

## **Countries able to perform PCR to diagnose influenza A (H1N1) virus infection in humans**

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Based on performance in the WHO external quality assessment project (EQAP)<sup>1</sup>, National Influenza Centres (NICs) of the WHO Global Influenza Surveillance Network (GISN)<sup>2</sup> and national influenza reference laboratories (NIRLs) in countries without NICs, which fulfil the following criteria, have been identified as having PCR capacity, with the necessary laboratory facility and consumables, to detect the influenza A (H1N1) virus, which has recently emerged.

- Scoring 100% in the last two or more WHO external quality assurance programme panels (EQAP)
- **OR** Scoring 100% in the latest EQAP panel and a history of consistent correct results for earlier panels.

WHO has been facilitating the distribution of real-time PCR kits with primers and probes specific for the influenza A (H1N1) virus to NICs of GISN and NIRLs.

NICs and NIRLs are listed hereafter, ordered by country, area or territory where they are located. The list will be updated along with the ongoing influenza laboratory capacity building.

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<sup>1</sup> [http://www.who.int/csr/disease/avian\\_influenza/guidelines/eqa\\_project/en/index.html](http://www.who.int/csr/disease/avian_influenza/guidelines/eqa_project/en/index.html)

<sup>2</sup> <http://www.who.int/csr/disease/influenza/influenznetwork/en/index.html>

<b>Country, area or territory</b>	<b>City</b>	<b>Influenza laboratory</b>
Algeria	Algiers	Pasteur Institute of Algeria, National Influenza Centre, Viral Respiratory Unit
Argentina	Buenos Aires	Instituto Nacional de Enfermedades Infecciosas, ANLIS C.G.
Argentina	Cordoba	Influenza and Respiratory Virus Laboratory - Instituto de Virologia
Argentina	Mar Del Plata	Intituto Nacional de Epidemiologia "Dr. Juan H. Jara"
Australia	Melbourne	WHO Collaborating Centre for Reference and Research on Influenza, VIDRL
Australia	Nedlands	PathWest Laboratory Medicine, Division of Microbiology and Infectious Diseases
Australia	Victoria	Virus Laboratory, Victorian Infectious Diseases Reference Laboratory
Australia	Wentworthville	ICPMR (Institute of Clinical Pathology and Medical Research)
Austria	Vienna	Medical University of Vienna, Clinical Institute of Virology
Belgium	Brussels	Scientific Institute of Public Health (ISP), Section Virology
Brazil	Belém	Evandro Chagas Institute
Brazil	Rio de Janeiro	Instituto Oswaldo Cruz, Department of Virology
Brazil	Sao Paolo	Instituto Adolfo Lutz, Laboratorio de Virus Respiratorios
Bulgaria	Sofia	National Centre of Infectious and Parasitic Diseases
Cambodia	Phnom Penh	Institut Pasteur in Cambodia
Cameroon	Yaoundé	Centre Pasteur of Cameroun
Canada	Winnipeg	Public Health Agency of Canada, National Microbiology Laboratory
Central African Republic	Bangui	Institut Pasteur de Bangui

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Chile	Santiago	Instituto de Salud Publica de Chile, Laboratorio de Virus Respiratorios y Exantematicos, Subdepartamento Virologia Clinica
China	Beijing	Virology Institute, Chinese CDC
China, Hong Kong SAR		The University of Hong Kong, Faculty of Medicine, Queen Mary Hospital, Department of Microbiology
China, Hong Kong SAR	Kowloon	Centre for Health Protection, Virology Division
Colombia	Bogota	Instituto Nacional de Salud de Colombia (Virology lab)
Costa Rica	Cartago	Laboratorio Nacional de Influenza
Côte d'Ivoire	Abidjan	Institut Pasteur de Côte d'Ivoire, Departement de Virus Epidemiques
Croatia	Zagreb	Public Health Institute, National Influenza Centre
Cuba	Habana	Tropical Medicine Institute "Pedro Koori"
Czech Republic	Prague	National Institute of Public Health, Center for Epidemiology and Microbiology
Denmark	Copenhagen	Statens Serum Institut, Department of Virology
Ecuador	Guayaquil	Tropical Leopoldo Izquieta Perez, Instituto Nacional de Higiene y med.trop. lip
Egypt	Cairo	Ministry of Health and Population, Virology Lab, Central Public Health Labs
Estonia	Tallinn	The Laboratory Communicable Diseases: Central Laboratory of Communicable Diseases for the Health Protectorat
Finland	Helsinki	National Institute for Health and Welfare (THL), Department of Vaccination and Immune Protection, Unit of Virus Infections
France	Lyon Bron	Centre National de Référence de la Grippe Région Sud
France	Paris	Institut Pasteur, Unité de Génétique Moléculaire des virus ARN

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French Guiana	Cayenne	Institut Pasteur de la Guyanne Française, CNR arbovirus et virus influenza pour la région Antilles Guyane
Georgia	Tbilisi	National Centre for Disease Control and Medical Statistics (NCDC)
Germany	Berlin	Robert Koch-Institute, National Influenza Center
Greece	Athens	Hellenic Pasteur Institute, National Influenza Reference Laboratory for Southern Greece
India	Pune	National Influenza Centre, National Institute of Virology
Indonesia	Jakarta	National Institute of Health Research and Development, Center for Biomedical and Pharmaceutical R&D
Ireland	Dublin 4	Influenza Surveillance Unit, National Virus Reference Laboratory
Israel	Jerusalem	The Hebrew University of Jerusalem, Department of Virology, Madassah Medical School
Israel	Tel Hashomer	Chaim Sheba Medical Center, Central Virology Laboratory
Italy	Roma	Istituto Superiore di Sanità, Centro Nazionale O.M.S. per l'Influenza
Jamaica	Kingston	University of the West Indies, Department of Microbiology
Japan	Tokyo	WHO Collaborating Centre for Reference and Research on Influenza, National Institute of Infectious Diseases, Department of Virology III
Kenya	Nairobi	KEMRI/CDC Regional Laboratory
Latvia	Riga LV	State Agency "Infectology Center of Latvia", Department of Laboratory
Luxembourg	Luxembourg	Laboratoire National de Santé
Madagascar	Antananarivo	Institut Pasteur de Madagascar, National Influenza Laboratory

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Malaysia	Kuala Lumpur	Institute for Medical Research (IMR), Virology Unit, Infectious Disease Research Centre
Mexico	México DF	INDRE (Instituto de Diagnostico y Referencia Epidemiologicos), Departamento de Virología
Mongolia	Ulaanbaatar	National Center of Communicable Diseases (NCCD), MoH, National Influenza Center
Netherlands	Bilthoven	National Institute of Public Health and the Environment (RIVM), Department Virology, Laboratory for Infectious Diseases and Perinatal Screening / PB22
Netherlands	Rotterdam	Erasmus Universiteit, National Influenza Centre, Institute of Virology
New Zealand	Grafton, Auckland	Laboratory Services, Auckland Hospital, Healthcare Services Ltd
New Zealand	Porirua, Wellington	Institute of Environmental Science and Research (ESR), Communicable Disease Group
Nigeria	Abuja	Askoro District Hospital, National Influenza Diagnostic Laboratory
Norway	Oslo	Norwegian Institute of Public Health, Department of virology, Division of Infectious Disease Control
Oman	Muscat	Central Public Health Laboratory
Pakistan	Islamabad	National Institute of Health
Panama	Panamá	Instituto Conmemorativo Gorgas de Estudios de la Salud
Paraguay	Ascuncion	Ministerio de Salud y Benestar Social, Laboratorio Central de Salud Publica, Instituto Nacional de Salud
Philippines	Muntinlupa City	National Influenza Center, Research Institute for Tropical Medicine (RITM)
Portugal	Lisboa	National Institute of Health, National Influenza Centre
Republic of Korea	Seoul	National Institute of Health, Korea CDC, Division of Influenza and Respiratory Viruses
Romania	Bucharest	Cantacuzino Institute

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Russian Federation	Koltosovo	State Research Centre of Virology and Biotechnology (Vector)
Russian Federation	Moscow	Ivanovsky Research Institute of Virology
Russian Federation	St.Petersburg	National Influenza Center, Research Institute of Influenza, Russian Academy of Medical Sciences
Rwanda	Kigali	National Reference Laboratory
Senegal	Dakar	Institut Pasteur de Dakar, Medical Virology Unit
Serbia	Belgrade	Institute of Virology, Vaccine and Sera "TORLAK", Respiratory Department
Singapore	Singapore	Dept of Pathology, Singapore General Hospital, Virology Section
Slovakia	Bratislava	National Reference Laboratory on Influenza, National Public Health Institute of the Slovak Republic
Slovenia	Ljubljana	Institute of Public Health of the Republic of Slovenia
South Africa	Sandringham	National Institute for Communicable Diseases, Respiratory Virus Unit
Spain	Barcelona	Catedratico de Microbiologia, Facultad de Medicina, Departamento de Microbiología
Spain	Majadahonda, Madrid	Centro Nacional de Microbiologia, Virology Service
Spain	Valladolid	Facultad de Medicina, Universidad de Valladolid, Centro de Gripe
Sri Lanka	Colombo	Medical Research Institute, Virology
Sweden	Solna	Swedish Institute for Infectious Disease Control, Department of Virology
Switzerland	Geneva	Hôpitaux Universitaires de Genève, Centre National de Référence de la Grippe, Laboratoire de Virologie
Thailand	Bangkok, Muang Nonthaburi	Ministry of Health, Department of Medical Science, National Institute of Health, Department of Medical Sciences
Trinidad and Tobago	Port of Spain	Caribbean Epidemiology Centre

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Tunisia	Tunis	EPS Charles Nicolle, Laboratoire de Microbiologie, Unité de Virologie
Turkey	Ankara	Refik Saydam Hygiene Institute, Virology Laboratory
Turkey	Istanbul	Istanbul faculty of Medecine, Unit of virology, Department of Microbiology
Uganda	Entebbe	Uganda Virus Research Institute (UVRI), National Influenza Centre
United Kingdom of Great Britain and Northern Ireland	Belfast	Regional Virus Laboratory, Royal Victoria Hospital
United Kingdom of Great Britain and Northern Ireland	Glasgow	Regional Virus Laboratory, Gartnavel General Hospital
United Kingdom of Great Britain and Northern Ireland	London	Health Protection Agency, Centre for Infections, Enteric, Respiratory & Neurological Virus Laboratory
United Kingdom of Great Britain and Northern Ireland	London	WHO Collaborating Centre for Reference and Research on Influenza, National Institute for Medical Research
United States of America	Atlanta	WHO Collaborating Centre for the Surveillance, Epidemiology and Control of Influenza, Centers for Disease Control and Prevention, Influenza Branch
United States of America	Memphis	WHO Collaborating Center for Studies on the Ecology of Influenza in Animals Virology Division, Department of Infectious Disease, St. Jude Children's Research Hospital
United States of America	Slingerlands	Virology Diagnostic Services Laboratory of Zoonotic Diseases and Virology Proficiency Testing, Wadsworth Centre, New York State Department of Health
Viet Nam	Hanoi	National Institute of Hygiene and Epidemiology
Viet Nam	Hanoi	National Institute of Paediatrics
Viet Nam	Ho Chi Minh City	Pasteur Institute