Interior Health
INFECTION PREVENTION & CONTROL

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# Definition & Management of Immunocompromised Patients

## Definition of an Immunocompromised Patient

The Interior Health Authority All Care Areas - Transmission Tables identifies specific requirements for immunocompromised patients in several of the diseases and conditions. These patients may require an extended duration for Additional Precautions because of reduced immune response in clearing certain infections, prolonged shedding of a microorganism, greater risk of developing or reactivating certain infections or an atypical presentation of a communicable illness. Patients with at least one of the following criteria are considered to be clinically immunocompromised and require special consideration as outlined in the diseases and conditions descriptions in the All Care Areas - Transmission Tables.

- Hematopoietic stem cell transplant patients in the first 24 months after transplant
- Patients with neutrophil count < 0.5 x $10^9$/ L for duration ≥ 48 hours
- Patients receiving corticosteroid therapy equivalent to prednisone ≥ 20mg/day for duration of≥two weeks
- HIV positive patients with CD4< 200 x $10^6$/ L
- Patients with inflammatory bowel disease, rheumatologic conditions, multiple sclerosis, or solid organ recipients receiving immunosuppressive therapy, such as, infliximab, etanercept, and methotrexate
- Oncology patients receiving chemotherapy
- Oncology patients receiving active radiation other than internal radiation (e.g., brachytherapy) or radiation therapy limited to very small, focused areas (e.g. for localized skin cancers)
- Patients with extensive loss of skin/mucous membrane barrier defenses e.g., graft versus host disease, Steven-Johnson syndrome, scalded skin syndrome, major burns
- Patients with congenital or acquired hypogammaglobinemia or agammaglobulinemia, severe combined immunodeficiency or other congenital immune deficiency syndrome
- Hematopoietic stem cell transplant patients

Other conditions causing immunocompromised patient status may be identified or require consultation with Infection Prevention and Control (IPAC) staff.

Interior Health would like to recognize and acknowledge the traditional, ancestral, and unceded territories of the Dǎkelh Dené, Ktunaxa, Nlaka'pamux, Secwépemc, St'át'imc, syilx, and Tŝilhqot'in Nations where we live, learn, collaborate and work together.

# Management of Immunocompromised Patients

Accommodation in a single room with washroom is preferred for all patients considered to be clinically immunocompromised. Routine Practices are the standard of care when working with immunocompromised patients. If an immunocompromised patient is suspected or known to have a communicable illness, implement the appropriate Additional Precautions in addition to Routine Practices.

For specialized units that predominantly care for clinically immunocompromised patients, it is required to exclude:

- Plants and flowers (fresh, dried, and artificial)
- Pet therapy and pet visitation

Special attention to minimize dust accumulation and dispersal is advisable (e.g., no fans, no clutter, routine cleaning and disinfection practices).

For immunocompromised patients who are not on these specialized units, please consult with IPAC staff to determine if these exclusions are applicable for the individual patient.

A protective environment room is the preferred accommodation only for hematopoietic stem cell transplant recipients. This is a specially engineered patient room with hepafiltered supply air and positive pressure airflow designed to minimize fungal spore counts in the air. In absence of a protective environment, a single room is recommended for hematopoietic stem cell transplant recipients.

**"Reverse isolation" is an outdated term and practice without evidence of benefit for hospitalized immunocompromised patients and such measures are not recommended.**

# References

1. Guidelines for Preventing Infections Complications Among Hematopoietic Cell Transplantation Recipients: A Global Perspective" (Endorsed by IDSA) Biol Blood Marrow Transplant; 2009; 15:1143- 1238. https://pubmed.ncbi.nlm.nih.gov/19747629/
2. Guidelines for Preventing Opportunistic Infections Among HIV-Infected Persons --- 2002. MMWR Reports and Recommendations. MMWR Recommendations and Reports. 51(RR08)1-46. http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5108a1.htm
3. Guidelines for Environmental Infection Control in Health-Care Facilities. Recommendations of CDC and the Healthcare Infection Control Practices Advisory Committee (HICPAC). MMWR Recommendations and Reports. 52(RR10)1-42 http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5210a1.htm
4. 2007 Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings. Table 5. Components of a Protective Environment. Adapted from MMWR 2003:52(RR10) http://www.cdc.gov/hicpac/2007IP/2007ip_table5.html
5. Clinical Practice Guideline for the Use of Antimicrobial Agents in Neutropenic Patients with Cancer: 2010 Update by the Infectious Diseases Society of America. Alison G. Freifeld, et al. Clinical Infectious Diseases 2011;52(4):e56–e93. http://cid.oxfordjournals.org/content/52/4/e56.full.pdf+html
6. American Cancer Society, Infections in People with Cancer, Last Medical Review: 2/16/2015 Last Revised: 2/25/2015 https://www.cancer.org/cancer/managing-cancer/side-effects/infections.html

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