

Influenza B Victoria lineage egg-derived¹ candidate vaccine viruses for development and production of vaccines for use in the 2020 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.²

27 September 2019 (last updated on 28 February 2020)

Candidate vaccine viruses (antigenically like B/Washington/02/2019)

Parent virus	Candidate vaccine virus	Type of virus or reassortant	Developing institute	Available from
B/Washington/02/2019	Wild type virus			WHO CCs NIBSC, UK
	BX-85C*	Classical	NYMC, USA	CDC, USA NYMC, USA
B/Brisbane/35/2018	Wild type virus			WHO CCs WHO ERLs
B/Victoria/705/2018	Wild type virus			WHO CCs WHO ERLs
	BVR-11	Classical	VIDRL, Australia	CBER/ FDA, USA CCDC, China CDC, USA FCI, UK NIBSC, UK NIID, Japan VIDRL, Australia
B/Sichuan-Gaoxin/531/2018	Wild type virus			WHO CCs WHO ERLs
	CNIC-1906	Classical	CCDC, China	CBER/ FDA, USA CCDC, China CDC, USA FCI, UK NIBSC, UK NIID, Japan VIDRL, Australia

**New CVV shown in blue font*

¹ For cell-derived candidate vaccine viruses and reference reagents please see https://www.who.int/influenza/vaccines/virus/candidates_reagents/2020_south/en/

² https://www.who.int/immunization_standards/national_regulatory_authorities%20/offices/

Institutes contact details for candidate vaccine viruses orders/information:

CBER/FDA: Laura.Couzens@fda.hhs.gov
CCDC: whocc-china@cnic.org.cn
CDC: dwentworth@cdc.gov (Subject: CVV request)
FCI: whocc@crick.ac.uk
NIBSC: standards@nibsc.org or enquiries@nibsc.org
NIID: flu-vaccine@nih.go.jp
VIDRL: whoflu@influenzacentre.org
NYMC: doris_bucher@nymc.edu
WHO CCs: http://www.who.int/influenza/gisrs_laboratory/collaborating_centres/list/en/

Reference antigens (freeze-dried)

Parent virus	Starting materials		Ref Ag Lot number	Unitage (µg HA/ml)	Available from
	Candidate vaccine virus	Egg or cell			
B/Washington/02/2019	Wild type	Egg	19/190	52 µg/ml	NIBSC, UK
			B(v)-Ag-1912	77 µg/ml	CBER/FDA, USA
			19/238	76 µg/ml	NIBSC, UK
B/Victoria/705/2018	BVR-11	Egg	19/208	79 µg/ml	NIBSC, UK
			2019/130B	89 µg/ml	TGA, Australia
B/Darwin/7/2019		Cell	19/210	44 µg/ml	NIBSC, UK

Sheep antisera

Purified HA from		Order Lot number	Available from
Parent virus	Egg or Cell		
B/Washington/02/2019 – like	Egg	19/218	NIBSC, UK
		B(v)-Ab-1914	CBER/FDA, USA
		AS436	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:

CBER/FDA: Laura.Couzens@fda.hhs.gov
NIBSC: standards@nibsc.org or enquiries@nibsc.org
NIID: flu-vaccine@nih.go.jp
TGA: 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/

For other candidate vaccine viruses and potency testing reagents, please go to

http://www.who.int/influenza/vaccines/virus/candidates_reagents/home/en/

For general enquiries, please contact gisrs-whohq@who.int