

Percent of two-year olds with up-to-date immunizations

SUMMARY

The percent of children up-to-date for age for all vaccine agents combined has oscillated between 65% and 68% for children born in 2004-2009. When vaccines were considered individually 75%-87% of children born in 2009 were up-to-date for age.

NOTES

In the fall and winter of 2009/10, the influenza H1N1 pandemic required an immense public health response. Regions reported that resources normally used to follow-up children under the age of two were diverted to the H1N1 response. As a result, two year old coverage rates were lower in 2009 and 2010 (children born in 2007 and 2008) than the previous year.

The data were extracted from the Integrated Public Health Information System (iPHIS) immunization registry and included all children with active records in iPHIS. Only coverage rates for the Health Authorities using the iPHIS immunization registry could be calculated (IHA, FHA, VIHA, and NHA). Provincial-level results include only the regions using iPHIS, data for VCH are not available.

Up to Date Definitions

Up-to-date for age	4 doses diphtheria/tetanus/pertussis, 3 doses hepatitis B, 2 doses measles, 2 doses mumps, 1 dose rubella, 3 doses polio, at least 1 dose of <i>Haemophilus influenzae</i> type b after 15 months of age, 1 dose varicella (or recorded exemption for varicella due to previous disease or protective antibody levels), up-to-date for pneumococcal conjugate as defined by age at first dose, at least 1 dose of meningococcal C conjugate on or after 12 months of age.
Up-to-date minus the booster	3 doses diphtheria/tetanus/pertussis, 3 doses hepatitis B, 1 dose measles/mumps/rubella, 2 doses polio, 1-3 doses of <i>Haemophilus influenzae</i> type b (depending on age of first dose), 1 dose varicella (or recorded exemption for varicella due to previous disease or protective antibody levels), up-to-date for pneumococcal conjugate as defined by age at first dose, at least 1 dose of meningococcal C conjugate on or after 12 months of age.
D/T/aP/IPV	4 doses diphtheria/tetanus/pertussis, 3 doses polio
D/T/aP/IPV/HIB	4 doses diphtheria/tetanus/pertussis, 3 doses polio, at least 1 dose of <i>Haemophilus influenzae</i> type b after 15 months of age
Hep B	3 doses hepatitis B
Hib	At least 1 dose <i>Haemophilus influenzae</i> type b after 15 months of age
MMR	2 doses of a measles-containing vaccine, 2 doses of a mumps-containing vaccine and at least 1 dose of a rubella-containing vaccine
Polio	3 doses polio
Varicella	1 dose of varicella or recorded exemption for varicella due to previous disease or protective antibody levels
Meningococcal C conjugate	At least 1 dose of meningococcal C conjugate on or after 12 months of age
Pneumococcal conjugate	As defined by age of first dose: 3 doses pneumococcal conjugate if dose 1 before 12 months of age 2 doses pneumococcal conjugate if dose 1 between 12 and 23 months of age

All analyses were conducted using business rules which calculated ages and time intervals at receipt of immunization. Each dose was counted as a valid dose only if NOT given prior to the earliest eligible age, or at time interval LESS than the shortest recommended interval. A child was assessed as "up-to-date" if all recommended doses were given by the 2nd birthday.

The best attempts are made to collect as accurate and consistent results as possible; however, data need to be interpreted with caution due to regional differences in the type of vaccine provider (physician versus public health nurses), the lack of data for First Nations on reserve, and use of immunization registries.

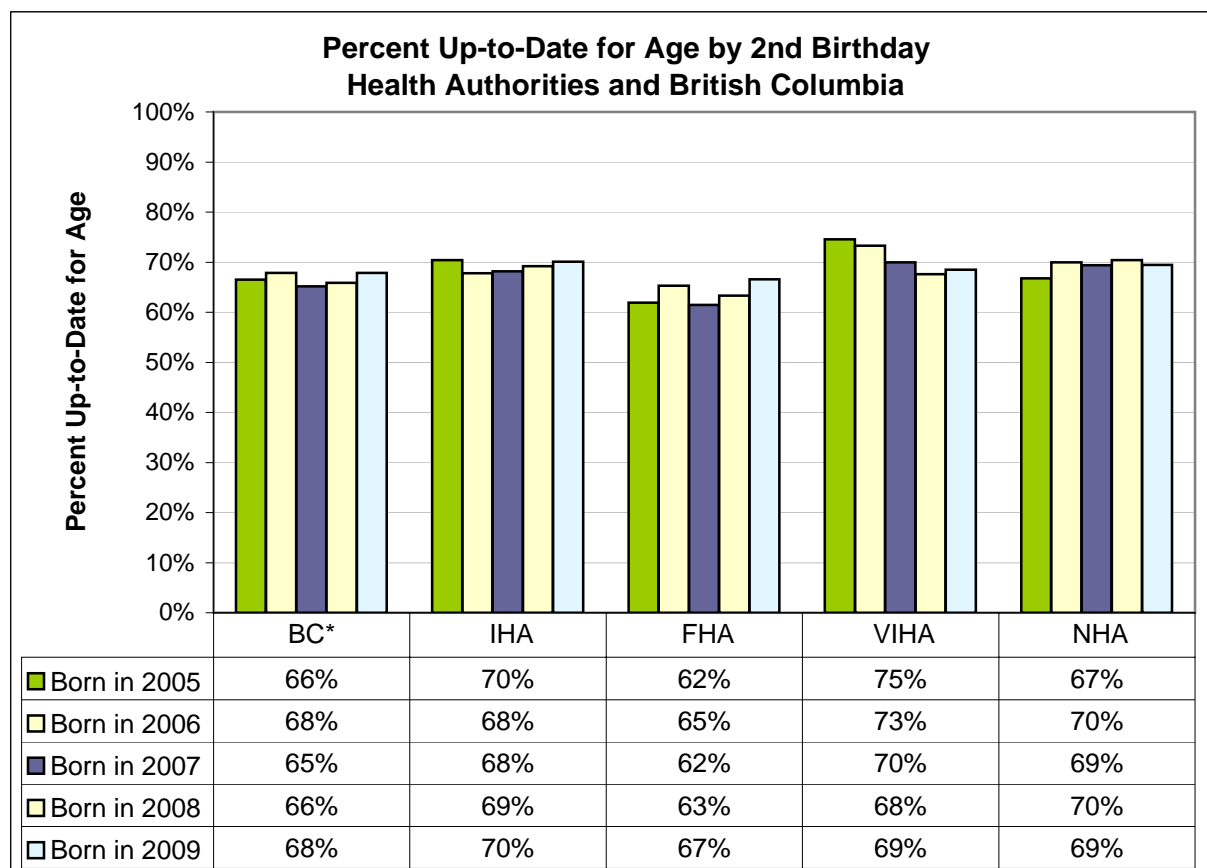
Abbreviations:

IHA = Interior Health Authority
FHA = Fraser Health Authority
VCH = Vancouver Coastal Health

For an explanation of BC Health Authorities, please visit:

VIHA = Vancouver Island Health Authority
NHA = Northern Health Authority
BC = Province of British Columbia
<http://www.health.gov.bc.ca/socsec/index.html>

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* Does not include Vancouver Coastal Health

		Year of Birth				
		2005	2006	2007	2008	2009
British Columbia (BC), excluding Vancouver Coastal Health (VCH)	Up-to-date for age	66%	68%	65%	66%	68%
	Up-to-date minus the booster	70%	76%	74%	75%	77%
	<i>Specific agents included in "up-to-date for age"</i>					
	D/T/aP/IPV	76%	77%	74%	74%	75%
	D/T/aP/IPV/Hib	76%	77%	74%	74%	75%
	Hep B	87%	87%	83%	83%	84%
	Hib	81%	82%	79%	78%	79%
	MMR	76%	78%	75%	74%	75%
	Polio	80%	81%	77%	77%	78%
	Varicella	83%	85%	83%	83%	84%
	Pneumococcal conjugate	79%	83%	82%	84%	85%
Meningococcal C conjugate	88%	87%	86%	86%	87%	

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		Year of Birth				
		2005	2006	2007	2008	2009
Interior Health Authority (IHA)	Up-to-date for age	70%	68%	68%	69%	70%
	Up-to-date minus the booster	74%	77%	77%	79%	79%
	<i>Specific agents included in "up-to-date for age"</i>					
	D/T/aP/IPV	79%	77%	76%	76%	77%
	D/T/aP/IPV/Hib	79%	77%	76%	76%	77%
	Hep B	88%	86%	85%	86%	86%
	Hib	82%	80%	79%	79%	80%
	MMR	78%	76%	76%	76%	76%
	Polio	81%	79%	78%	79%	79%
	Varicella	85%	84%	83%	84%	84%
Pneumococcal conjugate	82%	86%	86%	87%	86%	
Meningococcal C conjugate	90%	86%	87%	88%	88%	
Fraser Health Authority (FHA)	Up-to-date for age	62%	65%	62%	63%	67%
	Up-to-date minus the booster	65%	73%	70%	72%	75%
	<i>Specific agents included in "up-to-date for age"</i>					
	D/T/aP/IPV	73%	75%	71%	72%	75%
	D/T/aP/IPV/Hib	72%	75%	71%	72%	75%
	Hep B	85%	86%	80%	81%	83%
	Hib	79%	82%	78%	77%	79%
	MMR	74%	77%	73%	73%	75%
	Polio	77%	80%	76%	75%	78%
	Varicella	81%	85%	82%	82%	84%
Pneumococcal conjugate	76%	80%	79%	81%	83%	
Meningococcal C conjugate	86%	87%	84%	84%	86%	
Vancouver Island Health Authority (VIHA)	Up-to-date for age	75%	73%	70%	68%	69%
	Up-to-date minus the booster	77%	81%	79%	78%	79%
	<i>Specific agents included in "up-to-date for age"</i>					
	D/T/aP/IPV	83%	82%	78%	75%	75%
	D/T/aP/IPV/Hib	83%	81%	78%	75%	75%
	Hep B	90%	89%	86%	85%	86%
	Hib	85%	84%	81%	79%	78%
	MMR	82%	81%	77%	74%	74%
	Polio	85%	84%	80%	78%	77%
	Varicella	86%	86%	84%	83%	84%
Pneumococcal conjugate	84%	88%	87%	86%	86%	
Meningococcal C conjugate	90%	89%	88%	88%	87%	
Northern Health Authority (NHA)	Up-to-date for age	67%	70%	69%	70%	69%
	Up-to-date minus the booster	70%	79%	78%	78%	79%
	<i>Specific agents included in "up-to-date for age"</i>					
	D/T/aP/IPV	75%	78%	78%	79%	77%
	D/T/aP/IPV/Hib	75%	78%	78%	79%	77%
	Hep B	89%	89%	87%	87%	87%
	Hib	79%	81%	81%	81%	80%
	MMR	75%	78%	78%	79%	76%
	Polio	78%	80%	81%	81%	78%
	Varicella	82%	84%	83%	83%	83%
Pneumococcal conjugate	79%	86%	87%	87%	87%	
Meningococcal C conjugate	89%	87%	88%	89%	88%	