
**SEASONAL INFLUENZA, H1N1 INFLUENZA, AND PNEUMOCOCCAL VACCINATION:
ADDITIONAL INFORMATION REGARDING ADULT AND PEDIATRIC PATIENTS
UNDERGOING BMT (Blood and Marrow Transplant)**

Seasonal Influenza and Novel H1N1 Vaccinations

- Administration of inactivated annual seasonal influenza vaccine and inactivated 2009 novel H1N1 monovalent vaccine is strongly recommended for most oncology patients (except for severely immunocompromised), as well as for family members, caregivers and hospital/clinic staff in contact with patients.
- At the present time, highest priority for vaccination is being given to patients currently followed by the BMT clinic.
- Patients with hematologic malignancies undergoing BMT are at a significant risk for infections prior to immune regeneration, which may take more than 2 years post-transplant, depending on treatment regimens, complications, and co-morbidities.
- The same vaccination schedules are recommended for patients undergoing allogeneic and autologous transplants. Little data exists at this time regarding umbilical cord blood transplants, therefore the same vaccination schedules are also recommended for these patients.
- Inactivated influenza vaccines should be administered at least 10-14 days prior to harvest (allogeneic donor or autologous recipient) or transplant conditioning (allogeneic recipient).
- After transplant, the influenza vaccines **should not be administered before 4 months** post-BMT and should be administered annually to all BMT recipients who are at least 4 months post-BMT. For children receiving influenza vaccine for the first time in their life, two doses should be given (~1 month apart).
- It is particularly important that family members, caregivers, and hospital/clinic staff in contact with candidates or recipients of BMT be vaccinated. In many cases, this may be more important than vaccinating the patients themselves, as patients may be less likely to respond to the vaccines.
- Patients with hematological malignancies not treated with BMT should be judged individually based on the lymphotoxicity of their chemotherapy.

Pneumococcal Vaccination

- Pneumococcal vaccination should be given to all adult oncology patients who may be immunosuppressed as a result of treatment, including patients undergoing BMT. This appears to be especially important during the 2009 H1N1 pandemic, as preliminary evidence suggests that pneumococcal pneumonia appears to be over-represented among H1N1 fatalities.
- Adult patients undergoing BMT should receive 3-4 doses of the pneumococcal conjugate vaccine (~1 month apart) starting 3-6 months post-transplant. When the recipient is at high risk of chronic GVHD, vaccine response may be improved by donor vaccination.

These recommendations were developed by AHS Cancer Care, in collaboration with key provincial Oncology experts.