition without any disruption of services. In the coming months, pay attention to special mailings from your bank, credit union or other financial institution, credit card companies, and investment firms. Many of these companies are sending customers information about steps they are taking to protect customers during the Y2K transition. If you have questions, contact someone from the financial institution who can explain how they are preparing to handle possible problems that could affect your accounts.

## Keep Good Records

Keeping good financial records is always important. It's generally a good idea to keep written records that document all your important financial accounts and verify your financial transactions. Written records should include copies of monthly statements from your bank, savings association or

credit union; credit card statements and receipts; mutual fund, brokerage and other investment

account statements; and records of mortgages, car loans and other loans.

Retain paper copies of information that will document your deposits, account balances, receipts, investments, payments and ATM transactions. As you receive



monthly statements on your accounts, review them for accuracy by reconciling amounts on the statement with your checkbook records, credit card statements, ATM receipts and other records. If you discover errors or discrepancies, contact the financial institution to resolve the problem.

## Be Cautious with Cash

Think carefully about how much cash you should have on hand. While cash can be useful in a short-term emergency or a long weekend when financial institutions may be closed, cash does pose the possibility of loss or theft. For those concerned about the possible interruption in banking services with

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## Written Records to Keep

Written records should include copies of:

- ✓ monthly statements from your bank, savings association or credit union;
- ✓ credit card statements and receipts;
- ✓ mutual fund, brokerage and other investment account statements;
- ✓ records of mortgages, car loans and other loans.

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the Y2K date change, most experts suggest withdrawing only the amount of cash you would normally need to handle necessary short-term purchases over a long weekend.

### Be Alert for Consumer Fraud

Be aware that consumer scams and con artists may try to cash in on fears regarding the Y2K computer bug. Be careful if anyone tries to sell you a product, service or investment that's "guaranteed" to fix or prevent a Y2K problem. Such offers may just be a scare tactic to sell you unnecessary or overpriced goods or services.

Other offers may be aimed at obtaining your cash, credit card numbers or bank account information. If you have questions concerning an unsolicited offer, check with a reputable source or consumer protec-

tion agency such as the Wisconsin Department of Agriculture, Trade and Consumer Protection, or the Wisconsin Department of Justice. Do this research before you pay money or enter into any contract for services or products.

**"Be careful if anyone tries to sell you a product, service or investment that's 'guaranteed' to fix or prevent a Y2K problem."**

### Look for Additional Information

A great deal of consumer information is available from both government agencies and financial institutions at the phone numbers and internet web sites listed at the bottom of the page. For example, the Federal Trade Commission (FTC) has several fact sheets available for consumers. The "consumer gateway" web site listed below offers links to consumer information from institutions and government agencies associated with banking, credit cards, mortgages, pensions and investments. The Securities and Exchange Commission (SEC) web site allows you to check Y2K compliance reports from

investment advisors, brokers/dealers, transfer agents, and mutual fund companies. Finally, remember that county UW-Extension offices can often provide information and put you in touch with specialists who can answer your Y2K-related questions.

Prepared by Linda Boelter,  
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This publication and more information on Y2K is available from UW Cooperative Extension on the Web at [www.uwex.edu/ces/admin/Y2K](http://www.uwex.edu/ces/admin/Y2K)  
An EEO/Affirmative Action Employer, UW-Extension provides equal opportunities in employment and programming, including Title IX and ADA requirements. The information presented here provides general guidance on Y2K issues. UW-Extension assumes no liability for errors or omissions in content. UW-Extension's Y2K educational programs are conducted in cooperation with the Wisconsin Department of Administration and the Governor's Blue Ribbon Commission on Y2K Preparedness.

#### Additional Information:

Equipment  
Vendors Index  
[www.vendor2000.com](http://www.vendor2000.com)

Federal Trade Commission  
202/FTC-HELP  
[www.ftc.gov/bcp/online/edcams/y2k/index.html](http://www.ftc.gov/bcp/online/edcams/y2k/index.html)

U.S. Consumer Gateway:  
Y2K Money Issues  
[www.consumer.gov/y2k/money.htm](http://www.consumer.gov/y2k/money.htm)

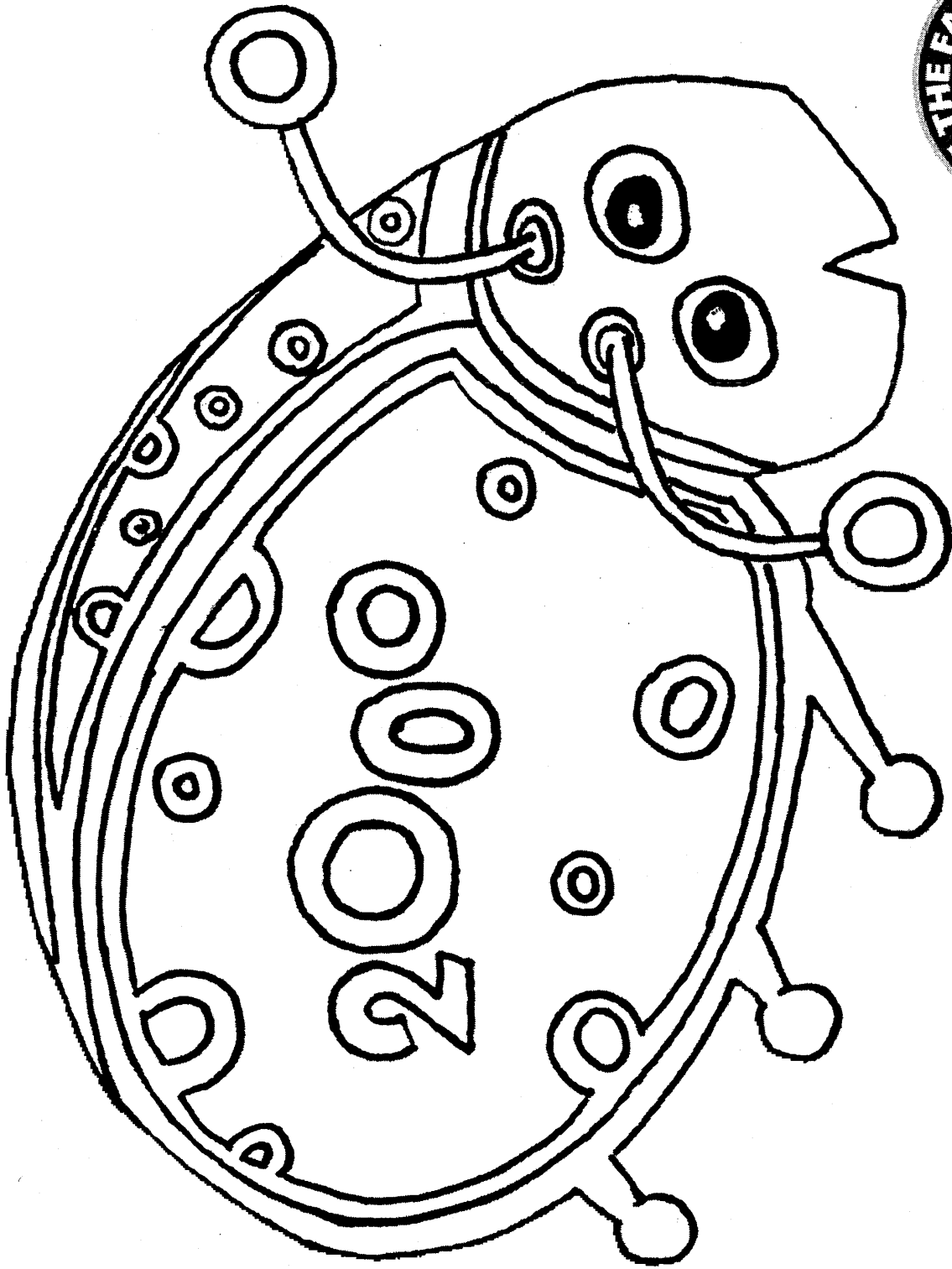
Federal Securities and  
Exchange Commission  
[www.sec.gov/news/home2000.htm](http://www.sec.gov/news/home2000.htm)

The Wisconsin  
Bankers Association  
(608)256-0673  
[www.wisbank.com/y2k.htm](http://www.wisbank.com/y2k.htm)

DATCP Bureau of  
Consumer Protection  
<http://badger.state.wi.us/agencies/datcp>

Federal Deposit  
Insurance Corporation  
[www.fdic.gov/](http://www.fdic.gov/)

# COLOR IN THE Y2K BUG



## Worried about Y2K problems?

By using our Y2K Checklists on the following pages, you can prepare and protect yourself:



### Household Preparation Checklist

Natural disasters and emergencies occur all year long. The Y2K bug may cause similar disruptions that affect the household. However, there is no need to panic or overreact. To be on the safe-side, simply prepare as you would for a severe winter storm.

### Utilities Checklist

As the Year 2000 draws near, more and more people are asking, "Will there be electricity?" "Will there be water?" The Public Service Commission of Wisconsin states there is little need to worry. Learn the facts and prepare as you would for a severe winter storm.

### Finance & Money Checklist

Although money is a major concern, preparing for the Year 2000 may be easier than you think. Simply keep your money where it is. Learn what could happen and prepare by following suggestions that are wise steps to take all through the year.

### Transportation & Travel Checklist

New Year's travelers may have a little more to think about this year, but taking a few extra precautions and allowing extra time will help make travel experiences safe and enjoyable. So, learn what could happen, and what you might need to do to prepare.

### Health Care Checklist

High-quality patient care is a top priority of health care providers in Wisconsin. This will continue to be a priority in the Year 2000. You can feel reassured by learning about your health care providers. Find out what you can do to receive quality care and services.

If you have specific manufacturing or computer questions, ask us for the "Year 2000 (Y2K) computer problem" fact sheet.

#### Other resources:

- State of Wisconsin Year 2000 Project at <http://y2k.state.wi.us>
- UW Cooperative Extension Y2K Fact Sheets at <http://www.uwex.edu/ces/admin/Y2K>
- President's Council on Year 2000 Conversion at <http://www.y2k.gov> or call 1-888-872-4925
- Federal Trade Commission Consumer Help Line at 1-877-382-4357 or <http://www.consumer.gov/y2k>
- The American Red Cross at <http://www.redcross.org/disaster/safety/y2k.html>

For fact sheets and copies of our Y2K Checklists, call the toll free hotline of the Wisconsin Department of Agriculture, Trade and Consumer Protection at 1-800-422-7128 or visit our website at <http://datcp.state.wi.us/y2k>

## ✓Y2K Checklist:

# Household preparation



Natural disasters and emergencies occur all year long. The Y2K bug may cause similar disruptions that affect the household. However, there is no need to panic or overreact. To be on the safe-side, simply prepare as you would for a severe winter storm. Stock supplies to last several days to a week.

### Water

- Store one gallon per person per day (half for drinking, half for food preparation/sanitation).
- Store water in plastic, glass, fiberglass or enamel-lined metal containers. Do not use milk jugs or containers that previously held food or toxic substances. It is almost impossible to adequately clean them.
- Replace water supplies every three months.
- The best way to purify water is to boil it in a clean saucepan for 10 minutes.

### Food

- Store at least a three-day supply of non-perishable food. However, significant hoarding of consumer products such as food, fuel, and prescription medications could lead to spot shortages that might escalate into more widespread problems.
- Choose foods that require no refrigeration and little preparation.
- Select the following kinds of food:
  - Ready-to-eat canned meats, fruits and vegetables, and dried fruit
  - Canned juices, powdered milk
  - Cereals
  - High-energy foods: peanut butter, jelly, trail mix, granola
  - Sugar, salt, pepper
  - Comfort foods: candy, cookies, snacks, instant coffee
- Store dry goods in a cool, dry place.
- Pay attention to expiration dates.
- When cooking, use charcoal grills, camp stoves, and fires outdoors only.

### Special items

- Baby supplies
- Prescription drugs
- Important family documents
- Eye glasses
- Games and entertainment for children
- Pet Supplies
- Extra set of keys

## Tools & supplies

- First aid kit
- Flashlight and extra batteries
- Battery-operated radio
- Non-electric can opener
- Canned heat burner and extra fuel
- Fire extinguisher
- Matches
- Plastic storage containers
- Paper plates, cups, plastic utensils
- Aluminum foil
- Disinfectant/ chlorine bleach
- Towelettes
- Toilet paper
- Plastic garbage bags
- Adjustable wrench (to turn off gas & water lines)
- Personal hygiene items and warm clothes
- Blankets and sleeping bags
- Paper and pencil
- Map of area for locating emergency shelters
- Credit cards & cash

## Household devices

- Check personal computers by contacting the manufacturer. Computers purchased before 1997 are more likely to have the Y2K problem than more recent models.
- Check that computer software is Y2K compliant by contacting the manufacturer. Most have websites. Downloadable "patches" may be available to fix certain Y2K compliance issues.
- Check thermostats and furnaces. Contact the manufacturers or suppliers for Y2K information. Older (analog) thermostats have no Y2K problems, however newer (digital) systems might. Ask a qualified heating system technician if you have questions about your thermostat and other heating equipment.
- Check home security systems by contacting the manufacturer.
- Check household devices such as VCRs, cameras, camcorders, and coffee makers by contacting the manufacturers.
- Find manufacturer's toll-free numbers by dialing 1-800-555-1212.

## Remember, you are not alone

- Find out how your community is preparing for Y2K.
- Talk with your neighbors about their plans for the year 2000.
- Locate your community's emergency shelters.
- If an emergency occurs, share resources such as phones and radios.
- Develop a plan now to ensure that loved ones know what to do in case of an emergency. Be sure they have adequate supplies to see them through a short-term emergency. Plan to have a friend or neighbor check in on loved ones, or have them stay with you during the beginning of the new year.

## Other resources

- Local Red Cross Chapter or the American Red Cross at <http://www.redcross.org/disaster/safety/y2k.html>
- UW Cooperative Extension Y2K Fact Sheets at <http://www.uwex.edu/ces/admin/Y2K>
- Wisconsin Emergency Management at 608-242-3232
- Federal Emergency Management Agency at <http://www.fema.gov>
- US Department of Agriculture at <http://www.usda.gov>
- Food Marketing Institute at <http://www.fmi.org>

For more information, or to file a complaint, contact the Bureau of Consumer Protection at:

**(800) 422-7128**

**FAX: (608) 224-4939**

**TTY: (608) 224-5058**

**E-MAIL: [datcph hotline@wheel.datcp.state.wi.us](mailto:datcph hotline@wheel.datcp.state.wi.us)**

**WEBSITE: <http://datcp.state.wi.us/>**

✓ Y2K Checklist:

## Utilities



As the Year 2000 draws near, more and more people are asking, "Will there be electricity?" "Will there be water?" The Public Service Commission of Wisconsin states there is little need to worry. Learn the facts and prepare as you would for a severe winter storm.

### Electric power

- The majority of electric utilities indicate they will be Y2K compliant for all critical systems.
- There is a risk of incurring a power outage on any given day. Because of storms and other unplanned events, contingency plans are in place on a regular basis.
- Many power systems can be manually operated during unexpected outages.
- Prepare for short-term emergencies. Have flashlights with extra batteries.
- It is not necessary for households to buy generators. Consumers who use generators are reminded to carefully follow operating instructions.

### Water

- The Public Service Commission of Wisconsin predicts no interruptions in water service.
- Most water utilities are accustomed to handling weather-related interruptions.
- Most water utilities have backup generators to maintain operations in an emergency.
- Smaller cities may be more likely to experience Y2K related problems.
- Keep at least a three-day supply of water for each person in your household. (One gallon per person per day—half for drinking and half for sanitation)
- Store water in plastic, glass, fiberglass or enamel-lined metal containers. Do not use milk jugs or containers that previously held toxic substances. It is almost impossible to adequately clean them.

### Telecommunications

- The majority of Wisconsin telecommunications providers report that they expect to have their critical systems ready.
- The telephone in your home will work if it does not include any clock functions.
- Check with the manufacturer about telephones with date-aware features.

- The cell phone is your best bet for a guaranteed voice connection. However, cell phones need electricity to recharge batteries.
- Develop a plan now to ensure that loved ones know what to do in case of an emergency. Be sure they have adequate supplies to see them through a short-term emergency. Plan to have a friend or neighbor check in on loved ones, or have them stay with you during the beginning of the new year.

### **Natural gas**

- The distribution system is dominated by mechanical systems that will not be affected by Y2K-related problems.
- Some programmable thermostats and items with a time/date function may be affected. Check with the manufacturer about Y2K compliance.
- In the unlikely event of a disruption, call your natural gas utility.

### **Rural utilities service**

- Chance of problems may be greater in rural areas because service providers are smaller and more isolated. They may lack awareness of the issue or lack resources to remedy problems.
- Contact your utility companies about their Y2K compliance and contingency plans.
- Contact the manufacturers of L-P gas, oil heating systems, septic systems, and generators about Y2K compliance.

### **Other resources**

- Contact the Wisconsin Public Service Commission at 1-800-225-7729 or <http://www.psc.state.wi.us/y2k>
- US Department of Energy at <http://home.doe.gov/>
- Alliant Energy Y2K hotline at 1-877-678-1100 or <http://www.alliantenergy.com>

For more information, or to file a complaint, contact the Bureau of Consumer Protection at:

**(800) 422-7128**

**FAX: (608) 224-4939**

**TTY: (608) 224-5058**

**E-MAIL: [datcph hotline@wheel.datcp.state.wi.us](mailto:datcph hotline@wheel.datcp.state.wi.us)**

**WEBSITE: <http://datcp.state.wi.us/>**



✓ Y2K Checklist:

## Finance & money



Although money is a major concern, preparing for the Year 2000 may be easier than you think. Simply keep your money where it is. Learn what could happen and prepare by following suggestions that are wise steps to take all through the year.

### Keep good records of:

- Monthly statements from your bank, savings association, or credit union.
- Receipts and credit card statements. During the first months of 2000, watch your store receipts more closely.
- Investment account statements.
- Records of mortgages, car loans and other loans.

### Financial institutions, ATMs, and cash

- Banks, credit unions, and other financial institutions are a safe place for your money.
- Deposits up to \$100,000 are insured by the National Credit Union Administration Insurance Fund and the Federal Deposit Insurance Corporation. Call 800-934-3342 for more information about FDIC deposit insurance coverage.
- Keep your bank statements and transaction records for at least three months before and after January 1, 2000.
- Ask about your financial institution's plans to deal with the year 2000.
- ATM and Debit Cards are expected to function. However, in advance of the new year, take out enough cash or traveler's checks for a long holiday weekend.
- Balance your checkbook.

### Automatic deposits and bill paying

- Contact all institutions from whom you receive a direct deposit and ask about their preparedness.
- Keep paper copies of all your payroll statements.
- Keep canceled checks as proof of payments you have made.

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## Credit cards

- Check the expiration dates on your credit cards. If a card expires after January 1, 2000, use it before then to make sure it works.
- Ask your credit card company what they are doing to deal with Y2K issues.
- To safeguard your good credit, get a copy of your credit report from each of the three major credit bureaus. Contact Equifax (800-685-1111), Experian (800-682-7654), Trans Union (800-916-9900). Check up-to-date copies of your credit report late in the fall and again in early 2000. The cost is \$8 per report.

## Scams

- Never give out personal information (bank account or credit card numbers) over the phone unless you have initiated the contact.
- Avoid scam artists who offer to "hold your money" through the date change.
- Hang up on any person who claims to be testing your bank account for Y2K compliance. Call your bank directly to alert them of the incident.

## Social Security

The Social Security Administration received an A grade from the General Accounting Office for being ready for the year 2000. There will be no disruption to the benefit payments before, on, or after January 2000. Direct deposit payment systems have been tested successfully.

- Contact the Social Security Administration with unanswered questions at 800-772-1213.

## Other resources

- WI Department of Financial Institutions at 608-261-9555 or <http://www.wdfi.org>
- US Social Security Administration at 1-800-772-1213 or <http://www.ssa.gov/year2000/index.htm>
- Federal Deposit Insurance Coverage at 1-800-934-3342 or <http://www.fdic.gov>
- Small Business Administration at 1-800-827-5722 or <http://www.sba.gov/y2k>
- Conversion 2000: Y2K Help Center for Small Business at 1-800-925-7557 or <http://y2khelp.nist.gov>

For more information, or to file a complaint, contact the Bureau of Consumer Protection at:

**(800) 422-7128**

**FAX: (608) 224-4939**

**TTY: (608) 224-5058**

**E-MAIL: [datcphotline@wheel.datcp.state.wi.us](mailto:datcphotline@wheel.datcp.state.wi.us)**

**WEBSITE: <http://datcp.state.wi.us/>**

## ✓ Y2K Checklist:

# Transportation & travel



New Year's travelers may have a little more to think about this year, but taking a few extra precautions and allowing extra time will help make travel experiences safe and enjoyable. So, learn what could happen, and what you might need to do to prepare.

### Reservations

- Try to plan your trip so you leave before January 1, 2000 and return a week or so after.
- Obtain written confirmation of your booking- in addition to verbal assurance.
- Have tickets in hand before your departure and call to reconfirm 24 hrs. in advance.
- Arrive early whenever possible and avoid changing hotels on January 1.
- Trip-cancellation insurance may not reimburse Y2K related problems.
- If carriers offer any Y2K warranties, be sure to get them in writing.

### Automobiles

- Cars and trucks will continue to run. Manufacturers indicate that although automobiles contain computers, these systems are not date-dependent.
- Have routine service before January 1 and replace worn out parts such as hoses, belts and filters. Disruptions in shipping may delay delivery of replacement parts.
- Continue to keep your gas tank above half full.
- Know how many miles you can go on one tank of gas.
- Traffic signals will function correctly or default to a flashing signal.
- In the event of a snow-storm, snow removal will occur.

### Motor Carriers

- Anticipate some delays and minor disruptions.  
Although Y2K problems are not found in trucks, some inventory, billing and payroll systems are date-sensitive and need upgrades.

### Airlines & airports

- The Federal Aviation Administration says problems are unlikely.
- Domestic air travel is expected to be problem-free.

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- International travel may be questionable. Some developing countries have not begun to tackle the problem.
- Anticipate delays and allow yourself extra time.
- Avoid connecting flights whenever possible.
- Metal detectors do not have date-related operations. All new explosive detection systems are Y2K compliant and older systems have been modified.
- Avoid connecting flights whenever possible.

### **Trains**

- Electrical outages and failures in traffic-control systems may occur.
- Problems with one train could disrupt service for hundreds of miles since trains share tracks.
- Travel with food, water, and entertainment to get you through long delays.

### **Ships**

- Allow extra time to reach your port of departure.
- Since international travel is questionable, obtain as much information as possible about the specific cruise line and ports.
- Navigation and engine-control systems could be affected.

### **Travel documents**

- Obtain passports, visas, and new driver's licenses well in advance.
- Keep important documents and personal items with you at all times.

### **Cash & carry**

- Bring extra cash, travelers checks, and essential items to get you through your trip in case you are not able to return home on schedule. Potential Y2K problems with cash machines and credit cards could cause great inconveniences while traveling.
- Always keep essentials with you.

### **Other resources**

- UW Cooperative Extension Y2K Fact Sheets at <http://www.uwex.edu/ces/admin/Y2K>
- WI Department of Transportation at 608-266-3581
- US Department of Transportation at <http://www.y2ktransport.dot.gov>
- US State Department at <http://travel.state.gov>

For more information, or to file a complaint, contact the Bureau of Consumer Protection at:

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**TTY: (608) 224-5058**

**E-MAIL: [datcpho@wheel.datcp.state.wi.us](mailto:datcpho@wheel.datcp.state.wi.us)**

**WEBSITE: <http://datcp.state.wi.us/>**

✓ Y2K Checklist:

## Health care



High-quality patient care is a top priority of health care providers in Wisconsin. This will continue to be a priority in the Year 2000. You can feel reassured by learning about your healthcare providers. Find out what you can do to receive quality care and services.

### General

- Don't be afraid to ask questions.
- Monitor the status of your health care provider's Y2K efforts through newsletters, media and direct contact.
- Discuss with your health care providers whether contingency plans are necessary.
- Keep paper copies of all appointments and bills.
- Schedule elective dental and medical work before January 1 or postpone appointments until well into 2000.

### Hospitals and nursing homes

- Schedule elective hospitalizations and surgery before December 1999 or after February 1, 2000.
- Check with nursing homes about their Y2K readiness.

### Medical devices

- Home medical devices may be of concern. Ask the provider if a specific electronic medical device needs debugging.
- Doctors advise that you contact the manufacturer for accurate information.
- The Food and Drug Administration can provide information about biomedical equipment. See their web site at [www.fda.gov](http://www.fda.gov).

### Prescription drugs

- Check with your pharmacist about your local drugstore's Y2K readiness.
- Add a few extra weeks of pills to your supply before January 2000. However, significant hoarding of prescription medications could lead to spot shortages that might escalate into more widespread problems.

## Health insurance

- Have a new health insurance card on hand by January 1, 2000.
- Keep paper records and copies of billing information and insurance documents.
- Contact your health insurer for specific information before December 1999.
- For specific Medicaid questions, call 608-221-4746 or 800-772-1213.
- For specific Medicare questions, call 800-944-0051.

## Emergency services

- According to the American Ambulance Association, there will be no disruption of local 911 emergency services.
- Hospitals that participate in Medicare have emergency power and lighting systems in critical areas such as operating, recovery, intensive care, and emergency rooms and stairwells.
- Contact your county government for details about their Y2K contingency plan.

## Other resources

- WI Department of Health and Family Services at 608-266-6954 or 608-221-4746 ext. 3705 or <http://www.dhfs.state.wi.us/y2k/index.htm>
- The American Red Cross or your Local Red Cross Chapter at <http://www.redcross.org/disaster/safety/y2k.html>
- Wisconsin Emergency Management at 608-242-3232
- Federal Emergency Management Agency at <http://www.fema.gov>

For more information, or to file a complaint, contact the Bureau of Consumer Protection at:

**(800) 422-7128**

**FAX: (608) 224-4939**

**TTY: (608) 224-5058**

**E-MAIL: [datcphotonline@wheel.datcp.state.wi.us](mailto:datcphotonline@wheel.datcp.state.wi.us)**

**WEBSITE: <http://datcp.state.wi.us/>**



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### Governor's Blue Ribbon Commission on Year 2000 Preparedness

Each subcommittee report can be accessed in full at the Wisconsin Year 2000 Project Web Page:  
[http:// y2k.state.wi.us/](http://y2k.state.wi.us/)

Press release on summary reports:

- 719 Public Safety Subcommittee
- 720 Healthcare Subcommittee
- 721 Finance Subcommittee
- 722 Transportation Subcommittee
- 723 Government Subcommittee
- 724 Agriculture Subcommittee
- 725 Business Subcommittee
- 726 Utility Services Subcommittee
- 727 Public Media Subcommittee
- 728 Blue Ribbon Commission's Final Report Summary

### Consumer Protection Fact Sheets

- 705 Coping: The Year 2000 Computer Problems
- 729 Countdown 2000: The Facts About the Year 2000 for Wisconsin Families

- 704 Y2K Preparedness Checklists: Household, Utilities, Finance, Travel, Health Care
- 706 Facts about Generators
- 701 Year 2000 Complaint Form
- 718 Year 2000 Publication Order Form
- 702 Emergency Radio Broadcasting Stations
- 703 WI County Emergency Management Directors List

### UW Extension Y2K Fact Sheets

- 707 Y2K and Your Farm Office
- 708 Personal Finances and Consumer Fraud
- 709 Travel Planning and Precautions
- 710 Local Government Planning and Preparation
- 711 Storing Water for Short-term Emergencies
- 712 The Power is Off: Is the Food Still Safe?
- 713 Storing Food for Short-term Emergencies
- 714 Home and Neighborhood Planning
- 715 Avoiding Frauds, Scams and Ripoffs
- 716 Small Business and Farm Computers
- 717 Manufacturing Production and Technology Systems

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Address \_\_\_\_\_

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Phone # \_\_\_\_\_

E-mail address: \_\_\_\_\_

Copies of these fact sheets are also available through fax-on-demand by calling 1-800-422-7128, by filling out this form and faxing it to 608 224-4939, or on the Internet at Wisconsin's Year 2000 Project Web Page: <http://y2k.state.wi.us/>

For more information contact:

**Department of Agriculture, Trade and Consumer Protection**

**800 422-7128**

**Fax: 608 224-4939**

**TDD: 608 224-5058**

**E-mail: [datcph hotline@wheel.datcp.state.wi.us](mailto:datcph hotline@wheel.datcp.state.wi.us)**

**DATCP Website: <http://datcp.state.wi.us/>**

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**Utilities:** Learn how to manually turn off water, gas and electricity at main switches.

**Heat:** Fill propane and oil tanks prior to January 2000. Keep chimneys cleaned and, if feasible, keep a week's supply of alternative fuel (e.g., wood) supplies on hand. Use alternative heating systems only if installed and operated properly. Some heating devices can pose a fire or poisonous gas hazard if used improperly. Check with local government building inspectors and/or fire officials for guidelines. If a safe alternative heat source is not available to you, check with local government officials, friends, neighbors and others to prepare a contingency site that you and your family can go to if necessary.

**Food:** Keep a reasonable quantity of nutritious and convenient food on hand, including bottled water, food for special diets, powdered milk, ready-to-eat canned goods, fruits and vegetables, soup, juices, cereals, crackers, potatoes (fresh or dried flakes), sugar, peanut butter, jelly, raisins, granola bars, trail mix, cooking oil, spices (salt & pepper), beans, white rice, dry pasta, non-carbonated soft drinks, or anything else your family eats regularly that stores well. You may also want to have a reasonable supply of "comfort foods" on hand, such as cookies, hard candy, instant coffee, tea bags, cocoa, chocolate bars, canned nuts, or other special treats.

**Automobile Fuel:** Don't let your fuel tanks fall below half full - a good practice anytime during Wisconsin's unpredictable winters. Note that storing extra gas or other fuels can be extremely hazardous.

**Other Supplies:** Here are some other suggested supplies to have on hand (remember that most experts anticipate only a few days to about one week of potential supply disruptions):

- Flashlights and extra batteries
- Battery-powered radio

- Standard (non-cordless) phone and/or CB Radio
  - Blankets, sleeping bags
  - Fuel for approved alternative heating systems (the State of Wisconsin has codes governing the type, installation and use of heating devices call local building inspection or fire personnel for more details)
  - Water: approximately one gallon of water per person per day (half for drinking, and half for food preparation/sanitation)
  - NOAA Weather Radio and batteries
  - Non-food products: toilet paper, tissue, plates, cups, plastic utensils, matches, aluminum foil (to avoid dish washing by lining pots and pans), plastic garbage bags with ties, soap, liquid detergent, and disinfectants
  - Plastic buckets with tight lids (to serve as temporary sanitation facilities)
  - First aid kit and manual
  - Special items for infants (diapers, wipes, formula), elderly or disabled family members
  - Personal hygiene products
  - Pet needs: food, chew toys, bedding, pet carrying case or crate, and litter
  - Fire extinguisher (5 lb. A-B-C type)
  - Extra set of car keys
- (This list is not inclusive. You may want to consider other items which you may need)*

#### World Wide Web Sources for More Information

##### State of Wisconsin Year 2000 Project Web Page

<http://y2k.state.wi.us/>  
Home page for the State's "Countdown 2000" project. Download the "Countdown 2000 Handbook," links to other government and private sector Y2K resources and research.

##### Wisconsin Emergency Management

<http://badger.state.wi.us/agencies/dina/lwem/index.htm>  
Home page for Wisconsin Emergency Management and links to other state and federal emergency management agencies and organizations.

##### Wisconsin Department of Agriculture, Trade, and Consumer Protection

<http://badger.state.wi.us/agencies/datcp/cp/y2k/index.html>  
DATCP's Consumer Information about the Year 2000 Problem

##### American Red Cross

<http://www.redcross.org/disaster/safety/y2k.html>  
The American Red Cross has published information about "Y2K"—its potential effects and what you can do to be prepared.

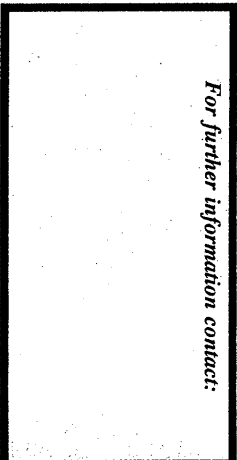
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##### FOR MORE INFORMATION CONTACT:

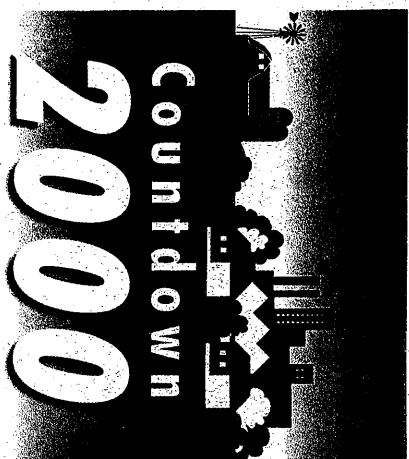
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A Guide to the Year 2000 for Wisconsin Families constitutes a "Year 2000 Readiness Disclosure" as that term is defined in the "Year 2000 Information and Readiness Disclosure Act" (S. 2392, 105th Congress, 2nd Session)

For further information contact:



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## A Guide to the Year 2000 for Wisconsin Families

Produced by:  
Wisconsin Department of  
Administration  
Wisconsin Emergency Management  
Wisconsin Department of  
Agriculture, Trade and Consumer  
Protection

# A Guide to the Year 2000 for Wisconsin Families

## What Is Y2K All About?

On the surface, Y2K is relatively simple. Decades ago, shortcuts were taken to conserve costs by using two digits to designate years in computer programs with calendar functions (e.g., "99" instead of "1999"). In effect, computer programs that are not updated to become "Year 2000 compliant" may read "00" as 1900 instead of 2000 and would be unable to calculate that "99" comes one year before "00." This can affect both computers and microchips built into everything from pocket calculators to airplanes. If left uncorrected, non-compliant computers and microchips could cause automated systems either to stop working or to generate inaccurate information.

## How Big Is the Problem?

There's no shortage of "experts" with strong opinions about what will happen in January 2000. But the truth is that the actual impact of Y2K will depend to a large extent on how much progress we make during 1999. While rigid predictions are obviously difficult, it is possible to make some overall projections based on reliable data from a variety of sources.

Gartner Group, a leading technology research firm, for example, compares the scale of probable Y2K impacts in the United States to a major storm. They anticipate scattered power outages and other business disruptions, but they discount the likelihood of a national blackout or other cataclysmic disruptions of the economy.

## What Is Being Done to Fix the Problem?

People are working around the clock to find and fix Y2K problems. But while the tools for fixing Y2K are readily available, the repair and replacement work takes time. That's why fixing the most critically important systems in government and industry has become a top priority.

## What Is the State Doing About Y2K?

Governor Thompson and the legislature have made Year 2000 preparedness state government's top business priority. The state has launched a Year 2000 Project, which monitors the progress of all departments, including on-site visits to those with critical services. For example, inspections of some state-owned facilities have turned up non-compliant chips in heating systems, communication devices and medical lab equipment. Because failures of these systems could disrupt critical services, state agencies are carefully checking all affected equipment and making adjustments where needed. The Governor has also appointed a 15-member Blue Ribbon Commission to assess public and private sector preparedness and to recommend ways to improve readiness.

## How Will Y2K Affect Me and My Family?

Everyone in the country (and around the world) could be impacted because we all rely on computer systems and microchips in our daily lives. This brochure will briefly describe what you can do to protect yourself, your home and your financial interests.

## Making Your Home Y2K Ready

Most preparations are simple, common sense planning.

**Financial Records:** Make backup paper copies of important financial documents, including payment records and investments. Have enough cash on hand to get you through a long weekend.

**Prescriptions:** Refill prescriptions you may need before January 2000.

**Personal Computers:** Diagnostic programs are available at computer stores or can be downloaded on the Internet from several sources (visit the Wisconsin Department of Agriculture, Trade and Consumer Protection web site listed in this brochure). Apple reports that its computers made since 1984 are fully Y2K compliant.

**Software:** Check with the manufacturer (most have Web sites). Some products are compliant in one version but not in others. Downloadable "patches" may be available to fix certain Y2K compliance issues.

**Systems with Embedded Chips:** A wide range of household devices, including thermostats and security systems, could be vulnerable. Check with the manufacturers or suppliers for information. Older (analog) thermostats have no Y2K problems, however newer (digital) systems might. Ask a qualified heating system technician if you have questions about your thermostat and other heating equipment. Information about motor vehicles is expected to be publicly available soon.

Once aware of the location of your Y2K problems there are a number of possible solutions:

**Ignore it:** Older products may not make the switch to the year 2000, but these items may still serve your needs.

**Fix it yourself:** Some appliances may accept the year 2000 and continue to work properly, once the date is set manually.

**Update and upgrade:** Computers that don't switch to 2000 automatically will likely need hardware upgrades or operating system and application updates. Check with the manufacturers for details as they develop. Many software companies are developing Y2K updates to their old programs and software to "patch" problems is also available. Remember, avoid scams by sticking only to the solutions offered by the manufacturer. Unless you are told otherwise, this should ensure compatibility and compliance with your warranty. If you find out you need a Year 2000 update, get it installed before January 1, 2000 rolls around. Some updates, if conducted after the year 2000 deadline, may cause even more problems to your software and data than you might have had before.

**Replace it:** If you've been considering replacing your old equipment it might be wise to purchase new items now and avoid date glitches that an older system is more likely to encounter. If you decide to purchase new hardware or software before the year 2000, make sure it is compliant and that you understand the manufacturer's compliance standards. Be certain it is warranted against any Y2K failures.

**Dependents:** Schools and daycare centers are working to find and fix their own Y2K problems. But some schools may not open if they can't ensure a safe, warm environment—similar to what schools do now when severe winter weather strikes. You may want to make alternative child care plans and remember the needs of elderly and disabled relatives, friends and neighbors.