INTRODUCTION

Health-care professionals and patients are concerned about the risk of transmission of infectious diseases from one to the other. The scientific literature indicates that the risk of blood borne virus transmission from health-care professionals to patient is low. However, there have been cases of transmission from physician-to-patient in North America, even after efforts to adopt appropriate infection prevention and control practices in surgical and other medical settings.\(^1\)

For health-care regulators, this raises the question – what measures should be put in place to protect the patient and the health professional from the risk of acquiring infection with a blood borne pathogen?

This policy is intended to safeguard the health of both patients and physicians in relation to blood borne virus infection, and to minimize the risk of exposure to blood borne pathogens during the provision of care. The expectations in this policy are grounded in the principles of medical professionalism, best available evidence relating to blood borne pathogens, and the College’s statutory mandate to regulate the practice of medicine and the medical profession in the public interest.

The College has considered that

- certain physicians may be called upon to perform, or assist in the performance of, an exposure prone procedure on infrequent or unpredictable occasions,
- it is not possible for physicians (or any person) to continuously monitor their serological status, and
- while there are blood borne pathogens (BBPs) other than hepatitis B virus (HBV), hepatitis C virus (HCV), and/or human immunodeficiency virus (HIV), this policy is only intended to address HBV, HCV and HIV, as different principles are applicable to other BBPs.

Therefore all physicians, and medical students and residents, are expected to review and, as applicable to them, act in accordance with this policy. The word “physician” as used in this policy should be understood to include medical students and residents.

The College acknowledges that scientific research and medical treatment in relation to blood-borne pathogens continues to evolve. The College is therefore committing to a comprehensive review of the College’s policy and standards of practice in relation to blood-borne pathogens within 2 years of the effective date of this Statement, or earlier if deemed necessary by the College.

\(^1\) One published report, of two to eight cases of HBV transmission by an orthopedic surgeon in the US, who was unaware of his seropositive status, since 1994. Source: Updated CDC Recommendations for the Management of Hepatitis B Virus – Infected Health-Care Providers and Students, July 6, 2012. This is an update of the 1991 Centers for Disease Control and Prevention (CDC) recommendations on this subject.
PRINCIPLES

This policy is based on the following principles:

1. Physicians have a responsibility to consider the well-being of the patient first;

2. Physicians who perform, or assist in the performance of, exposure prone procedures have an ethical obligation to know their serological status;

3. Physicians have a right to privacy in relation to their serological status, but that right is subject to the ethical obligation to take steps to minimize the risk to patients of exposure and transmission;

4. Steps to minimize the risk of transmission to patients should be proportional to the risk, which current scientific evidence indicates is low, while taking into account the potentially very serious consequences for the patient if he or she were to be exposed to a blood borne pathogen; and

4. Physicians have a responsibility to participate in self-regulation of the medical profession, by complying with the expectations in this policy.

SCOPE OF THIS POLICY

This policy sets out

- guidelines and standards of practice that apply to seropositive physicians who perform or assist in the performance of exposure prone procedures

- guidelines and standards of practice that apply to seropositive physicians who do not perform or assist in the performance of exposure prone procedures

- guidelines and standards of practice that apply to seronegative physicians who perform or assist in the performance of exposure prone procedures

- guidelines and standards of practice applicable to all physicians

The terms “policy”, “standard of practice” and “guideline” as used in relation to this policy are defined by the College’s By-Law No. 5, as follows:

(a) “policy” means a statement of the College’s position on the expected practice or expected conduct of a medical practitioner in relation to a particular issue;

(b) “guideline” means a statement by the College of best practices and recommendations in relation to a particular issue, which may have variable applicability on a case-by-case basis, depending on individual patient circumstances, local resources and the professional judgment of the medical practitioner, and includes College advisories;

(c) “standards of practice” means principles of patient care and management that are generally accepted and recognized by the medical profession in Canada, or that are expressed in a College statement of standards of practice, and that in the case of a College statement of standards of practice may be departed from or modified by a medical practitioner only if ALL of the following conditions are met:
(i) the departure or modification is an exceptional circumstance and does not represent the norm for patient management by the medical practitioner;

(ii) the departure or modification is limited, in extent and duration, to the minimum necessary to respond to the exceptional circumstance;

(iii) the departure or modification, and the reasons for it, are documented in the patient’s chart; and

(iv) the medical practitioner has complied with any other conditions for departing from the standard set out in the applicable College statement of the standards of practice;

TERMINOLOGY

**Blood Borne Pathogens:**

For the purpose of this policy, blood borne pathogens (BBPs) refer to hepatitis B virus (HBV), hepatitis C virus (HCV), and/or human immunodeficiency virus (HIV).

**Exposure Prone Procedures:**

An exposure prone procedure is a procedure that involves one or more of the following:

1. digital palpation of a needle tip in a body cavity (a hollow space within the body or one of its organs) or the simultaneous presence of the health-care worker’s fingers and a needle or other sharp instrument or object in a blind or highly confined anatomic site (e.g., during major abdominal, cardiothoracic, vaginal and/or orthopaedic operations); or

2. repair of major traumatic injuries; or

3. manipulation, cutting or removal of any oral or perioral tissue, including tooth structures during which blood from a health-care worker has the potential to expose the patient’s open tissue to a blood borne pathogen.²

Non-inclusive illustrative examples of procedures that are classified as ‘exposure prone’ in the SHEA Guideline for Management of Healthcare Workers Who Are Infected with Hepatitis B Virus, Hepatitis C Virus, and/or Human Immunodeficiency Virus, are attached as Appendix B.

**Routine Practices:**

Routine Practices refers to a set of practices designed to protect health care-workers and patients from infection caused by a broad range of pathogens including blood borne pathogens. Formerly, the term “Universal Precautions” was used. Routine Practices is now the current term of usage and encompasses a broader scope of measures. Routine practices must be followed when caring for all patients at all times regardless of the patient’s diagnosis. Key elements of Routine Practices include:

- point of care risk assessment,

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² Centers for Disease Control and Prevention, 1998.
hand hygiene,

- use of barriers (e.g., gloves, mask, eye protection, face shield and/or gowns) as per the risk assessment,

- safe handling of sharps, and

- cleaning and disinfection of equipment and environmental surfaces between uses for each patient.

**Expert BBP Committee:**

The Expert BBP Committee is a committee struck by the College to evaluate the health information and practice of seropositive physicians for the purpose of recommending to the College and to the seropositive physician what precautions should be implemented in respect of, and restrictions, if any, that will be required on, the seropositive physician’s practice. The Expert BBP Committee will be comprised of experts in public health, infection prevention and control, and infectious diseases, and other experts (e.g. surgeons, hepatologists) as required.

**Seropositive Physician:**

For the purposes of this policy, seropositive physician means a physician who has tested positive for HBV, HCV or HIV.

**Seronegative Physician:**

For the purposes of this policy, seronegative physician means a physician who has tested negative for HBV, HCV or HIV, or who has not been tested for HBV, HCV or HIV.

**Treating Physician:**

For the purposes of this policy, treating physician refers to the physician who is managing the care of the seropositive physician with respect to their infection with a blood borne pathogen.

**POLICY**

Physicians are expected to take steps to safeguard their own health and that of their patients, and must report their own seropositive status to the College where required by this policy.

**A. Safeguarding Health**

The College requires, as a standard of practice, that all physicians (seropositive and seronegative) adhere to Routine Practices, and if seropositive to also take other measures as advised by their treating physician and as required under this policy.¹

a) Routine Practices

As a standard of practice, all physicians must adhere to Routine Practices in accordance with Appendix C. This standard of practice applies equally to seropositive physicians and seronegative physicians.

¹ This includes measures required by hospitals and other health-care institutions at which physicians work.
b) HBV Vaccination

As a guideline, it is strongly recommended that all practising physicians be immunized against HBV, unless a contraindication exists, or there is evidence of prior immunity. This is for the protection of both physicians and their patients.  

Physicians who do not respond to the vaccine are advised to seek expert advice on alternative measures to be taken to prevent infection with HBV.

c) Additional Measures for Seropositive Physicians

As a guideline, it is expected that a seropositive physician, who does not perform or assist in the performance of exposure prone procedures, should

- be under the care of a treating physician who has expertise in the management of the specific infection (e.g., infectious diseases expert, hepatologist), and
- follow the advice of his or her treating physician.

As a standard of practice, a seropositive physician who wishes to perform or assist in the performance of exposure prone procedures

- must be under the care of a treating physician who has expertise in the management of the specific infection (e.g., infectious diseases expert, hepatologist), and
- must follow the recommendations of the Expert BBP Committee, by voluntary agreement or as determined by the Quality Assurance Committee. See Section C and Appendix A of this policy for the standard of practice for reporting seropositive status to the College and for the process followed by the College in the case of such a report.

B. Knowing Serological Status

As a guideline, all physicians have an ethical obligation to know their serological status for blood borne pathogens.

As a guideline, all physicians performing or assisting in the performance of exposure prone procedures have an ethical obligation to know their serological status for blood borne pathogens, and to be tested as recommended by a physician familiar with the treatment of BBPs if they have engaged in personal at-risk behaviours or have had potential exposure to a BBP.

As a standard of practice, physicians performing or assisting in the performance of exposure prone procedures, after exposure to bodily fluids of unknown blood borne pathogen status, must seek and follow appropriate expert advice, and if advised to do so, are expected to be tested for blood borne pathogens.

As a standard of practice, seropositive physicians performing or assisting in the performance of exposure-prone procedures are expected to have testing, as recommended by the Expert Blood Borne Pathogen Committee and determined by the Quality Assurance Committee.

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4 Current evidence suggests that the risk of HBV infection is reduced through vaccination of health-care workers: Canadian Medical Protective Association, “The Physician with Blood-Borne Viral Infection: What are the Risks to Patients and What is an Appropriate Approach to the Physicians?”, August 2010, at 20.
Testing for BBPs

The frequency with which physicians must or should be tested for blood borne pathogens will vary, depending on the applicable circumstances. Expectations for specific circumstances are set out below.

- **Regular Testing if at risk**

As a guideline, all physicians performing or assisting in the performance of exposure prone procedures have an ethical obligation to know their serological status for blood borne pathogens, and to be tested for blood borne pathogens (HBV, HCV and HIV) as recommended by a physician familiar with the treatment of BBPs if they have engaged in personal at-risk behaviours or have had potential exposure to a BBP.

- **Beginning Exposure Prone Procedures**

As a guideline, all physicians who will or may begin performing or assisting in the performance of exposure prone procedures as a new part of their practice\(^5\) have an ethical obligation, to know their serological status for blood borne pathogens, and to be tested for blood borne pathogens (HBV, HCV and HIV) as recommended by a physician familiar with the treatment of BBPs if they have engaged in personal at-risk behaviours or have had potential exposure to a BBP, before they commence this new area of practice.

- **Testing Post-Exposure**

As a standard of practice, all physicians who perform or assist in the performance of exposure prone procedures and who have been exposed to bodily fluids of unknown blood borne pathogen status through a specific incident, such as a needle prick or splash, must seek appropriate expert advice regarding the frequency of testing that is required to determine if they have been infected with one or more blood borne pathogens, and must undergo that testing.

- **Testing for Seropositive Physicians**

As a guideline, it is expected that seropositive physicians, who do not perform or assist in the performance of exposure prone procedures and who will refrain from doing so, should still undergo such regular testing as is advised by their treating physician, for the purposes of monitoring their health, including their viral loads.

As a standard of practice, seropositive physicians performing or assisting in the performance of exposure prone procedures, or who may be called upon to perform or assist in the performance of exposure prone procedures, must undergo such regular testing as is advised by their treating physician, for the purposes of monitoring their health, including their viral loads and minimizing risk of transmission to their patients.

As a standard of practice, seropositive physicians performing or assisting in the performance of exposure prone procedures, or who may be called upon to perform or assist in the performance of exposure prone procedures, must undergo, as applicable

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\(^{5}\) This applies to physicians who will or may begin performing or assisting in performing exposure prone procedures as part of their educational training, as a result of a change in scope of practice, and/or as a result of re-entering practice.
in accordance with this policy, such regular testing as is recommended by the Expert BBP Committee and determined by the Quality Assurance Committee, for the purposes of monitoring their health, including their viral loads and minimizing risk of transmission to their patients.

C. Reporting Serological Status

As a standard of practice, seropositive physicians performing or assisting in the performance of exposure prone procedures, or considering entry into a practice that will or may require them to perform or assist in the performance of exposure prone procedures, must make a report to the BBP subcommittee of the Quality Assurance Committee as soon as is reasonably practical after learning of their seropositive status.

See Appendix A of this policy for the process followed by the College in the case of such a report.

Acknowledgement

The College acknowledges that this policy has been adapted, in many parts with no changes, from the policy of the College of Physicians and Surgeons of Ontario (CPSO) on Blood Borne Pathogens. The College recognizes, with thanks, the contribution of the CPSO to the development of professional standards and guidance on this issue.
Appendices

APPENDIX A: College Practices: Blood Borne Pathogens

This document describes the College’s practices with respect to reporting by seropositive physicians who perform, or assist in the performance, of exposure prone procedures. All references to “reporting seropositive physician” or “reporting physician” below mean a seropositive physician who performs, or assists in the performance, of exposure prone procedures.

Confidentiality and Privacy

The College respects the confidentiality and privacy of all information it receives or creates in the course of fulfilling its regulatory functions. This includes information about blood borne pathogens and physician health.

The identity of reporting seropositive physicians will be only known to the BBP subcommittee of the Quality Assurance Committee, comprised of the College’s Director of Quality Assurance and the Chair of the Quality Assurance Committee, except for those exceptions provided for in the College’s Privacy Code or in the circumstances specified below. The College’s Director of Quality Assurance and the Chair of the Quality Assurance Committee will be responsible to ensure that all information provided to the Expert BBP Committee has redacted from it the name of the reporting seropositive physician.

The College also ensures that information about reporting physicians’ serological status and any related information such as practice evaluations and practice restrictions are kept in a secure manner.

Reporting Seropositive Physicians: Evaluation of Practice

When a seropositive physician wishes to continue performing or assisting in exposure prone procedures, the physician must report to the BBP subcommittee of the Quality Assurance Committee, so that the Expert BBP Committee can evaluate the physician’s practice and health information to determine what precautions and restrictions, if any, are required to safeguard patient health. The initial report will be made in writing, addressed to the attention of the College’s Director of Quality Assurance, and marked “Private & Confidential”.

The Expert BBP Committee will be appointed by the Council of the College, and will be comprised of experts in public health, infection prevention and control, and infectious diseases, and other experts (e.g. surgeons, hepatologists) as required.

The reporting physician and his/her Treating Physician will be expected to provide relevant information about the reporting physician’s health and practice. This information will be provided to the Expert BBP Committee.

The College will take steps⁶ to gather any other relevant information about the reporting physician’s health and practice. This information will be provided to the Expert BBP Committee.

⁶ As authorized by the College’s legal authority
As part of this process, the reporting physician has an opportunity to make representations and to provide his or her own experts’ opinion if available, and if different from that of the Expert BBP Committee.

Any practice recommendations or, where necessary, practice restrictions, will be determined by the Quality Assurance Committee, on a non-nominal basis to preserve the reporting physician’s anonymity, based on the recommendations of the Expert BBP Committee and the submissions of the reporting physician. The Quality Assurance Committee’s determinations will take into account the recommendations of the Expert BBP Committee and the SHEA Guidelines. Restricting physicians from doing exposure prone procedures is resorted to when other options are not sufficient to safeguard patient health.

The recommendations of the Expert BBP Committee and determinations of the Quality Assurance Committee will be communicated to the reporting physician through the College’s Director of Quality Assurance and/or the Chair of the Quality Assurance Committee.

If it is determined that restrictions on a reporting physician’s practice are necessary, the following principles will determine the extent of notification of those restrictions to others:

- the Quality Assurance Committee will determine what details of the restrictions should be shared with the institution(s) at which the reporting physician works;
- whether broader notification of the practice restrictions is required will depend on the circumstances of each case;
- when evaluating the notifications that may be required, the College will strive to protect the reporting physician’s privacy to the greatest extent possible, subject to the overarching object of safeguarding patient health;
- to the greatest extent possible, the reporting physician will be given the opportunity to communicate himself or herself to the institution at which he or she works, and to others that the Quality Assurance Committee determines should be notified, that he or she will be restricting his or her practice, instead of direct notification by the College;
- the reporting physician shall provide the Quality Assurance Committee with any information necessary to confirm compliance with notifications, recommendations and restrictions, including confirmation from the workplace.

Other circumstances where information obtained under this policy (including the identity of a reporting physician) may be disclosed include:

1. To the Quality Assurance Committee, if the Chair of the Quality Assurance Committee believes that the reporting physician is not following the recommendations of the Expert BBP Committee, and thereby poses a risk to patients;
2. To the Complaints Authorization Committee, by the Quality Assurance Committee in the circumstances contemplated by subsection 71(4) or 73(1) of the Medical Act, 2011;
3. When required by law, including by regulation.
If the Chair of the Quality Assurance Committee believes that the reporting physician is not following the recommendations of the Expert BBP Committee or the determinations of Quality Assurance Committee, and thereby poses a risk to patients, the Chair of the Quality Assurance Committee will inform the Quality Assurance Committee, of the information which forms the basis for that belief. If the Quality Assurance Committee believes further action is required, the identity of the reporting physician may be disclosed to the Quality Assurance Committee. The Committee may then take such action as it is authorized to take under the Medical Act, 2011 and the regulations made thereunder, and subject to providing the opportunity to the reporting physician to make submissions personally and/or through legal counsel to the Quality Assurance Committee.
APPENDIX B: SHEA Guideline for Management of Healthcare Workers who are Infected with Hepatitis B Virus, Hepatitis C Virus, and/or Human Immunodeficiency Virus

Examples of Procedures Classified as Exposure Prone

The following procedures have been identified in the SHEA Guideline as those for which there is a definite risk of blood borne virus transmission (Category III Procedures).

They are adopted by the College as non-inclusive illustrative examples of procedures that are classified as ‘exposure prone’ for the purposes of the Blood Borne Pathogens policy.

Although many of the general surgical procedures can be performed laparoscopically and therefore not considered to be exposure-prone procedures, these procedures are listed as they may require open surgical intervention.

- General surgery, including nephrectomy, small bowel resection, cholecystectomy, subtotal thyroidectomy, other elective open abdominal surgery;
- General oral surgery, including surgical extractions, hard and soft tissue biopsy (if more extensive and/or having difficult access for suturing), apicoectomy, root amputation, gingivectomy, periodontal curettage, mucogingival and osseous surgery, alveoplasty or alveoectomy, and endosseous implant surgery;
- Cardiothoracic surgery, including valve replacement, coronary artery bypass grafting, other bypass surgery, heart transplantation, repair of congenital heart defects, thymectomy, and open-lung biopsy;
- Open extensive head and neck surgery involving bones, including oncological procedures;
- Neurosurgery, including craniotomy, other intracranial procedures, and open-spine surgery;
- Non-elective procedures performed in the emergency department, including open resuscitation efforts, deep suturing to arrest hemorrhage, and internal cardiac massage;
- Obstetrical/gynecological surgery, including caesarean delivery, hysterectomy, forceps delivery, episiotomy, cone biopsy, and ovarian cyst removal, and other transvaginal obstetrical and gynecological procedures involving hand-guided sharps;
- Orthopedic procedures, including total knee arthroplasty, total hip arthroplasty, major joint replacement surgery, open spine surgery, and open pelvic surgery;
- Extensive plastic surgery, including extensive cosmetic procedures (e.g., abdominoplasty and thoracoplasty);
- Transplantation surgery (except skin and corneal transplantation);
- Trauma surgery, including open head injuries, facial and jaw fracture reductions, extensive soft-tissue trauma, and ophthalmic trauma;
• Interactions with patients in situations during which the risk of the patient biting the physician is significant; for example, interactions with violent patients or patients experiencing an epileptic seizure;

• Any open surgical procedure with a duration of more than three hours, probably necessitating glove change.
APPENDIX C: Routine Practices

Preamble

The term “Routine Practices” (RP) refers to a set of practices designed to protect health-care workers (HCW) and patients from infection caused by a broad range of pathogens including blood borne viruses. These practices must be followed when caring for all patients at all times regardless of the patient’s diagnosis. Although RP are targeted to prevent transmission of microbes from patient to patient and HCW to HCW as well as between HCW and patient, the focus of this discussion is the transmission of microbes from HCW to patient and/or patient to HCW, in particular as related to the blood borne viruses hepatitis B (HBV), hepatitis C (HCV) and human immunodeficiency virus (HIV).

RP begin with a point of care risk assessment to consider the potential for microbial transmission during the upcoming process of care. This risk assessment is routinely followed by hand hygiene and donning of the appropriate barrier equipment prior to examining the patient. RP also include care in the use and disposal of needles and other sharp instruments, documented immunity/immunization against HBV as appropriate, and proper reprocessing of medical equipment. HCWs performing exposure prone procedures* are at an increased risk of infection with blood borne pathogens and must be knowledgeable about and diligently adhere to RP. The key elements of RP are discussed briefly below, and a glossary of terms appropriate to this document follows. For more information please check the appropriate reference(s).

Point of Care Risk Assessment

- The risk of exposure to blood, body fluids* and non-intact skin* should be considered by assessing the nature of the upcoming process of care, the patient, the HCW and the health care environment.

- Strategies (e.g., choice of barrier precautions) should be identified and implemented to decrease exposure risk and prevent the transmission of microorganisms.

Hand Hygiene

- Hand hygiene is the single most important measure to prevent the spread of infection.

- Hand hygiene refers to both washing with soap and water or the use of alcohol-based hand rubs (ABHR).

- Use of ABHR (70-90% alcohol) is the preferred method of cleaning hands when hands are not visibly soiled. Hand washing with soap and water must be performed when hands are visibly soiled.

- Hand hygiene must be performed,
  - Before initial patient/patient environment contact,  
  - Before performing an aseptic procedure,
  - After blood/body fluid exposure after gloves have been removed, and
  - After patient/patient environment contact,
To prevent cross-contamination of different body sites, it may be necessary to perform hand hygiene between procedures on the same person.

**Gloves**

- Medical grade gloves (clean, non-sterile gloves are adequate for routine care) should be worn when contact with blood/body fluids, secretions, excretions, mucous membranes*, non-intact skin and/or potentially contaminated items is anticipated.

- Gloves should be changed or removed after touching a patient’s contaminated body site and prior to touching the patient’s clean body site or the environment.

- Gloves should be removed promptly after use, followed by immediate hand hygiene.

**Mask, Eye Protection, Face Shield and Gowns**

- Masks, eye protection (safety glasses, goggles or face shield) and/or gowns as appropriate to the type of contact anticipated should be worn in order to protect mucous membranes and/or clothing during clinical procedures, care activities or handling used medical equipment if splashes or sprays of blood, body fluids, secretions, or excretions might be generated.

**Handling Sharps**

- Sharps should be handled as minimally as possible.

- Needles should not be re-capped.

- Used needles and other sharps should be discarded in a specially designed sharps container.

**Cleaning and Disinfection of Equipment and Environmental Surfaces**

- All used medical equipment must be cleaned and then disinfected or sterilized as appropriate prior to use on another patient.

- Equipment that enters sterile tissues, including the vascular system is referred to as a critical device and must be sterilized after cleaning.

- Equipment that comes in contact with non-intact skin or mucous membranes but does not penetrate them is referred to as a semi-critical device and requires high level disinfection after cleaning.

- Equipment that touches only intact skin and not mucous membranes, or does not directly touch the patient is referred to as a non-critical device and requires low level disinfection after cleaning.

- Single-use items should be discarded.
GLOSSARY

*Body fluids: blood, vomit, stool, semen, vaginal fluid, urine, CSF, peritoneal fluids, pleural fluids, regardless of whether or not they contain visible blood; and droplets from coughing or sneezing, if they contain visible blood or if there is other reason to be concerned that they may be contaminated (sweat is not considered to be a “body fluid” for the purposes of “Routine Practices”).

*Exposure Prone Procedures are defined as follows:

1) Digital palpation of a needle tip in a body cavity (a hollow space within the body or one of its organs) or the simultaneous presence of the health-care worker’s fingers and a needle or other sharp instrument or object in a blind or highly confined anatomic site e.g., during major abdominal, cardiothoracic, vaginal and/or orthopaedic operations, or

2) Repair of traumatic injuries, or

3) Manipulation, cutting or removal of any oral or perioral tissue, including both tooth structures, during which blood from a health-care worker has the potential to expose the patient’s open tissue to a blood borne pathogen.

*Mucous membranes: lining of the eyes, nose and mouth.

*Non-intact skin: open lesions, and dermatitis.