

Summary of status of development and availability of A(H9N2) candidate vaccine viruses and potency testing reagents

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](#)

28 February 2020

Candidate vaccine viruses*

Antigenic prototype	Clade	Candidate vaccine virus	Type of virus or reassortant	Developing institute	Available from
A/Hong Kong/1073/99	G1	Wild type virus			NIBSC, UK
A/chicken/Hong Kong/G9/97	Y280/G9	Wild type virus			WHO CCs
		NIBRG-91*	Reverse genetics	NIBSC, UK	NIBSC, UK
		IBCDC-2*	Classical reassortant	CDC, USA	CDC, USA
A/Hong Kong/33982/2009	G1	Wild type virus			WHO CCs
		IBCDC-RG26*	Reverse genetics	CDC, USA	CDC, USA
A/Bangladesh/994/2011	G1	Wild type virus			WHO CCs
		IDCDC-RG31*	Reverse genetics	CDC, USA	CDC, USA
A/Hong Kong/308/2014	Y280/G9	Wild type virus			WHO CCs
		SJ008*	Reverse genetics	SJCRH, USA	SJCRH, USA

* These viruses are candidate vaccine viruses which have passed relevant safety testing. They can be handled under BSL-2 enhanced containment¹.

¹ <http://www.who.int/biologicals/publications/trs/areas/vaccines/influenza/Annex%205%20human%20pandemic%20influenza.pdf?ua=1>

Candidate vaccine viruses in preparation

Antigenic prototype	Clade	Developing Institute	Available from
A/Oman/2747/2019-like#	G1	CDC, USA	Pending
A/Anhui-Lujiang/39/2018	Y280/G9	CCDC, China	Pending
		CDC, USA	Pending

#New candidate vaccine virus shown in blue

Reference antigens (freeze-dried)

Parent virus	Starting Materials		Ref Ag / Lot number	Unitage (µgHA/mL)	Available from
	CVV	Egg or Cell			
A/chicken/Hong Kong/G9/97	NIBRG-91	Egg	08/228	84 ug/ml	NIBSC, UK
A/Hong Kong/1073/99	Wild-type	Egg	08/208	To be announced	NIBSC, UK

Sheep antisera

Purified HA from		Order Lot number	Available from
Parent virus	Egg or Cell		
A/Hong Kong/1073/99	Egg	07/146	NIBSC, UK
	Egg	10/214 [§]	NIBSC, UK
A/chicken/Hong Kong/G9/97	Egg	08/202	NIBSC, UK

[§] Anti NA serum for tests of neuraminidase identification

Institutes and contact details for candidate vaccine virus orders and other information:

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

CCDC: whocc-china@cnic.org.cn

NIBSC: standards@nibsc.org or enquiries@nibsc.org

SJCRH: richard.webby@stjude.org

WHO CCs: http://www.who.int/influenza/gisrs_laboratory/collaborating_centres/list/en/

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

For information of other type and subtype candidate vaccine viruses and potency testing reagents, please go to: <http://www.who.int/influenza/vaccines/virus/en/>