

Using Technology? Positively!

A SERIES OF FACT SHEETS

ON EVERYDAY TECHNOLOGIES AND OLDER CANADIANS

SERIES OVERVIEW

This series explores technologies that affect the daily activities of older adults. The fact sheets may be helpful to those who are new users or who may be considering using technology for the first time. Fact sheets 2-7 take a close look at specific technologies and provide tips and strategies suggested by older adults. The fact sheets also uncover myths about aging and seniors' use of technology and look at the challenges facing us as we all grow older and encounter new ways of doing things.

The world-wide growth in older populations is occurring at the same time as an explosion in technology. Thousands of older adults are discovering the many benefits of technology. Yet, credited with making life easier, technology has also created challenges for some as everyday activities such as banking, telephoning, and finding health information may increasingly involve unfamiliar or different ways of doing things. Access, literacy, cost, design, privacy and attitudes, all play a role in how we choose to use technology.

Where you live can affect how you view and use technology

Across Canada, **automated banking machines (ABMs)** have replaced many bank branches. For older adults living in rural areas or who prefer to do business with a human bank teller, this may pose a serious challenge, especially if transportation to the closest full service bank is not available.

High-speed communication is more likely to be available in more densely populated areas, allowing better internet services. In contrast, some remote areas of Canada struggle to maintain and upgrade even **basic telephone** service.

Living in a small community can have its advantages too! In many rural regions, vibrant community groups advocate for improved services and training whereas social isolation can occur in urban centres where people may not feel as closely connected to their community.

Some Barriers...

- ◆ Initial costs as well as ongoing service charges prevent many people from enjoying the benefits of computers, emergency response devices or telephones with display capabilities.
- ◆ Poorly designed technologies such as some telephone answering menu systems and banking machines with keys that do not line up with corresponding text on the screen discourage acceptance and promote resistance to using them.
- ◆ Computer keyboards, banking machines or touch-tone telephones may be difficult to operate for some who experience physical changes, such as visual or hearing loss, or arthritis.
- ◆ Perceptions that a particular technology is too complex or difficult to learn may deter some older adults from attempting to master a new device.

People aren't necessarily slow in adapting to technology; technology is often slow in adapting to people! Good design is better for everyone.

Myth: Seniors are not receptive to new technologies.

Mythbuster: Recent studies show that new technologies which improve the quality of life for older adults in their homes are welcomed. In fact, older adults readily accept technology when it meets their needs and is explained effectively. Technology can not only improve the quality of older adults' lives but may allow them to remain independent longer.

Sources:

- Brown, John Seely and Paul Duguid. *The Social Life of Information*. Boston: Harvard Business School Press, 2000.
- Fozard, James L., Jan Rietsema, Herman Bourna and J.A.M. Graafmans. *Gerontechnology: Creating Enabling Environments for the Challenges and Opportunities of Aging*. *Educational Gerontology*, 26, 2000.
- Zimmer, Zachary and Neena L. Chappell. *Receptivity to New Technology Among Older Adults*. *Disability and Rehabilitation*, Vol. 21, No. 5/6, 1999.



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Techno Terms

ABM - an **Automated Banking Machine**, also known as an automated teller machine (ATM), can carry out ordinary bank transactions such as deposits, withdrawals, transfers, account updates and bill payments. An ABM allows you to conduct these transactions 24 hours a day at your convenience.

Gerontechnology - a field of study which combines the study of aging (gerontology) and the development of technology. Its main purpose is to understand better how technology impacts upon an aging society.

Internet - a very large computer network through which individual computers are connected to internet service providers (ISP) so they can share information. The internet is open to anyone with access to a computer that is connected to an ISP.

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TELECOMMUNICATIONS: PHONES AND MORE

Fact sheet #2 looks at the widening telecommunications field and its impact on the everyday lives of older adults.

The communications field has grown far beyond the telephone to include **fax machines**, e-mail (electronic mail), monitoring devices and other teleservices. The development of voice, fax, video, data and other digital transmission technology has changed how and when we communicate, but not why. Communicating with friends, family, health care providers and the community is as important as it always was. Seniors are benefiting from new communication technologies that allow them to stay in touch with loved ones both near and far.

Everyday Telephone Innovations

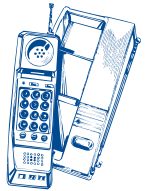
New telephone technologies can provide increased independence, convenience and safety. A wide variety of services

and equipment is available from telephone companies. Be aware that most of them add extra charges to your monthly telephone bill.

◆ Portable Cordless Phones

prevent rushing to answer a phone in another room.

Cellular phones (wireless telephones) are portable and operate on batteries. They make it easy to send and receive important telephone calls when you are away from your home and can be helpful in case of an emergency.



◆ Voice Mail Systems/Answering Machines

take messages from callers when you are not able to answer your phone. Your telephone company may offer an automated answering service for a monthly fee or you can purchase an answering

machine to plug into your phone. When setting up a recorded message, don't tell callers you are not home, or let them know that you live alone. Simply say "you have reached (your number) and we can't take your call at the moment."

Some seniors have a family member or friend who has a clear, firm voice record the greeting.

◆ **Caller Identification, Call Waiting, Call Blocking, Call Tracing** services are just a few of the features most telephone companies provide for a fee. Look through your telephone directory or call your telephone service to ask for a full explanation of these services.

◆ **TTY (teletypewriter)**, also known as **TDD (telecommunications device for the deaf)**, are services that make it possible for customers with a hearing impairment to use the telephone. **Relay** is the service provided by telephone companies to enable TTY users and non-TTY users to communicate. Customers communicate by typing into the TTY. An operator interprets the message and communicates it to the person they are contacting.

Automated Voice Response Systems (AVRs) are answering systems used by many companies that ask you to press a number on the phone key pad that corresponds to your inquiry from a list of choices. Its purpose is to direct calls to the most appropriate person and/or answer common questions. **AVRs** are cost effective for companies, as they require fewer service representatives. Many people find these systems frustrating if the menu choices do not match their inquiry and/or they would rather speak to a person. But if the system is well designed, it may be convenient and save time.

A well designed **AVR** system should include:

- simple clear choices
- an option to speak to a person
- an option to repeat the menu

If you encounter a poorly designed **AVR** system, tell the company. **AVR** systems should serve, not frustrate, customers.



AVR Tips

- ☎ Make your call when you have a block of time and will not be interrupted.
- ☎ Listen to all of the choices first, writing down any that seem to fit your inquiry.
- ☎ Even if '0' is not offered as an option to speak to a person directly, try pressing it anyway.
- ☎ If the menu choices seem unnecessarily complicated or too long, let the company know. Menus are sometimes poorly designed and the choices not clearly explained.
- ☎ Be patient with yourself and just hang up if you become confused. The machine does not care how many times you hang up or call back!

Telephone Tips

- ☎ Have a pencil and paper handy when you make any call but especially one that you know will be answered by an **AVR** (see above). Beforehand, write down your main points so that if you have to wait until your call can be answered, you won't forget them.

- ☎ Portable cordless phones have become relatively inexpensive. Be sure to read thoroughly the instructions that come with your phone. A welcome feature with most phones is the **locator button** on the telephone base. When pressed, the handset will emit a series of beeps to let you know where you last used it.
- ☎ Talking on a cell phone while driving has been shown to be a major distraction for drivers – in fact, in some jurisdictions, it is against the law. Exercise some common sense.

A word of caution: some cell or portable phones may not be secure; their signal could be picked up by other electronic devices in the area, such as baby monitors or private scanners; so do not use them for confidential calls.

Sources:

- Coughlin, Joseph F. *Technology Needs of Aging Boomers*. Issues in Science and Technology Online. Fall 1999.
- Listening to Canadians*. Communications Survey, Fall 2000.
- White, Jo and Ann Weatherall. *A Grounded Theory Analysis of Older Adults and Information Technology*. Educational Gerontology, 26:371-386, 2000.



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Techno Terms

AVR - an **Automated Voice Response System** is an electronic telephone answering service used by many companies to direct your call to the appropriate person or department and increasingly, by medical and professional offices to book appointments. Most use a 'menu' style, in which you make your choices by pressing the buttons on your phone. This system does not work with a rotary telephone.

Cellular Phone - a wireless telephone.

Fax Machine - sends and receives printed pages or images over telephone lines by converting the printed material to and from electronic signals.

Pound Key - the number sign (#) often used in automated voice response systems (AVRs) to designate a choice in the list of options.

Star Key - (*) often used in automated voice response systems to exit a system.

TTY (teletypewriter)/TDD (telecommunications device for the deaf) - are services that make it possible for customers with a hearing impairment to use the telephone. **Relay** is the service provided by telephone companies to enable TTY users and non-TTY users to communicate. Customers communicate by typing into the TTY. An operator interprets the message and communicates it to the person they are contacting.

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LOOKING AFTER YOUR MONEY: TECHNOLOGY AND BANKING

Fact sheet #3 looks at some of the changes in day-to-day banking and issues that have emerged. It also provides some tips for using new methods of banking.

Banking has changed dramatically in the last few decades due to technological advances. Many Canadians, including a growing proportion of older adults, now use telephone banking, internet banking or **automated banking machines (ABMs)** to carry out basic transactions. According to the Canadian Bankers Association, more than 60 percent of customers do most of their banking electronically. Fifty two percent of adults aged 55 and over have used a bank machine. There are more changes coming too, such as voice-activated automated banking machines (ABMs) that are being tested in many locations.


Automated Banking Machines (ABMs), also called **automated teller machines (ATMs)**, are often located inside or near banks, in grocery, and

other retail stores and in gas stations. To use an **ABM**, you must obtain a bank card and a **personal identification number (PIN)** from your bank.



You can deposit or withdraw cash, transfer funds to another account, pay bills or receive a printout of your balance and recent transactions. The easiest and most common transaction carried out at **ABMs** is cash withdrawal. Even if you prefer to talk to a human teller, **ABMs** can: save time if there are line-ups at the tellers' wickets, provide 24-hour bank services seven days a week and eliminate the need to carry large amounts of cash, especially when travelling.

Bank Cards - You can use your bank card at an **ABM** and to pay for purchases at a store that has **Interac direct**



payment service. At the cash register, you or the cashier will swipe your bank card (also referred to as your debit card) through a machine that electronically transfers money from your account to the store's account once you have keyed in your **PIN** and verified the transaction.

Drawbacks: The layout and function of **ABMs** and **Interac direct payment** machines can vary widely and may be confusing. Design features that would be helpful, such as non-glare glass, large print and clear, easily manipulated key pads are not consistently available. In addition, remembering **PINs** may be difficult for people who have experienced some memory loss.

Internet Banking is conducted on a personal computer. Most transactions except deposits or withdrawals can be conducted. You need your bank card and a pre-registered password. It can be done at any time of day from the comfort of your home and is convenient, fast and relatively safe.

If you have a touch-tone telephone, **telephone banking** can save a trip to the bank by allowing you to pay bills, transfer between accounts, and inquire

about balances and recent transactions. You must pick a telephone password and tell your bank which bills you wish to pay with this method. It is safe and saves time and energy, especially in bad weather. Remember, if you change your telephone number you must inform the bank so it can update your telephone banking information.

Safe Banking Tips

- ◆ Your **bank card**, also called your **debit card** is valuable. Together with your **personal identification number (PIN)**, it provides access to your bank account.
 - Never lend your card or reveal your PIN to anyone else.

- ◆ When selecting your **PIN**, never use your birth date or other numbers that may be written down in your purse or wallet, although it is a good idea to use numbers/letters that mean something to you. If you must write your **PIN** down, keep it separate from your bank card and disguise it in some fashion so it is not recognizable as a **PIN**. Don't panic if you forget or misplace your **PIN**. Simply go to your bank (take identification) and choose a new one.

- ◆ Privately owned “**white label**” ABMs are sometimes set up in stores or restaurants. They generally charge a higher fee per transaction than bank-owned **ABMs**.
- ◆ Be aware of your surroundings when using ABM machines, especially those that are located in poorly lit areas. Perhaps bring a relative or friend along with you.
- ◆ Have pension or income cheques **direct deposited** to your account. It is safe and convenient as your money goes into your account at the same time each month and a statement is mailed to your home. Remember to check your passbook or bank statement to make sure deposits have been made.
- ◆ When doing **telephone banking**, you must key in the long number from the front of your bank card. This is not your **PIN** or account number. It helps to write this number down before calling the toll-free bank number because it is sometimes difficult to read it from the card. When your transaction is completed, an electronic voice will give you a confirmation number. Do write down this number and the day’s date on your bill and keep it as a record that you have paid this bill.

Challenges Encountered by Some People

Despite the growth in electronic banking, not all customers are able to, or want to, use the new methods. In addition, improvements in the design and functioning of the technology are still needed in many areas. However, as banks face global competition and other pressures on their services, smaller branches in rural areas are being closed, leaving their customers with little choice but to use an electronic method for some of their banking needs. For Canadians in rural areas who may have little or no access to the closest branch in another town, this trend can pose serious challenges.

Using an ABM or internet banking may not be an option for other reasons, including those related to the natural processes of aging such as decreased vision or short-term memory loss, or perhaps a sense of mistrust towards technology and lack of access to training or a computer. Studies have shown that unless ABM technology is useful, convenient and safe, people tend to resist using it.

Sources:

2000 General Social Survey, Statistics Canada.

Canadian Bankers Association. *Fast Facts - Electronic Banking*, Retrieved April 16, 2001 from <http://www.cba.ca/eng/statistics/fastfacts/abms.htm>

Smither, Janar Al-Awar and Curt C. Braum. *Technology and Older Adults: Factors Affecting the Adoption of Automatic Teller Machines*. Journal of General Psychology, Provincetown, 1994.

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Bank Card - (also known as client card, access card, debit card, ABM card, ATM card) a plastic card, issued by your bank. A bank card is necessary for ABM banking and to pay for purchases by using the **Interac direct payment** service. Your personal banking information is protected by your **personal identification number (PIN)**.

Interac Direct Payment - a technology that allows you to make a purchase using your bank card. It enables you to make purchases without having to carry cash.

PIN (Personal Identification Number) - a code, containing letters, numbers or both, that allows you to access your bank accounts using an ABM, the telephone or a computer.

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COMPUTERS: GETTING ONLINE USING THE INTERNET

Fact sheet #4 examines some of the benefits as well as the challenges related to computers and older adults.

Older adults are the fastest growing group of computer buyers and internet users. In 1999, 25 percent of households headed by a person 55-64 years old used the internet from home. In the 65 and over age group, 10 percent did. Internet use in the 65 and over age group is growing faster than in all other age groups.

A **computer** can enrich your life in many ways. Just as you might not know exactly how your car works to drive it, so too, you don't have to understand the




computer to send **electronic mail (e-mail)** to friends and family, shop online, play games, make greeting cards,

read book and film reviews, look into your family's genealogy or find valuable health information on the **internet**.

Think about it

Some research shows that age is not an important predictor of owning a computer. An interest in technology among other factors is more important in determining who owns a computer.

Some Useful Definitions

- ◆ The **internet** is a very large computer network through which individual computers are connected to **internet service providers (ISP)** so they can share information. The **internet** is open to anyone with access to a computer that is connected to an **ISP**. 
- ◆ Information on the **internet** is presented on **web pages** that contain images, text and sometimes sound.

By clicking on the 'links' on a **web page**, you can visit other pages. The total of all **web pages** makes up the **World Wide Web or www**.

- ◆ **Modems** are devices that are installed in your computer or outside of it and allow your computer to communicate with other computers. This enables you to send a message through your computer via electronic mail (**e-mail**) over your telephone line, cable or satellite to another computer or the **internet**.

Myth: Older adults are resistant and react negatively to technological change.

Mythbuster: Some research shows that older adults' direct experience with computers and technology can have a positive influence on their overall outlook and mental health.

Training and Access

Computers are available for public use at any of the **Community Access Program (CAP)** sites across Canada and are located in various public facilities, including libraries, seniors' centres, schools and recreation centres. The

volunteers who donate their time at the **CAP** sites provide training, access to the internet and information on distance education. The training topics range from getting connected to the Web and using e-mail effectively to online banking, shopping and security issues. For more information, call toll free: **1-800-575-9200** or for **TTY** service: **1-800-465-7735**. You can also visit the CAP web site: **<http://cap.ic.gc.ca>**.

Across Canada, the **Student Connection Program** provides **Seniors' Internet Training** for a low fee. Four training modules include basic computer training as well as internet and electronic commerce education. For more information, visit their web site: **<http://www.scp-ebb.com>** or call toll free: **1-888-807-7777** to obtain the telephone number of the office nearest you.

Do it yourself

Seek out affordable and reputable **training programs**. Check out your local library for lists of courses or call your community education department. Some universities, community colleges and school boards have Continuing Education departments that may offer

training. Your provincial or territorial seniors' organizations or government agencies may also have information on computer training. Many reasonably priced programs are staffed by volunteers and/or subsidized by public funding. In some areas, training in your home is available. Once you are online, there are moderately priced computer and internet training courses available on the internet, as well as free resources. You may find listings of such material by conducting a search on the internet using specific terms like 'computer training resources'.

Overcoming Barriers...

- ◆ For many older adults, the cost of new computer equipment is beyond their budget. However, previously owned systems are available at reasonable costs. Ask at a local **Community Access Program (CAP)** site for suggestions (see **Training and Access** above).
- ◆ One of the best ways to learn how to use a computer is to talk to someone you know who already uses a computer, perhaps a neighbour,

friend, grandchild or other relative. Or ask people at your local seniors' centre for advice.

- ◆ Some older adults may feel that computers are too complicated or difficult to understand but with a little training and persistence, you might be surprised at how quickly you can learn, not to mention how much fun you might end up having. Learning how to use a computer can be a great way to feel connected to the Information Age!

Sources:

- Canada Online – Community Access Program (CAP). *Connecting Canadians*. Retrieved May 9, 2001 from <http://connect.gc.ca/en/240-e.htm>.
- Meeks, C.B., and A.L. Sweaney. *Consumers' Willingness to Innovate: Ownership of Microwaves, Computers and Entertainment Products*. In Carol B. Meeks. *Technological Change and the Elderly*. *Advancing the Consumer Interest*, Vol. 6, No. 1, Spring 1994.
- Personal communication with John Ryan, CAP Site Volunteer, April/May 2001.
- Untangle the Web: Introducing Canadian Business to the Power of the Internet*. Student Connection Program Information Kit, Industry Canada, 2001.
- White, Jo and Ann Weatherall. *A Grounded Theory Analysis of Older Adults and Information Technology*. *Educational Gerontology*, 26: 371-386, 2000.



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Techno Terms

Computer Virus - a programming code that is transmitted to your computer from an infected e-mail attachment, downloaded from an infected web site or present on a diskette. Viruses can cause operating problems with your computer and are often designed to automatically spread to other computer users. You can protect your computer from a virus by purchasing virus detection software.

Firewall - a security feature installed on some but not all computers that protects your information by preventing access to it from other computers when you are connected to the internet. Many networks have built-in **firewalls** to ensure privacy. If you plan to use the internet regularly from your home, check into whether you already have this feature on your computer or must install firewall software.

Hacker - a term used by some to mean ‘a clever programmer’ and by others, to mean ‘someone who tries to break into computer systems’.

Internet Service Provider (ISP) - a company that provides individuals and other companies access to the internet and other related services.

Online - the condition of being connected to a computer or a telecommunications system. The term is frequently used to describe someone who is currently connected to the internet.

World Wide Web - all the resources and users on the internet that are using the **Hypertext Transfer Protocol (HTTP)**. The World Wide Web is the universe of network-accessible information, an embodiment of human knowledge.

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FOR THE GOOD OF YOUR HEALTH: TECHNOLOGY AND HEALTH CARE

Fact sheet #5 looks at how technology affects access to health information and care and offers some tips in assessing that information.

Technology has significantly changed health care in Canada. It affects the way we get health information and how we use it. From contacting your doctor to delivering health services over great distances, technology is making a difference. There are increasing opportunities to get more information about your own health issues. But there may also be more confusion about the methods of getting information and the accuracy of the information.

Using the Internet to Get Health Information

Some research claims that as many as two thirds of internet users have sought health care information online. Online support and discussion groups can provide comfort and valuable

information. However, the internet cannot replace face-to-face contact with health professionals. It is important to keep your doctor informed of any changes in your health.

Some Cautions About Health Information on the Internet...

The internet is a rich source of health information, but it is unregulated. Some information is wrong, while other information is confusing or could take advantage of vulnerable people by promoting or selling useless products or worse, harmful advice. Ask a health professional as well as friends and family about information you find on the internet. Here are some specific guidelines that can help you to decide which information is trustworthy.

Guidelines to reliable health information on the internet:

- ◆ Look for the author's name, professional standing and contact information.
- ◆ Any information should be current with the last update of the web site noted.
- ◆ There should be clearly stated cautions on the site. For example, it should note that the information is not a substitute for visiting a physician.
- ◆ Any commercial sponsorship or fees should be clearly stated.
- ◆ Check with your physician, local seniors' organization or provincial/territorial department of health for listings of reliable web sites.

Check out the Canadian Health Network's web site for reliable health information and more detailed checklists to help you evaluate the information you find. Their web site address is: <http://www.canadian-health-network.ca>

An **Emergency Response Monitoring Device** is a small device often worn around the neck or clipped onto your clothing. The client can press it if she/he needs help. Once the device is pressed, it sends a signal to a small in-home communicator, which then notifies a response centre. A staff member at the centre notifies a relative, a neighbour or sends an ambulance to check on the client. In most areas, this service is available for a reasonable fee.

How has making a doctor's appointment changed?

Many doctors' and other professionals' offices now use an **automated voice response (AVR)** system to book or direct calls (**See fact sheet #2 for information on AVRs**). You may have to choose from a list of options before you speak to a receptionist. Sometimes, you have to wait until the receptionist can take your call. It helps to write down your main points before you phone, and have your health card numbers ready as well as a pen and paper handy to jot down any information you may be given.

Other Ways to Access Health Information

In some areas, providing health services using a computer network, video-conferencing or teleconferencing for example, has been a great success. In many rural areas of Canada, however, access to such technology is not yet available or needs upgrading. As technology continues to develop, these challenges will be overcome.

Even if you don't use the internet yourself, health care professionals and caregivers can benefit from the internet's rich scope of information. This option has the potential to make it easier for health care providers to exchange information, clinical expertise, diagnostic tests and results.

Contact your local health department to find out what is happening in your area.

Sources:

- Industry Canada. *Reports on the Telehealth Industry in Canada*. Retrieved March 12, 2001 from <http://strategis.ic.gc.ca/SSG/it05497c.html>.
- Health Canada. Information, Analysis and Connectivity Branch. Office of Health and the Information Highway. *Information and Communications Technologies for Better Health*. Ottawa, 2000.
- Cubberly, Maureen and Stan Skrzyszewski. Seniors' Connectivity: Health and the Internet. In *Background Papers: Seniors' Connectivity Strategy*. Prepared for Information Highway Applications Branch, Industry Canada, September 2000.
- Canadian Health Network web site, <http://www.canadian-health-network.ca/html/help/netinfoe.html>. Retrieved April 2001.

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Electronic Health Record (EHR) - electronic versions of individual patient records including medical history and test results. EHRs enable medical information to be sent between different geographical locations electronically (e.g. from the hospital to the doctor's office).

Emergency Response Monitoring Device - a small electronic device often worn around the neck or clipped to clothing and pressed by the wearer if she/he needs help. It sends a signal to a response centre which then notifies a relative, a neighbour or sends an ambulance to check on the client. In some areas, this service is available for a fee.

Internet - a very large computer network through which individual computers are connected to internet service providers (ISP) so they can share information. The internet is open to anyone with access to a computer that is connected to an ISP.

Online - the condition of being connected to a computer or a telecommunications system. The term is frequently used to describe someone who is currently connected to the internet.

Tele-Homecare - provides healthcare practitioners with a way to monitor, and provide care and education to patients in their homes. Using telecommunications technology, such as the internet, the tele-homecare system allows healthcare providers to communicate with patients as frequently as necessary.

Telemedicine - also known as **telehealth**, it is the use of information technology or computer networks to deliver health services and information over distances. Tele-homecare, video-conferencing and electronic health records are all components of telehealth and use information technology in delivering their service.

Video-Conferencing - allows people in vastly different places to communicate together by hearing and seeing one another in rooms specially equipped with microphones, speakers, cameras, and projection equipment. Two-way interactive video uses telephone lines to transmit live video, sound, and still pictures all at the same time.

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HOW ARE EVERYDAY TECHNOLOGIES KEPT SAFE?

Fact sheet #6 looks at safety and security issues of some everyday technologies.

Along with new technologies, new ways of committing crime have also turned up. From electronic crime to fraudulent charities, technology has provided new tools for criminals. Technology is also part of the solution, as companies, banks, organizations, police services and governments share information and take measures to combat such crime. Banks and **internet service providers (ISPs)** have developed pass codes and **encryption** security systems to protect their customers. Although some crimes and fraud schemes are targeted directly at older adults, there are a few simple guidelines you can follow that will greatly lessen your chances of being 'stung'. Of course, the first and best defence is to be cautious when conducting any transaction that involves your money or your privacy.

Automated Banking Machine (ABM) Safety Tips



- ◆ Be aware of those around you, both in a line-up and at the machine.
- ◆ Be discreet when entering in your **Personal Identification Number (PIN)** at a banking machine, or at a store retail machine.
- ◆ Shield the keypad with your body or hand.
- ◆ Do not write your PIN down or share it. If you must write it down, keep it separate from your card.
- ◆ Be sure to remove your card and your cash from the ABM.
- ◆ If you need assistance, do not ask the person behind you. Go into the bank and speak to an employee.

- ◆ Keep your ABM transaction slips and debit receipts to check against your monthly bank statement or passbook.

Internet Safety Tips

- ◆ Delete any e-mail you receive from unknown companies or unknown senders (e-mails also called **spam**). Or click on 'Block sender' which will delete incoming messages from e-mail addresses on your 'Block Sender List'.
- ◆ If you are shopping online, deal with reputable companies which clearly provide contact information and security assurances.
- ◆ Ask an unknown company for references and check them out before purchasing online.
- ◆ Look for a symbol on the top or bottom of your computer screen that looks like an unbroken key or a closed padlock to show that you are in a secure environment when you enter credit card information.
- ◆ If you visit 'chat rooms' or online 'discussion groups', do not volunteer personal information such as your name, phone number or address.



- ◆ If you visit the internet regularly, look into having what is called 'firewall' software installed to protect your computer against **hackers** or find out if your computer already has such security measures in place.
- ◆ Check for viruses e-mails sent with attachments by saving them to a disk first and then running your antivirus program.

Telemarketing Fraud

Although there are many legitimate telemarketing firms, every 48 hours another fraudulent company is identified. In 2000, more than 50 percent of Canadian victims were over 60 years of age and more than 60 percent of reported fraud victims were women. Legitimate telemarketing firms do not use pressure tactics or ask for cash only and will send out written material, giving ample time to make a decision.

PhoneBusters is a national call centre for reporting deceptive telemarketing. It is operated by the Ontario Provincial Police since 1993 and is accessible from across the country in both official languages. Besides educating the public,

PhoneBusters collects and disseminates victim evidence and statistics to law enforcement agencies. A new free video called **Stop Phone Fraud–IT’S A TRAP** is now available. Phone **1-888-495-8501** for your copy or to arrange a presentation for your organization.

SeniorBusters is a group of volunteers working with PhoneBusters to give information and telephone support to older adults who may have experienced telephone fraud. To report a fraud or get information you can reach **PhoneBusters** or **SeniorBusters** at **1-888-495-8501**. Or you can visit their web site at: <http://www.phonebusters.com>

Beware of...

- ◆ being told you’ve won a contest you have not entered.
- ◆ being told you have to pay a ‘small fee’ or shipping charge to claim a prize.
- ◆ promises of a valuable prize in return for a low-cost purchase.
- ◆ 1-900 numbers which carry automatic and substantial charges. Check out the number with the Better Business Bureau or PhoneBusters before calling.

- ◆ being asked for your credit card or SIN number for no valid reason.
- ◆ phone calls from a person claiming to be a bank inspector or police officer. Hang up and call your bank.

Consumer privacy has become a major concern for many Canadians with the increased use of debit cards, telephone and internet banking, point system award programs and other methods of information storage. Protect your personal information—social insurance numbers, health card numbers, account numbers, and marital status are all private information!

The best way to deal with fraud is to prevent it. Be aware. Be prepared. Be alert!

Sources:

- Partners Against Consumer Telefraud. *Don’t Fall for a Telephone Line!: Working to Reduce Telemarketing Fraud in Nova Scotia*. Brochure.
- Canadian Consumer Handbook. Ottawa: Industry Canada, 1999. Cat. No. C2-422/1999E.
- Lindsay, Colin. *A Portrait of Seniors in Canada*, 3rd ed. Ottawa: Statistics Canada, 1999. Cat. No. 89-519-XPE.
- Statistics on Phone Fraud, Phonebusters web site, retrieved May 11, 2001 from http://www.phonebusters.com/Eng/Statistics/canada_stats7_2000.html.

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Techno Terms

ABM - an **Automated Banking Machine**, also known as an automated teller machine (ATM), can carry out ordinary bank transactions such as deposits, withdrawals, transfers, account updates and bill payments. An ABM allows you to conduct these transactions 24 hours a day at your convenience.

Computer Virus - a programming code that is transmitted to your computer from an infected e-mail attachment, downloaded from an infected web site or present on a diskette. Viruses can cause operating problems with your computer and are often designed to spread automatically to other computer users. You can protect your computer from a virus by purchasing virus detection software.

Encryption - conversion or scrambling of computer information. It is used to protect your information when you conduct a sensitive transmission, such as internet banking or online shopping with a credit card.

Firewall - a security feature installed on some but not all computers that protects your information by preventing access to it from other computers when you are connected to the internet. Many networks have built-in **firewalls** to ensure privacy. If you plan to use the internet regularly from your home, check into whether you already have this feature on your computer or must install firewall software.

Hacker - a term used by some to mean 'a clever programmer' and by others, to mean 'someone who tries to break into computer systems'.

Internet - a very large computer network through which individual computers are connected to internet service providers (ISP) so they can share information. The internet is open to anyone with access to a computer that is connected to an ISP.

Internet Service Provider (ISP) - a company that provides individuals and other companies access to the internet and other related services.

Online - the condition of being connected to a computer or a telecommunications system. The term is frequently used to describe someone who is currently connected to the internet.

PIN (Personal Identification Number) - a code, containing letters, numbers or both, that allows you to access your bank accounts using an ABM, the telephone or a computer.

Spam - an unsolicited e-mail flooding the internet with many copies of the same message, in an attempt to force the message on people who would not otherwise choose to receive it.

Using Technology? Positively!

A SERIES OF FACT SHEETS

ON EVERYDAY TECHNOLOGIES AND OLDER CANADIANS

OLDER ADULTS MEAN BUSINESS!

Fact sheet #7 looks at the numbers, diversity, consumer power and economic impact of seniors.

Who are they?

In 1999, 3.7 million people or 12.3 percent of the Canadian population were over the age of 65. By 2031, 22 percent or nine million people will fall into this age category. The consumer power of older adults is growing. Although they grew up without computers, cell phones, banking machines, VCRs and tape recorders, older adults use some or all of these technologies every day. In fact, older adults are the fastest growing customer group in computer sales and Internet services.

Think about it...

The rapid growth of technology and the increasing size of the aging population are happening at the same time. Technology can enhance the daily lives of older adults by providing opportunities to maintain or increase independence. Yet,

older adults have rarely been consulted about the development of technology even though the growing market of older adults is changing the face of the economy.

As a society, we need to address issues such as cost, design and training associated with the unequal access to technology, especially where such technologies can impact upon seniors' independence or their quality of life.

The development of any technology should include the participation of the intended user in all phases, including needs assessment, initial design and evaluation. In general, older adults have been excluded from these processes in the development of new technologies, even though they are often encouraged or required to use **automated banking machines (ABMs)**, computers, **automated voice response (AVR)** answering systems, etc. One of the



greatest challenges ahead is to create and endorse inclusive standards and guidelines for industries that produce products, services and technologies for an aging society. Seniors can benefit from new technology if they have a say in its design and choice in how it is used.

Economic Facts

There are wide income differences among older adults. As a group, they are financially better off today than previous generations. The incomes of seniors have risen faster than those of any other age group since the 1980s: they are 18 percent higher in 1997 than they were in 1981 (after adjusting for inflation). These consumers may have more time to find the best value for their money. At the same time, on average, seniors have lower incomes than people in all other age groups except for the 15 to 24 year-olds. To industry, seniors present an attractive but discriminating market. For many seniors, living on a fixed income means they

must spend carefully to make ends meet and to get the most for their money.

Communicating with Companies, Banks and Government

As more aspects of daily living become dependent on technology, it is crucial that older adults are not excluded or sidelined from full participation in society. Communicating effectively with service providers is essential whether by e-mail (electronic mail), telephone, **fax machine**, or pen and paper. Canadians should speak out to companies, banks or government departments who use poorly designed technologies or services. Many organizations welcome ideas on how to improve their services and are

Older adults are not all the same!

Older adults differ more from one another than younger people differ from their peers. Each person is unique and is shaped over the years by many factors such as family history, ethnicity, culture, education, income and work experience. People in their 60s grew up and lived through very different times than people in their 80s. It makes sense that they would differ from each other in their beliefs, expectations and needs and should not be treated as a homogeneous group of customers.

more than willing to discuss an issue. Getting satisfaction often takes persistence. It may be necessary to repeat a request or complaint using different words and to share experiences with seniors' organizations.

Older adults have influence

Did you ever stop to think about the influence that older adults have in many areas? Many adults rely on the advice and counsel of their older friends and relatives when making major purchases and life decisions. Older adults are a major force in the voluntary sector. In Canada, the economic value of their volunteer activities is estimated to be between \$764 million and \$2.3 billion annually. Older adults contribute to the economy in important ways. They typically spend more on gifts and charities than younger people do.

A fact industry can't afford to overlook

Staying active, exploring new paths, earning supplementary income are all reasons why many older adults continue working and volunteering. In fact, some researchers believe that older workers will be needed in the future as fewer young

adults enter the workforce. Workplace technology will need to address normal age-related changes such as auditory loss, visual deterioration and limited mobility. Investing in technology for an aging society is a "win/win" situation because it lays the groundwork for a more inclusive, user-friendly environment for all ages. The Canadian Standards Association is currently working on a guideline, Design for Aging, that will serve as a general reference for the development of products, services and environments for an aging society. Recently released from CSA is a standard on Barrier Free Design for ABMs.

Over the next 25 years, 1 in 4 Canadians will be over 60. This should influence the design of everything around us!

Sources:

- Baldi, Renee A. *Training Older Adults to Use the Computer: Issues Related to the Workplace, Attitudes and Training*. Educational Gerontology, Vol. 23, 1997.
- Community Health Promotion Network Atlantic. *Aging: Debunking the Myths*. CHP Notes, No. 2, 1999.
- Coughlin, Joseph F. *Technology Needs of Aging Boomers*. Issues in Science and Technology Online. Fall 1999.
- Health Canada, Division of Aging and Seniors. *Communicating with Seniors: Advice, Techniques and Tips*. Ottawa: 1999.
- Lindsay, Colin. *A Portrait of Seniors in Canada*. 3rd ed. Ottawa: Statistics Canada, 1999. Cat. No. 89-519
- MacLellan, Marlene. *Attitudes, Values and Beliefs about Aging*. Nova Scotia Centre on Aging, Mount Saint Vincent University, 1998.
- National Advisory Council on Aging. *1999 and Beyond: Challenges of an Aging Canadian Society*. Ottawa: 1999.



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AVR - an **Automated Voice Response System** is an electronic telephone answering service used by many companies to direct your call to the appropriate person or department and increasingly, by medical and professional offices to book appointments. Most use a 'menu' style, in which you make your choices by pressing the buttons on your phone. This system does not work with a rotary telephone.

Cellular Phone - a wireless telephone.

Fax Machine - sends and receives printed pages or images over telephone lines by converting the printed material to and from electronic signals.

Gerontechnology - a field of study which combines the study of aging (gerontology) and the development of technology. Its main purpose is to understand better how technology impacts upon an aging society.

Internet - a very large computer network through which individual computers are connected to internet service providers (ISP) so they can share information. The internet is open to anyone with access to a computer that is connected to an ISP.