



New Publicly Funded Vaccines for Ontario

August 2011



What's New

- Rotarix™
- Second dose of varicella
- MMRV vaccine {Priorix-Tetra™}
- Booster dose of pertussis for adults
- Prevnar 13™

New Schedule

- Rotarix TM at 2 and 4 months
- Second dose of varicella for children up to 11 years of age
- MMRV vaccine for children from 4-6 years of age
- Adacel TM/Boostrix TM vaccine for adults 19-64 years of age



Rotavirus Infection

- Severe dehydrating gastroenteritis
- Common cause of gastroenteritis
- Incubation 18 – 72 hours
- Fever, vomiting and diarrhea for 3-7 days



- High Burden on Health Care System
 - 36% see a doctor
 - 15% visit emergency department
 - 7% require hospitalization
- Peak in late winter and early spring



Rotarix™ Vaccine

- Live, oral vaccine – 2 doses
- GlaxoSmithKline product
- Can be co-administered with other vaccines
- Babies can safely breastfeed
- Prematurity not an issue



Efficacy – Rotarix™

- Protection of 85% to 96% against severe rotavirus infection in first season
- Protection of 79% to 86 % against severe rotavirus infection in second season



Rotarix™ Administration

- Rotarix™ is publicly funded for infants 6 to 24 weeks of age
- Recommend to give at 2 and 4 month visit
- Minimum of 4 weeks between doses



Administration

- Vaccine is a clear, colourless liquid
- Should be administered first before any injections
- Have infant in reclining or feeding position



Contraindications

- Allergy to any components of the vaccine
- < 6 weeks of age or > 24 weeks of age
- History of bowel problems or intussusception



Side Effects

- Viral shedding may occur for about 7 days following immunization in the stool of infants
- Caregivers should be encouraged to use good handwashing
- Intussusception may rarely occur after rotavirus vaccine

Second Dose Varicella





Chickenpox Disease

- 23% reduction in the number of cases reported since 2004 (Ontario)
- Reduction in the complications: bacterial skin infections, pneumonia, blood infection and infections of the brain
- Huron County vaccination coverage rates 40% - 50 %



Second dose of Varicella

- In 2010 NACI recommended that children receive a second dose of varicella
- First dose offers – 70% to 90% protection second dose increase protection to 99%
- MMRV has been publically funded for this second dose*



Schedule Change

- First MMR at 12 months and first varicella at 15 months
- Change to MMRV for 4 – 6 years
 - Children born on or after January 1, 2000 a single dose of varicella vaccine if they have received two doses of MMR and one dose of varicella {or 2 doses if none}

Minimum Interval Between Doses

Vaccines regardless of which vaccine is given first	Recommended minimum interval between (for vaccines not given on the same day)
MMR and MMR	4 weeks
MMR and Varicella	4 weeks
MMR and MMRV	6 weeks
Varicella and Varicella	6 weeks
Varicella and MMRV	3 months if 1 to 12 years of age inclusive 6 weeks if 13 years of age or older



Why not both doses as MMRV?

- MMRV combined not recommended due to concerns about febrile seizures (for children < 23 months)
- In Ontario Priorix-Tetra™ is currently funded for children 4 to 6 years of age



Other things to consider re: MMRV

- Contraindications – live vaccine:
 - Immunocompromising conditions
 - allergic to neomycin
 - Latex – uncertain
 - If TB skin test not given on same day, delay for 4 weeks
- Aspirin containing and Antiviral drugs



Acellular Pertussis for Adults

- Designed to protect newborn infants who are most at risk of complications
- Now expanded for adults who have not received an acellular pertussis dose
- Since 2003, adolescents have been given acellular pertussis as 14-16 year booster



Who Can Receive Tdap?

- Adults who never had a dose of acellular pertussis vaccine and
 - Need a 10 year booster
 - Have a wound that needs a tetanus shot
 - At any time, regardless of when last tetanus shot was, especially if exposed to infants (unless reaction to previous dose)



Two Acellular-Pertussis Containing Products

- Adacel™ (sanofi-pasteur)
- Boostrix™ (GlaxoSmithKline)
- Very similar
- May be latex in pre-filled syringe of Boostrix™



Pneumococcal Disease

- Invasive Disease
 - bacteraemia
 - meningitis
- Non-invasive
 - pneumonia
 - otitis media
 - sinusitis



Ontario Schedule

- Introduced Prevnar 13 in November 2010
- Also switched to a 2 + 1 schedule for healthy infants – 2, 4 and 12 months
- Schedule remains 3 + 1 for children with underlying medical conditions
 - These infants also need pneumococcal 23 at 2 years

High Risk Medical Conditions

- Chronic respiratory disease
- Chronic cardiac disease
- Diabetes mellitus
- Primary immune deficiency
- Immunosuppressive diseases or therapies
- Cochlear implants
- Solid organ transplant
- Chronic renal disease
- Cirrhosis or alcoholism



Prevnar 13™ Catch-up

- If completed a course of Prevnar 7 or Synflorix, get a dose of Prevnar 13 if:
 - Healthy children < 3 years of age
 - Underlying medical conditions < 5 years
 - Children attending group day care and Aboriginal children who are < 5 years of age



12 Month Visit

- Better to give booster at 12 months due to waning immunity after 4 month dose
- So 12 month visit now has
 - Prevnar 13
 - Meningococcal C conjugate
 - MMR



12 Month Visit

- Can give several vaccines at one visit
- For the 12 month visit
 - Meningococcal C in one arm (IM)
 - Prevnar 13 TM in the other arm (IM)
 - MMR 1 inch from either of the vaccines (SC)
- Clearly document what given where



Pain Management

- Quick injection; Do not withdraw (don't aspirate)
- Feed baby or sugar water
- Don't lie baby down
- Oral vaccine first; Most painful needle last
- Distraction
- Tactile stimulation
- Topical aneesthesia

?? Questions??

