

# Recommended Vaccines for Patients 50 Years of Age and Older

In general, adult Canadians are underimmunized for routine vaccine-preventable diseases. Primary responsibility for adult immunization falls to family doctors and other primary care providers. To streamline current recommendations for average Canadians, the following table is provided as a tool for everyday use. For more information, visit the *Canadian Immunization Guide* at <http://www.phac-aspc.gc.ca/publicat/cig-gci/index-eng.php>.

VACCINE	RECOMMENDATION	COMMENTS
1. Tetanus	<ul style="list-style-type: none"> <li>1 booster dose of Td every 10 years</li> </ul>	
2. Pertussis	<ul style="list-style-type: none"> <li>1 lifetime dose of Tdap as an adult</li> </ul>	<ul style="list-style-type: none"> <li>can be given at any interval after Td when indicated</li> </ul>
3. Influenza	<ul style="list-style-type: none"> <li>1 dose yearly</li> </ul>	<ul style="list-style-type: none"> <li>all adults</li> <li>focus on high-risk individuals</li> <li>those at risk of spreading disease</li> <li>essential service providers</li> </ul>
4. Pneumococcal	Conjugate (PCV13) <ul style="list-style-type: none"> <li>3 doses for adults with hematopoietic stem cell transplant starting 3-9 months after transplant, administered at least 4 weeks apart, followed by a booster dose of PPV23 12-18 months post-transplant (6-12 months after the last dose of PCV13)</li> <li>adults with HIV, immunosuppressive conditions, splenectomy or on immunosuppressive therapies should receive 1 dose of PCV13 followed by 1 dose of PPV23 8 weeks later</li> </ul>	<ul style="list-style-type: none"> <li>PCV13 should be administered at least one year after any previous dose of PPV23</li> </ul>
	Polysaccharide (PPV23) <ul style="list-style-type: none"> <li>1 dose at age 65 and older</li> <li>adults (at any age) who have asthma, regardless of whether they are on high-dose steroids or have chronic obstructive pulmonary disease</li> <li>adults (at any age) with medical comorbidities making them higher risk for invasive pneumococcal disease (IPD)</li> </ul>	<ul style="list-style-type: none"> <li>revaccination with one booster of PPV23 only for adults (at any age) at highest risk of IPD, i.e. immunosuppressed, asplenia, HIV or significant chronic kidney disease</li> <li>high-risk individuals requiring an additional dose of PPV23 should receive the dose 5 years after the most recent dose of PPV23 and no sooner than 8 weeks after PCV13</li> </ul>
5. Herpes Zoster	<ul style="list-style-type: none"> <li>1 dose age 60 and older</li> <li>may be given to patients aged 50-59</li> </ul>	<ul style="list-style-type: none"> <li>live virus vaccine (see over)</li> <li>past diagnosis of shingles not a contraindication to immunization</li> <li>NACI does not recommend booster doses at this time</li> <li>in patients with history of shingles, experts suggest vaccination at least 1 year after HZ episode</li> </ul>
6. Hepatitis B	<ul style="list-style-type: none"> <li>3 doses</li> <li>generally 0, 1, 6 months</li> </ul>	<ul style="list-style-type: none"> <li>may be administered with Hepatitis A vaccine in patients requiring both</li> <li>for travelers and families with international adoptions</li> <li>adults at increased risk of exposure, including chronic liver/kidney disease, hemophiliacs, and lifestyle risks (history of sexually transmitted infections, using illicit drugs and engaging in high-risk sexual practices)</li> <li>no previous immunity</li> <li>anyone wishing to decrease risk of HB infection</li> </ul>
7. Hepatitis A	<ul style="list-style-type: none"> <li>2 doses generally 0, 6 months if given alone</li> <li>3 doses generally 0, 1, 6 months if administered with hepatitis B</li> </ul>	<ul style="list-style-type: none"> <li>mortality from disease increases with age</li> <li>for travelers and families with international adoptions</li> <li>adults at increased risk of infection, including chronic liver disease, haemophilia A or B receiving plasma-derived replacement clotting factors, and lifestyle risks (using illicit drugs and men who have sex with men)</li> <li>anyone wishing to decrease risk of HA infection</li> </ul>

# NOTES/DEFINITIONS

## 1. Live Vaccine Considerations

- If you are administering multiple live vaccines, they can be administered at the same time or 4 weeks apart. These include varicella, herpes zoster, MMR, yellow fever and oral typhoid. Live attenuated influenza vaccine (LAIV) can be given at the same time or any time before or after other live vaccines.
- Should NOT be given to pregnant women or those with significant immunosuppression.
- In situations where planned treatment medication will cause immunosuppression, administer live virus vaccine at least 4 weeks prior to onset of treatment.

## 2. What is significant immunosuppression? For more information, visit

<http://www.phac-aspc.gc.ca/publicat/cig-gci/p03-07-eng.php>

- Prednisone 20 mg or more per day x 14 days or more
- Biologicals such as Enbrel and Remicade
- Asplenia, HIV and other known immunodeficiency states
- Malignant neoplasms including leukemia and lymphoma
- Solid tumors

## 3. What about lower-dose steroids?

- Topical, nasal, inhaled, joint injections or maintenance physiologic replacement are NOT contraindications for live virus vaccine.

## 4. What drugs are NOT considered significant immunosuppression for administering live vaccines?

- Prednisone < 20 mg/day
- Sulfasalazine
- Hydroxychloroquine
- Auranofin

Please note special considerations are given for drugs not considered to cause significant immunosuppression for administering the herpes zoster vaccine. For more information, visit <http://www.phac-aspc.gc.ca/publicat/cig-gci/p04-herp-zona-eng.php#immther>

The following drugs are NOT considered to cause significant immunosuppression for administering the herpes zoster vaccine:

- Methotrexate  $\leq$  0.4 mg/kg/week
- Azothiaprine  $\leq$  3.0 mg/kg/day
- 6 mercaptopurine  $\leq$  1.5 mg/kg/day
- Prednisone < 20 mg/day

Prior to administering any live vaccines, consultation with the treating physician is recommended.

## 5. Co-administration

- There are no contraindications to co-administration of any of these vaccines in terms of safety and/or efficacy unless otherwise stated.
- Specifically, it is safe to administer HZ, PCV13 OR PPV23, and influenza at the same visit, choosing different sites on the patient for injection. Please note the recommendations for timing considerations between PCV13 and PPV23. For more information, visit <http://www.phac-aspc.gc.ca/publicat/cig-gci/p04-pneu-eng.php#simadmin>

## 6. Conjugate vs. Polysaccharide Vaccine

- Conjugate vaccines offer some advantages over polysaccharide vaccines. Notably, antibody responses are more robust after conjugate vaccines; conjugate vaccines induce immune memory and therefore lead to longer duration of protection. Unlike polysaccharide vaccines, conjugate vaccines reduce nasopharyngeal colonization, an important benefit in contributing to herd immunity.