

Summary of status of development and availability of A(H5) non-A(H5N1) 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](#)

26 September 2025

Candidate vaccine viruses*

Subtype	Antigenic prototype	Clade	Candidate vaccine virus	Developing institute	Available from
H5N6	A/Sichuan/26221/2014	2.3.4.4a	Wild type virus		WHO CCs
			IDCDC-RG42A*	CCDC, China CDC, USA	CDC, USA
H5N8	A/Astrakhan/3212/2020	2.3.4.4b	IDCDC-RG71A*	CDC, USA	CDC, USA
			CBER-RG8A*	CBER/FDA, USA	CBER/FDA, USA
	A/gyrfalcon/Washington/41088-6/2014	2.3.4.4c	Wild type virus		WHO CCs
			IDCDC-RG43A*	CDC, USA	CDC, USA
H5N6	A/duck/Hyogo/1/2016	2.3.4.4e	Wild type virus		WHO CCs
			NIID-001*	NIID, Japan	NIID, Japan
	A/chicken/Vietnam/RAHO4-CD-20-421/2020-like	2.3.4.4g	Wild type virus		CDC, USA
			IDCDC-RG69A*	CDC, USA	
	A/Guangdong/18SF020/2018-like	2.3.4.4h	Wild type virus		WHO CCs
			IDCDC-RG65A*	CDC, USA	CDC, USA

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

¹ [Guidelines for the safe development and production of vaccines to human pandemic influenza viruses and influenza viruses with pandemic potential, Annex 3, TRS No 1016 \(who.int\)](#)

Candidate vaccine viruses in preparation

Subtype	Antigenic prototype	Clade	Developing Institute	Available from
H5N6	A/Fujian-Sanyuan/21099/2017-like (CNIC-HB29578)	2.3.4.4b	CCDC, China	Pending
H5N6	A/Hubei/29578/2016-like (CNIC-HB29578)	2.3.4.4d	CCDC, China	Pending
H5N6	A/chicken/Viet Nam/NCVD-15A59/2015-like (SJ010)	2.3.4.4f	SJCRH, USA	Pending
H5N6	A/Fujian/2/2024	2.3.4.4h	CCDC, China	Pending
H5N6	A/Guangdong/18SF020/2018-like	2.3.4.4h	CCDC, China	Pending
			HKU, China	

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

CCDC: fluchina@ivdc.chinacdc.cn

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

HKU: malik@hkucc.hku.hk

NIID: flu-vaccine@nih.go.jp

SJCRH: richard.webby@stjude.org

For candidate vaccine virus available from **CBER**, email CBERShippingRequests@fda.hhs.gov

WHO CCs: <https://www.who.int/initiatives/global-influenza-surveillance-and-response-system/who-collaboration-center-erl?CxitPEOtTWx0xUd5TJdODSXcnyJqzYd7FZeivpn7xcl=>

Candidate vaccine viruses and potency testing reagents for influenza A(H5N1) can be found on the WHO web site at <https://www.who.int/teams/global-influenza-programme/vaccines/who-recommendations/zoonotic-influenza-viruses-and-candidate-vaccine-viruses>

Reference antigens (freeze dried)

Subtype	Starting materials		Ref Ag	Unitage	Available from
	Parent virus	CVV	Lot number	(µgHA/ml)	
H5N6	A/Sichuan/26221/2014	IDCDC-RG42A	H5-Ag-2111 (cell)	60	CBER/FDA, USA
H5N8	A/Astrakhan/3212/2020	IDCDC-RG71A	H5-Ag-2301 (egg)	62	CBER/FDA, USA
			2024AH5A (EB66 cell)	28	NIID, Japan
		SeqHS-SyS22_09.5A	H5-Ag-2213 (cell)	98	CBER/FDA, USA
		CBER-RG8A	23/178	66	MHRA, UK
			2023/144B (egg)	72	TGA, Australia
			2025/152B	80	
	A/gyrfalcon/Washington/41088-6/2014		H5-Ag-1514 (egg)	83	CBER/FDA, USA
			H5-Ag-1511 (cell)	87	

Sheep antisera

Subtype	Parent virus	Order	Available from
		Lot number	
H5N6	A/Sichuan/26221/2014 rHA	H5-Ab-2201	CBER/FDA, USA
H5N8	A/Astrakhan/3212/2020	H5-Ab-2313	CBER/FDA, USA
		2024AH5-1	NIID, Japan
		H5-Ab-2407*	CBER/FDA, USA
		23/224*	MHRA, UK
	A/gyrfalcon/Washington/41088-6/2014	H5-Ab-1515	CBER/FDA, USA

* Purified rHA used as immunogen

WHO Essential Regulatory Laboratories (ERLs) contact details for reagent orders and other information:

MHRA: standards@mhra.gov.uk or enquiries@mhra.gov.uk

NIID: flu-vaccine@nih.go.jp

TGA: influenza.reagents@tga.gov.au

For reagents available from CBER, email CBERShippingRequests@fda.hhs.gov.

For information of other type and subtype candidate vaccine viruses and potency testing reagents, please go to: (<https://www.who.int/teams/global-influenza-programme/vaccines/who-recommendations/zoonotic-influenza-viruses-and-candidate-vaccine-viruses>).

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