



asked that manufacturers certify that their equipment is safe, but only 20% have bothered to reply.

According to Philip Neufeld, chief of surveillance in Health Canada's Medical Devices Bureau, most manufacturers either don't know whether their equipment will work or have been advised by lawyers that even if they think it is compliant, they cannot issue a guarantee. "I don't think these are refusals by the manufacturers to cooperate," he says. "They just don't have the data to respond."

Hospitals estimate that about 10% of medical devices will be non-Y2K compliant, but without manufacturers'

guarantees they don't know which 10%. The obvious suspects are those with an obvious date function that allows equipment to keep track of records and diagnostic trends. Even if they don't have a date function, many pieces of medical equipment contain an embedded microchip that could be programmed to keep track of the date and time or verify maintenance dates. If that's the case, the chips might not recognize the year 2000 and could malfunction or shut the machine down. For instance, noncompliant electrocardiograph machines could fail to date-stamp output strips properly. That could be nothing more than a minor nuisance, forcing medical staff to add the date and

## Y2K bug poses threat to MDs' offices

Experts still cannot say how seriously the millennium bug will affect doctors' offices, but many are advising that they should start looking for potential problems right away. "The lack of information bothers me," says Tom Magyarody, executive director of corporate affairs at the Ontario Medical Association. "It could turn out to be nothing, but if there is a problem and I ignore it, then as a physician I am at great risk for criticism or damages."

Physicians can prepare for Jan. 1, 2000, by looking at 5 areas of their practice.

- Office computers. Most older operating systems and software programs cannot manage dates after 1999, and they will revert automatically to another date, such as the day the system was installed. Since most doctors keep written files, the problem will likely have little effect on patient care. However, there is concern that it might lead to billing errors and payment delays, and leave physicians open to questions about the accuracy of their records. Magyarody, who is coordinating the OMA's Year 2000 project, says physicians should ask their system vendor to verify in writing that their computer is Y2K compliant and follow up by running software that validates the vendor's claim. Many systems can be repaired with a minor upgrade. However, older programs or those made by a company that is out of business will likely need to be replaced.
- Be prepared financially. Most provincial health ministries say their computerized billing systems will be Y2K compliant and that payments will not be interrupted. However, some experts are still worried. Dr. Mark Dermer, an Ottawa family physician and practice management consultant with MD Management Ltd., says all physicians should have a contingency cash flow, such as a line of credit or

short-term bank loan, in place by the end of 1999.

- Medical devices. Physicians should follow hospitals' lead and take an inventory of every medical device that plugs in, assess the consequences of a failure and ask the vendor for written assurance that high-risk equipment is Y2K compliant. Magyarody also recommends having an independent test done by a biomedical engineer as extra insurance.
- Infrastructure. Systems such as telephones, modern elevators, heat, water and electricity rely on computers. Although physicians cannot control building systems, Magyarody says they should ask their landlords for assurance that everything possible has been done to ensure that a building's operating systems keep working. "We're talking about linking liabilities," he says. "Doctors should also draw up a contingency plan to deal with infrastructure problems." Dermer says it is also important to check office equipment such as telephones, fax machines and photocopiers and to ask vendors to fix a faulty date function.
- Patient demand. Even if a physician's office is Y2K compliant, other health services may not be. Doctors must be prepared to handle patients who are in hospital or a long-term care facility, or are receiving treatment at home and rely on medical devices such as pain pumps. If these devices fail, doctors' offices could be swamped with calls. "If all hell breaks loose, it's the doctors, not the administrators, who will be dealing with patients," says Magyarody. He says physicians should talk to the medical staff association at their hospital as soon as possible to plan who will be available and for what purposes on New Year's Eve, 1999. Starting next November, doctors should also assess where their patients will be at the dawn of the new millennium so they can prepare for potential problems.