HERPES SIMPLEX SURVEILLANCE PROTOCOL FOR ONTARIO HOSPITALS

Developed by the Ontario Hospital Association and
the Ontario Medical Association
Joint Communicable Diseases Surveillance Protocols Committee

Approved by
The OHA and the OMA Board of Directors
The Ministry of Health and Long-Term Care –
The Minister of Health and Long-Term Care

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This protocol was developed jointly by the Ontario Hospital Association and the Ontario Medical Association to meet the requirements of the *Public Hospitals Act 1990,* Revised Statutes of Ontario, Regulation 965. This regulation requires each hospital to have by-laws that establish and provide for the operation of a health surveillance program including a communicable disease surveillance program in respect of all persons carrying on activities in the hospital. The communicable disease program is to include the tests and examinations set out in any applicable communicable disease surveillance protocol. The regulation states that the communicable disease surveillance protocols that hospitals must adopt are those "published jointly by the Ontario Hospital Association (OHA) and the Ontario Medical Association (OMA) and approved by the Minister (of Health and Long-Term Care)."

This Protocol has been reviewed since the previous version; changes have been highlighted in yellow for easy identification. Protocols are reviewed on a regular basis, every two years or as required.

The protocol reflects clinical knowledge, current data and experience, and a desire to ensure maximum cost effectiveness of programs, while protecting health care workers and patients. It is intended as a minimum standard that is practical to apply in most Ontario hospital settings. It does not preclude hospitals from adopting additional strategies that may be indicated by local conditions.

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Rationale for Herpes Simplex Surveillance Protocol

Herpes simplex virus (HSV) is an extremely common cause of infection worldwide, with 50-90% of adults having antibodies.[1] Direct contact with lesions or infected secretions is the primary mode of transmission of HSV.

Primary infection with HSV infection results from the first exposure to the virus. Orolabial infection may be mild or inapparent, or result in overt disease with fever, malaise lasting a week or more and vesicular lesions in the mouth and/or pharynx. After primary infection, the virus becomes latent, and may reactivate as localized blisters, commonly referred to as “cold sores” or “fever blisters”, which usually appear at the border between the mucous membranes of the mouth and the skin. Genital infections, skin lesions, eye infections, generalized systemic infections and central nervous system infections may also occur with primary infection and reactivation.

Primary or recurrent lesions, and secretions such as saliva and genital secretions, contain the virus. Virus may be present in saliva or genital secretions in the absence of symptomatic or clinically apparent lesions.[2]

Health care workers (HCWs) are at risk of acquiring HSV infection if exposed hands contact infected secretions or mucous membranes/skin of an asymptomatic or symptomatic patients shedding the virus.[3,4] Infections acquired by this route typically result in herpetic whitlow, painful recurring vesicular lesions on the nail or finger area, although other herpes infections may also occur .[5] Dentists and dental teams,[6-8] anaesthesiologists,[9] respiratory therapists, obstetricians, and critical care nurses[5,7,10] are at particular risk. Routine Practices, including wearing gloves,[11,12] reduce this risk.

Patients are also at risk of acquiring HSV from infected HCWs. For some high risk patients (e.g. newborns, patients with extensive skin damage such as burns and chronic eczema, patients who are immunocompromised) infection may result in severe, life-threatening, systemic disease. Virus can be transferred from the oral area to the hands of the HCW, and then transmitted by HCW hands on contact with the patient. Although rare, transmission from HCWs to newborns has been documented.[13-15]

Because HSV may be present in saliva before or without the appearance of lesions, continuing education must emphasize the mode of transmission, the importance of hand hygiene and use of Routine Practices when in direct patient contact to prevent transmission both from patients to HCWs and from HCWs to patients.

This protocol is only one component of an infection prevention and control program; HCWs must consistently adhere to Routine Practices.

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I. Purpose

The purpose of this protocol is to provide direction to hospitals to prevent the transmission of herpes simplex virus among health care workers (HCWs) and patients.

II. Applicability

This protocol applies to **all persons carrying on activities in the hospital**, including but not limited to employees, physicians, nurses, contract workers, students, post-graduate medical trainees, researchers and volunteers. The term HCW is used in this protocol to describe these individuals. This protocol does not apply to patients or residents of the facility or to visitors.

When training students or hiring contract workers, the hospital must inform the school/supplying agency that the school/agency is responsible for ensuring that their student/contractors are managed according to this protocol.

This protocol is for the use of the Occupational Health Service (OHS) in hospitals. It is expected that OHS collaborate with Infection Prevention and Control (IPAC) and other departments, as applicable.

III. Pre-placement

Screening for HSV in persons carrying on activities in the hospital is neither required nor recommended. HCWs must be informed of the requirement to notify the OHS of acute primary herpes simplex infection, and recurrent orofacial infection or herpetic whitlow.

IV. Continuing Surveillance

No routine screening for HSV in persons carrying on activities in the hospital is needed or recommended.

V. Exposure

Exposure has occurred if unprotected hands have come into contact with infected secretions or mucous membranes/skin of asymptomatic or symptomatic patients shedding the virus. [3,4]

VI. Acute Disease

HSV infections are evident as:

- oral infections (inside the mouth),
- orofacial infections (inside the mouth and on the outside of the lips, face),
- herpetic whitlow (herpes simplex infection of the fingers),
- genital infections, and
- herpes corporis (herpes simplex infection on parts of the body other than hands, face or genitals).

Persons carrying on activities in the hospital who have direct patient contact and who develop acute infections of the first three types below (oral, orofacial, herpetic whitlow) have a responsibility to inform the OHS as soon as they notice symptoms. Work restrictions or modifications vary with the type of herpes simplex infection and the type of patients with whom the person has contact. HCWs excluded from direct patient contact because of HSV infection may safely be assigned to duties that involve no patient contact.

Work Restrictions

Acute Primary Oropharyngeal Infection:

- No patient contact until symptoms have resolved.

Oral/Orofacial Infection:

- HCWs working with high-risk patients (see Glossary) may continue to work as long as they **maintain meticulous hand hygiene, and cover the lesions (e.g., wear a surgical mask or dressing)** to discourage hand-to-lesion contact. The HCW should **wear gloves for direct hands-on contact with high risk patients.** Perform hand hygiene after removing gloves, as per Routine Practices.
- HCWs who do not work with high-risk patients may continue to work with no special precautions, as long as they maintain meticulous hand hygiene.

Herpetic Whitlow:

- HCWs with HSV infection of the fingers must be restricted from all direct patient contact until lesions are healed.[11] There is no evidence that wearing gloves will provide adequate protection for the patient,

and prolonged wearing of gloves would likely aggravate the existing infection.

Genital Herpes / Herpes Corporis

- HCWs with genital HSV infection or herpes corporis do not have to inform OHS of these conditions. There should be no risk to patients as long as good hygiene is maintained, including meticulous hand hygiene, and lesions are covered.

VII. Reporting

Herpes simplex infections are not reportable to the Medical Officer of Health.

In accordance with the Occupational Health and Safety Act and its regulations, an employer must provide written notice within 4 days of being advised that a worker has an occupational illness, including an occupationally-acquired infection,
and/or a Workplace Safety and Insurance Board (WSIB) claim has been filed by or on behalf of the worker with respect to an occupational illness, including an occupational infection, to the:

- Ministry of Labour,
- Joint Health and Safety Committee (or health and safety representative), and
- trade union, if any.

Occupationally-acquired infections and illnesses are reportable to the WSIB.

VIII. Outbreak

Not applicable in this protocol.

IX. Glossary

Direct Patient Contact

Direct patient contact involves skin-to-skin contact of the type that occurs in patient care activities that require direct, personal “hands-on” care (e.g., bathing, washing, turning patient, changing clothes, continence care, dressing changes, care of open wounds/lesions, toileting).[12]

High Risk Patients

High-risk patients include newborns, patients with extensive skin damage such as burns and chronic eczema, and patients who are immunocompromised.

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