# Hepatitis B prevention in Singapore

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- This is a template that will be distributed among the participants of the groups discussions in the VHPB – Hanoi 2018 meeting on 'Prevention and control of hepatitis B with combined vaccines and birth dose vaccination'
- The goal of this template is to get streamlined information, that can easily be compared, among participating countries.
- Please take this slides as a guideline, not as a fixed template. More information is always welcome but don't exceed 10 slides
- Present only information for your specific country (no global neither Asian region information is requested)
- See also some additional notes in the note box of each slide



# Hepatitis B Prevalence/Incidence in Singapore

	% Hep B (HBsAg) positives
General population incidence (2016)	0.8 per 100 000 population
General population prevalence (2010) 18-79 years old	3.6%

Age group	Male	Female	Total	%	Incidence rate per 100,000 population*
0-4	0	0	0	0	0.0
5-14	0	0	0	0	0.0
15-24	3	0	3	6.5	0.4
25-34	8	5	13	28.3	1.0
35-44	14	2	16	34.8	1.6
45-54	5	2	7	15.2	0.9
55-64	4	1	5	10.9	0.8
65+	1	1	2	4.3	0.4
Total	35	11	46	100	0.8

Table 5.1 Age-gender distribution and age-specific incidence rate of acute hepatitis B cases^. 2016

> \*Rates are based on 2016 estimated mid-year population. (Source: Singapore Department of Statistics)

	% HBeAg +
Hep B pos pregnant women*	0.5%

\*A total of 19,350 blood samples were screened at the KK Women's and Children's Hospital for HBsAg and HBeAg in 2016. Of these, 372 (1.9%) were HBsAg positive and 106 (0.5%) were HBeAg positive.



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## Vaccination schedules 2018



Available free from the gov Recommended not for free

### Immunization schedule

Disease	Vaccine Name/brand	Birth	4w	3m	4m	5m	6m	12m	15m	18m	6Y	9/10Y	10/11y
TB (BCG)													
Polio													
Diphtheria/Tetanus/pertussis/Pol io/ Haemophilus Influenzae													
Hepatitis B													
Rotavirus													
Measles or MMR													
Menigococcal Menegitis													
Pneumococcal													
Hepatitis A													
Chickenpox													
HPV													
Influenza													
RSV													

## Vaccination coverage

Immunization coverage							
	Year (2007-2010) %	Year (2011-2016) %					
BCG	98.9-99.5	98.6-99.6					
DTP1 and DTP3	96.1-96.9	96.0-97.8					
DTP booster1	88.3-91.0	89.7-91.4					
HepB3	95.6-96.8	95.7-96.6					
Hib3	85.6-92.0	81.6-96.3					
Hib booster	81.0-89.6	77.9-89.8					
IPV1 and IPV3	96.0-96.6	95.9-96.8					
IPV booster1	86.6-90.6	89.5-91.2					
MMR1	94.9-95.2	94.7-95.2					
MMR2	92.4-96.0	86.2-91.6					
PCV1 and PCV2	24.1-56.8	53.6-82.2					
PCV3	18.5-23.2	41.4-77.7					

#### \*PCV data from 2009-2016

#### Vaccines:

BCG Ba	accille Calmette Guérin vaccine	HepBb	HepB birth dose
	irst dose of diphtheria toxoid, tetanus oxoid and pertussis vaccine	DTP3	Third dose of diphtheria toxoid, tetanus toxoid and pertussis vaccine
HepB3 Th	hird dose of hepatitis B vaccine	Hib3	Third dose of Haemophilus influenzae type B vaccine
Pol3 Th	hird dose of polio vaccine	PCV3	Third dose of Pneumococcal Conjugate
Rotac Ro	otavirus last dose	Rcv1	First dose of Rubella Containing Vaccine
MCV1 Fi	irst dose of Measles-containing vaccine	MCV2	Second dose of Measles-containing vaccine



Prevention and control of hepatitis B with combined vaccines, and birth dose vaccination

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## Universal vaccination of hepatitis B in your country

Hepatitis B	Yes/no	Target (who is vaccinate + age (if relevant))	Since/period
Universal	Yes	All newborns	Sep 1987
Risk groups	Yes	Infants born to Hep B carrier mothers	Oct 1985
		Secondary school students to tertiary institutions, full time national servicemen	Jan 2001-2005



## Hepatitis B prevention-Immunization

## (combined/mono valent)

Available hepatitis vaccines	Disease	NAME (producer)		Target group		
Monovalent	НерВ	Engerix B 10m Engerix B 20m				
	НерВ	Hbvaxpro 5m Hbvaxpro 10n Hbvaxpro 40n	ncg (MSD)			
Combined	HepB and HepA	Twinrix (GSK)				
	DTP/HiB/IPV and HepB	Infanrix Hexa (GSK) Hexaxim (Sanofi Pasteur)				
	<b>/ Combined vaccination (</b> what a th use of combined Hep B vaccination)	re the	Opportunities (how do	you think this issues can be solved)		
<ul><li>Hep B carrier mot</li><li>Interchangeability</li></ul>	<ul> <li>Lack of data of Hexaxim use in preterm babies and Hep B carrier mothers</li> <li>Interchangeability data between the different combination vaccines</li> </ul>		<ul> <li>Recent introduction of Hexaxim as the main 6 in 1 combination vaccine in the public healthcare sector- to study use in preterm babies and Hep B carrier mothers</li> </ul>			



# Extra information on birth dose(BD)vaccination

		Yes/no	Since/period	ł	Coverage
	<b>Birth dose vaccination</b> in universal vaccination program	Yes	Sep 1987		95-96% (3 doses)
	Issues with BD in yo	our count	ſY	Successes with	BD in your country
. )	<ul> <li>Vaccine coverage data collected only for Sing permanent residents</li> </ul>	•	•	• In general, well	accepted with high coverage.



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