office tips

in association with Memorial University of Newfoundland

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Video-conferencing Learning to Drive

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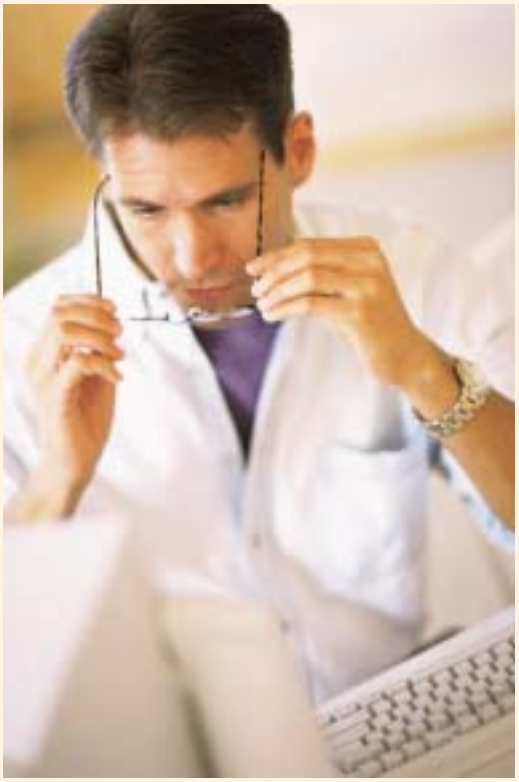
Videoconferencing has been around for 20 years, but only in the last five years has the technology advanced to being an affordable and reliable alternative to face-to-face encounters. There are still issues associated with learning how to use these technologies effectively and efficiently. Herein lies the challenge — teaching people how to use this technology properly.

Remember your first ride in an automobile? One thing was certain, someone else was driving and that person, hopefully, knew how to operate his or her automobile. Before you assumed the role of driver, you had to undergo a similar learning process. Understanding the what, why and how of videoconferencing is akin to learning how to drive. There are good drivers and poor drivers. Your ability to successfully and effectively videoconference is relative to your preparation. So, before you turn that key there are some things you need to know.



What is videoconferencing?

Videoconferencing allows individuals in different locations to interact with each other in real time via video and audio.

What equipment is involved?

There are several flavours of videoconferencing technologies, all of which include a video workstation with monitor, microphone, camera, and control pad, as well as a digital telecommunications link. Systems vary in size, functionality and complexity relative to the environment they will be used in, from desktop to boardroom, as well as the type of telecommunications network available to end-users.

What features are available?

The latest videoconferencing offerings tend to address a wide array of features that strive to meet the needs of most, if not all potential users. Features include the ability to add multimedia visuals (document cameras, VCRs, laptops), access the Internet, share and collaborate on documents, white- boarding and incorporating multiple sites (audio and video) to your videoconferences.

Video-conferencing (cont'd)

What are potential uses?
Videoconferencing is useful in any situation that requires people to "meet" but are unable to "get together" physically in the same location, examples include job interviews, training and orientation, meetings, presentations and demonstrations, launches and announcements, focus groups and brainstorming sessions. Specific applications for videoconferencing include Telehealth, Distance Learning and Government services, *i.e.,* Telejustice.

Why videoconference?
The obvious benefit in considering videoconferencing is that the process saves time and money.
Other benefits include:
- Improved communication allows for more frequent meetings, encourages wider participation, keeps key people involved and provides access to resource people and specialists;
- Streamlines decision-making, increases responsiveness and morale, obtains results quickly, facilitates consultation in emergencies;
- Leaves more time for activities at home base; and
- Provides an additional resource to your existing best business practices.

What are the types of videoconferencing?
There are two basic types of videoconference sessions: "point-to-point" and "multipoint." As the terms imply "point to point" refers to two locations as multipoint refers to greater than two locations connecting in a single video session.

Videoconferences are also defined by the telecommunications used to connect or link locations together. Dial-up videoconferencing is referred to as either Integrated Services Digital Network (ISDN) or Switch 56 kilobit per second (SW56). Dedicated videoconferencing is primarily associated with private networks called Internet Protocol (IP).

How to successfully videoconference?
Once you understand the "automobile" it is time to learn the "rules of the road". Please stay tuned for "Videoconferencing – Rules of the Road" coming in a future issue.

Post-Exposure Prophylaxis Update

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Potential exposures to Human Immunodeficiency Virus (HIV) can be very distressing, whether you or one of your office staff experiences a needle-stick injury, or one of your patients calls the morning after a condom broke. A calm mind and knowledge of the proper assessment questions and treatment approach are critical to ensure timely, effective management. Exposed persons should be evaluated within hours (rather than days) of exposure.

Potential exposure to HIV also means potential exposure to other bloodborne viruses, including hepatitis B virus (HBV) and hepatitis C virus (HCV), so risk assessment and preventative measures should also be directed at minimizing transmission of these infections as well. This *Office Tip* will provide a brief overview of the latest guidelines on the management of potential exposures to bloodborne viruses, with particular emphasis on HIV post-exposure prophylaxis (PEP). A complete copy of the PEP guidelines for occupational and non-occupational exposures can be found at *www.hivatis.org*.

Post-Exposure Prophylaxis Update (cont'd)

Management of occupational exposures to bloodborne viruses

Provide immediate care to the exposure site: Wounds should be washed immediately with soap and water, and mucous membranes should be flushed with water.

Determine exposure risk: Consider both the type of fluid and type of exposure, for example, blood and visibly bloody body fluids are associated with a higher risk of transmission versus other potentially infectious body fluids (semen, vaginal secretions, cerebrospinal, synovial, pleural, peritoneal, pericardial, and amniotic fluids). Also, percutaneous exposure is a higher risk than mucous membrane or non-intact skin exposures. Factors associated with increased risk of transmission are listed in Table 1. Table 2 describes the estimated risk of transmission based on exposure type.

Evaluate exposure source: If the identity of the source patient is known, obtain permission and test for HIV, HBV and HCV. If the source patient is tested and found to be seronegative, further assessment of the exposed person is not necessary. If the serologic status of the source patient is unknown, complete the risk assessment to

Table 1

Factors Associated with Increased Risk of HIV Transmission

Deep percutaneous injury
Injury with device that contained visible blood from source patient
Injury with device that was placed in source patient's artery or vein
Source patient has advanced disease
Source patient has advanced HIV/AIDS

Table 2

Estimated Risk of HIV Transmission Following Exposure to Known HIV-Infected Source (per episode risk)

Percutaneous injury (*i.e.*, needle-stick)	0.3-0.4%
Mucocutaneous exposure	0.09%
Non-intact skin exposure	unknown
Shared IV needle or syringe	0.67%
Receptive penile-anal sexual exposure	0.1-3%
Receptive vaginal sexual exposure	0.1-0.2%
Receptive oral sexual exposure	unknown

Table 3

Determine Need for HIV PEP

Risk Category	PEP Regimen Indicated
High risk exposure (*i.e.,* Percutaneous injury or large volume mucocutaneous exposure with blood, visibly bloody body fluid or other potentially infectious body fluids) to known HIV-infected person, or setting where HIV infection is likely.	Yes; 3-drug regimen
Low risk exposure (*i.e.,* small volume mucocutaneous exposure with blood, visibly bloody body fluid or other potentially infectious body fluids) to known HIV-infected person, or setting where HIV infection is likely.	Yes; 2-drug regimen
Any exposure to source known to be HIV negative or if unknown HIV status, setting where HIV infection is unlikely.	No PEP indicated

Table 4

Recommended PEP Regimens

Two-drug regimens	Optional third drug*
Zidovudine (AZT) + Lamivudine (3TC)	Indinavir
Stavudine (d4T) + Lamivudine (3TC)	Nelfinavir
Didanosine (ddI) + Stavudine (d4T)	Efavirenz
	Abacavir

*Any drug listed in this column may be combined with any of the two-drug regimens listed for high risk exposure PEP.

determine if PEP is indicated.

Evaluate exposed person for immune status for HBV infection: Assess the exposed person's immune status for HBV infection by asking about history of HBV vaccination and vaccine response. If he/she has received the HBV vaccination and is a known responder (*i.e.*, Anti-Hbs >10 mIU/mL), no further assessment for HBV is required. If he or she is not immunized or if immunization status is unknown, consult the guidelines for risk assessment and appropriate intervention. In most cases, any exposure to blood or body fluids should lead to initiation of the HBV vaccination series. In some cases, administration of the hepatitis B immunoglobulin is recommended for PEP. PEP is not recommended for HCV prevention due to the lack of documented effectiveness for this indication.

Give HIV PEP if the exposure poses a significant risk of infection: Refer to Table 3 to determine whether a two-drug or three-drug antiretroviral regimen is indicated. Table 4 lists some recommended PEP regimens. If PEP is indicated, it should be initiated as soon as possible (preferably within hours of the exposure) and should be continued for four weeks.

Provide counselling and perform followup testing: Counselling should include management strategies to deal with adverse effects of PEP, importance of adherence to

PEP, and advice on how to prevent secondary transmission (*i.e.*, safe sex practices). Exposed persons should be advised to seek medical attention if they experience symptoms consistent with acute retroviral syndrome (*i.e.*, flu-like symptoms) or any acute illness. Followup testing should include repeated testing for HIV, HBV and HCV.

Management of non-occupational exposures to HIV

Evidence for the use of HIV PEP is lacking in this area, therefore the current guidelines do not promote nor discourage using PEP. Some considerations in deciding whether or not to offer PEP for non-occupational exposures include:

- Evaluate the HIV status and risk-behaviour history of the reported source of the exposure.
- If the source person is known to be HIV positive or there is convincing evidence that he/she may be infected, evaluate the risk for HIV transmission.
- Consider the specifics of the risk event (*i.e.*, no condom, torn condom, whether receptive or insertive partner, injection before or after others, number of persons sharing injection equipment) and any factors that would modify the risk (*i.e.,* increased risk: vaginal or anal tears or bleeding, visible genital ulcers, evidence of other STDs; reduced risk: bleach treatment of injection equipment).
- Evaluate the frequency of HIV exposure. PEP is not a replacement for adherence to behavioural methods to reduce HIV exposure.
- Provide counseling and obtain informed consent (due to unproven efficacy of PEP).
- Consult an expert in HIV treatment to determine need for PEP and if indicated, to select an appropriate PEP regimen. CME