

## Influenza B Victoria lineage egg-derived candidate vaccine viruses for development and production of vaccines for use in the 2019-20 northern hemisphere influenza season

Antigenic and genetic analyses are performed by the WHO Collaborating Centres of the Global Influenza Surveillance and Response System (GISRS). Unless otherwise indicated all candidate vaccine viruses posted on this table have passed two-way haemagglutination inhibition (HI) test.

[National or Regional control authorities approve the composition and formulation of vaccines used in each country](#)

**21 February 2019 (updated on 25 April 2019)**

### Candidate vaccine viruses

Parent virus	Candidate vaccine virus	Type of virus or reassortant	Developing institute	Available from
B/Colorado/06/2017	Wild type virus			CDC, USA NIBSC, UK NIID Japan
B/Alabama/2/2017	Wild type virus			CDC, USA NIBSC, UK
B/Maryland/15/2016	Wild type virus			CDC, USA NIBSC, UK NIID Japan
	<b>NYMC BX-69</b>	Classical	NYMC, USA	CDC, USA NIBSC, UK NYMC, USA
	<b>NYMC BX-69A</b>		NYMC, USA	CDC, USA NIBSC, UK NYMC, USA

### Institutes contact details for candidate vaccine viruses orders/information:

CDC: [dwentworth@cdc.gov](mailto:dwentworth@cdc.gov) (Subject: CVV request)

NIBSC: [standards@nibsc.org](mailto:standards@nibsc.org) or [enquiries@nibsc.org](mailto:enquiries@nibsc.org)

NIID: [flu-vaccine@nih.go.jp](mailto:flu-vaccine@nih.go.jp)

NYMC: [doris\\_bucher@nymc.edu](mailto:doris_bucher@nymc.edu)

WHO CCs and ERLs: [http://www.who.int/influenza/gisrs\\_laboratory/collaborating\\_centres/list/](http://www.who.int/influenza/gisrs_laboratory/collaborating_centres/list/)

### Reference antigens (freeze-dried)

Parent virus	Starting materials		Ref Ag Lot number	Unitage (µgHA/ml)	Available from
	Candidate vaccine virus	Egg or cell			
B/Maryland/15/2016	Wild type virus	Egg	18/100	58	NIBSC, UK
			2018/122B	80	TGA, Australia
	NYMC BX-69A	Egg	18/104	69	NIBSC, UK
			2018BVA	47	NIID, Japan
			2018BVB	81	NIID, Japan
B/Colorado/06/2017	Wild type	Egg	2018/124B	83	TGA, Australia

### Sheep antisera

Purified HA from		Order Lot number	Available from
Parent virus	Egg or Cell		
B/Colorado/06/2017 – like	Egg	18/114	NIBSC, UK
		2018BV-1	NIID, Japan
		AS422	TGA, Australia
		AS429	TGA, Australia

The above-listed potency testing reagents have been developed with support from manufacturers, and calibrated by the WHO Essential Regulatory Laboratories (ERLs) of the Global Influenza Surveillance and Response System (GISRS).

**ERLs contact details for reagents orders/information:**

**NIBSC:** [standards@nibsc.org](mailto:standards@nibsc.org) or [enquiries@nibsc.org](mailto:enquiries@nibsc.org)  
**NIID:** [flu-vaccine@nih.go.jp](mailto:flu-vaccine@nih.go.jp)  
**TGA:** [influenza.reagents@health.gov.au](mailto:influenza.reagents@health.gov.au)

The list of all WHO Collaborating Centres (CCs) and Essential Regulatory Laboratories (ERLs) for influenza can be found on the WHO web site at  
[http://www.who.int/influenza/gisrs\\_laboratory/collaborating\\_centres/](http://www.who.int/influenza/gisrs_laboratory/collaborating_centres/)

For other candidate vaccine viruses and potency testing reagents, please go to  
[http://www.who.int/influenza/vaccines/virus/candidates\\_reagents/home/en/](http://www.who.int/influenza/vaccines/virus/candidates_reagents/home/en/)

For general enquiries, please contact [gisrs-whohq@who.int](mailto:gisrs-whohq@who.int)