

Annexure 1: Provincial Procedure for Screening of Individuals following possible exposure to High Pathogenicity Avian Influenza A ((H5N1) in birds/poultry

It is important to conduct active surveillance of individuals potentially exposed to avian influenza viruses in birds or poultry to identify human infections. The spread of avian influenza viruses from one person to a close contact is very rare, and when it has happened, it has only spread to a few people. However, because of the possibility that avian influenza viruses could change and gain the ability to spread easily between people, potentially leading to a global influenza pandemic, monitoring for human infection and person-to-person spread is extremely important for public health.

1. RISK OF INFECTION OF HPAI A (H5N1) TO EXPOSED PERSONS

- Since 1997, the H5N1 virus has been described to occasionally cause infection in humans, resulting in severe respiratory disease with high mortality (60%). The virus does not infect humans easily and spread from person-to-person appears to be unusual. Infection occurs most often through direct unprotected contacts (no gloves, protective wear, facemasks, or eye protection) with infected birds. People can become infected by breathing virus in droplets in the air or dust, or by touching an infected bird or surfaces contaminated with infected bird mucous, saliva or faeces and then touching their eyes, mouth, or nose.
- **Healthcare providers should be on alert for respiratory illness or conjunctivitis amongst persons who may have been exposed to infected poultry.** Exposed persons include farm workers, abattoir workers, animal health personnel and any field workers in contact with poultry (chicken, ostriches etc.) from farms with suspected/confirmed HPAI or from wild bird rehabilitation centres that have handled confirmed or suspected HPAI cases.

2. SURVEILLANCE FOR OCCUPATIONALLY EXPOSED INDIVIDUALS

- The Department of Agriculture, Department of Health, and the National Institute for Communicable Diseases work together around surveillance for avian influenza amongst animal populations and occupationally exposed humans.
- The Department of Agriculture informs the Department of Health (Communicable Disease Control) of any suspected or confirmed outbreaks of avian influenza in the animal / poultry population.
- Persons who are in contact with live or dead birds, especially those in the poultry industry are advised to wear personal protective equipment including gloves, disposable aprons/clothing, and masks capable of preventing inhalation of aerosolised virus particles. Only limited numbers of persons should be exposed. Hand washing with disinfectant soap after contact with birds, is essential.
- The Department of Agriculture completes Annexure 2: Avian Influenza Surveillance: Department of Agriculture and Department of Health (District Services) linkage form and forward to the Provincial CDC Unit. The following details are required: the name of farms or premises with positive avian influenza result, location (district/sub-district), measures undertaken (e.g., culling), number of workers on the farm, name and contact details of the farmer/manager, and the details of the state veterinarian. The linkage forms are updated by the Provincial CDC unit as new farms/premises are identified by the Department of Agriculture.
- The Provincial CDC unit liaise and coordinates with the appropriate in response teams at district and sub-district level to ensure a joint human agricultural investigation is conducted. This involves liaison with the nearest health facility primary health care staff, Environmental Health, and laboratories to ensure specimens are collected from suspected cases based on the below case definition.
- Provincial pamphlets on avian influenza will be provided to staff working with birds/poultry by the State Veterinarians and animal technicians; or Environmental Health Practitioners from the Department of Health/ municipalities in collaboration with the specific State Vet of the region/district.

3. **SCREENING AND CASE DEFINITION**

- All suspected cases of potential transmission of avian influenza virus from infected birds/poultry to humans should be investigated.
- Clusters (e.g., 3 or more cases in 72 hours, or 5 or more cases in a 5-day period) of severe respiratory illness (hospitalised or ICU admission or death) with evidence of common exposure or epidemiological link (attention should be given to recent travel or exposure to animals implicated in zoonotic transmission of respiratory pathogens) are notifiable in South Africa and should be investigated (Category 1NMC: Respiratory disease caused by a novel respiratory pathogen).
- If an individual has been in contact with potentially infected birds (sick or dead birds and poultry) and become sick within 10 days of the exposure, they must present to the nearest doctor or healthcare facility and avoid close contact with other people as much as possible.
- **When medical care is sought, the healthcare practitioner should alert the National Institute for Communicable Diseases (NICD) on the clinician hotline (0800-212-552).**
- **Persons meeting the case definition below, should be investigated as a matter of urgency.**
 - **Report the suspected case to the Provincial Communicable Disease Control Unit, 021-830-3727; 021-815-8660/1/2/3 or 072-356-5146 / 082-327-0394) or the District CDC Coordinator or equivalent.**
 - Infectious Disease Specialist or Medical Virologist on call at Tygerberg Hospital; 021- 938-4911; Groote Schuur Hospital, 021-404-9111, may also be contacted for any advice on clinical management etc.
- Follow the procedure for potentially exposed persons in the Screening and Case definition: Avian Influenza, November 2022, document.

Case Definition for person under investigation

Any of the following symptoms: *cough, fever, sore throat, runny nose, difficulty breathing or conjunctivitis*

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A documented history of having had exposure (direct contact or proximity of <15 metres) to potentially infected birds (alive or dead) OR having had worked in a poultry house with infected birds, in the 10 days preceding the onset of symptoms.

- Due to high human influenza transmission currently (influenza season), an exposed farm worker that develop symptoms, still most likely will have human influenza. As avian influenza can be associated with worse outcome and other risks, these individuals will be tested for both human and avian influenza.

3. **SPECIMEN COLLECTION AND LABORATORY TESTING**

- Laboratory tests for HPAI A (H5N1) should be conducted on patients who satisfy both the clinical and epidemiological criteria included in the definition of a possible case.
- The specific tests on patients who satisfy the case definition will be conducted at the NICD, Centre for Respiratory Diseases and Meningitis (CRDM) laboratory in Johannesburg. Specimens can be sent to the NHLS laboratories marked for "Attention of CRDM, NICD". For any laboratory enquiries / assistance call 011-555-0315 / 0317.
- The required specimens should be collected URGENTLY from persons meeting the case definition, by healthcare workers at the dedicated/specific public health facilities. See Standard Operating Procedures: How to collect nasal/oropharyngeal swabs for detection of respiratory viruses, 4 November 2022.

- Dedicated health facilities should consult the nearest NHLS laboratory to ensure sample collection material / equipment/kits is available, and samples should be sent by regular, routine routes to NHLS labs, which will process further.
- Health facilities in the Garden Route District should forward the specimens to the George Hospital NHLS Laboratory, and they will be forwarding it to the NICD.
- If samples are collected in the private health facility, the private laboratories should forward the samples to the NICD as part of their routine transport of influenza surveillance samples e.g., viral watch etc.
- Prior arrangements will need to be made with the Provincial CDC Unit, district coordinator/equivalent and health facility staff - If managers at poultry farms, abattoirs, and bird sanctuary or rehabilitation centres are requesting of testing of all workers (symptomatic and asymptomatic).
- **Specimens for testing (see attached SOP for collection for nasal/oropharyngeal swabs)**
 - Infection prevention and control measures (gloves, well fitted surgical mask/N95 mask) should be employed by the health care worker when taking specimens.
 - A nasal/nasopharyngeal or a combined nasal/ nasopharyngeal swab in viral or universal transport media, is the appropriate specimens to collect.
 - A completed Case Investigation Form: Request for Avian Influenza A (H5N1) testing and a Centre for Respiratory Disease and Meningitis, Specimen Submission Form, MUST accompany the specimen/s (attached).
 - Make sure you have contact details (2 or more numbers if possible) for follow-up in the event of a positive result.
 - Advise the suspected case/patient to avoid close contact with other people until the symptoms resolve.
- **Contact details for assistance:**
 - Specimen collection procedures and clinical advice: Call Dr Sibongile Walaza, 011-386-6410 or Prof Cheryl Cohen, 011-386-6593
 - Laboratory testing, specimen transport or collection advice: 011-555-0315 or 011-555-0317

4. **MANAGEMENT OF CASES UNDER INVESTIGATION**

- Persons meeting the case definition should be investigated as a matter of urgency. The appropriate specimen must be taken, and the Provincial Communicable Disease Control Unit notified of the suspected case.
- Persons with mild upper respiratory tract illness should be counselled to return immediately if the symptoms worsen, particularly if shortness of breath develops.
- Should a suspected case present with signs and symptoms of lower respiratory tract infection (shortness of breath or dyspnoea or clinical/radiological evidence of pneumonia) requiring admission, oseltamivir must be started immediately (75mg bd po for 5 days). Investigate and treat for other common causes of lower respiratory tract infection (particularly bacterial pneumonia). Please consult the NICD hotline or one of the Infectious Disease Specialists at Tygerberg or Groote Schuur Hospital.
- All suspected cases should be counselled regarding the importance of hand hygiene and cough etiquette.
- Infection Prevention and Control (IPC) precautions when caring for patients with suspected, probable, or confirmed infection with HPAI are the same as those practiced when caring for patients with seasonal influenza.
- When working in direct contact with patients, Standard and Droplet Precautions should be applied.

5. RESOURCES

The attached documents are available: <https://www.nicd.ac.za/diseases-a-z-index/avian-influenza/>

- 5.1 Avian Influenza Guidance, NICD, compiled November 2022
- 5.2 Avian Influenza Frequently Asked Questions, NICD, compiled June 2017
- 5.3 How to collect nasal/oropharyngeal swabs for detection of respiratory viruses, NICD, updated 4 November 2022
- 5.4 Case Investigation Form: Request for Avian Influenza testing, NICD, Version November 2022
- 5.5 Screening and Case definition: Avian Influenza, November 2022
- 5.6 Centre for Respiratory Diseases and Meningitis: Specimen Submission Form, November 2022
- 5.7 Annexure 2: Avian Influenza Surveillance: Department of Agriculture affected farms/premises & linkage to Department of Health (District services)
- 5.8 Information pamphlets (English, Afrikaans, and Xhosa), Western Cape Department of Health and NICD

6. CONTACT DETAILS

Herewith the contact numbers of role-players involved in avian influenza surveillance:

Table 1: List of Department of Agriculture Officials in the Western Cape Province, June 2023

	Name	Designation	Tel / Cell	Email
1.	Msiza, G. Dr	Chief Director: Veterinary Services	021-808-5002 (tel) 084-604-6705 (cell)	gininda.msiza@westerncape.gov.za
2.	Bhandi, S. Dr	Director: Animal Health (Acting)	021-808-5052 (tel) 083-687-1094 (cell)	solomon,bhandi@westerncape.gov.za
3.	Roberts, L. Dr	State Veterinarian: Epidemiology	021-808-5058 (tel) 072-184-8642 (cell)	laura.roberts@westerncape.gov.za
4.	Van Helden, L. Dr	State Veterinarian: Epidemiology	021-808-5017 (tel) 072-460-1984 (cell)	lesley.vanhelden@westerncape.gov.za
5.	Cloete, A. Dr	State Veterinarian: Training	021-808-5254 (tel) 082-901-1710 (cell)	annelie.cloete@westerncape.gov.za
6.	Janse van Rensburg, L. Dr	State Veterinarian: George	044-873-5527 (tel) 083-797-0010 (cell)	leana.jansevanrensburg@westerncape.gov.za
7.	Malan, V. Dr	State Veterinarian: Boland	021-808-5028 (tel) 082-228-9076 (cell)	vivien.malan@westerncape.gov.za
8.	Kloppers, C. Dr	State Veterinarian: Swellendam	021-808-5059 (tel) 083-641-5163 (cell)	christi.kloppers@westerncape.gov.za
9.	Fox, C. Dr (Acting)	State Veterinarian: Beaufort West	023-414-9221 (tel) 082-699-6043 (cell)	cathy.fox@westerncape.gov.za
10.	Lombard, C. Dr	State Veterinarian: Vredendal	027-213-3106 (tel) 073-465-3860 (cell)	chanel.lombard@westerncape.gov.za
11.	Swart, M. Dr	State Veterinarian: Malmesbury	022-433-8910/15 (tel) 083-469-2404 (cell)	michael.swart@westerncape.gov.za
12.	Fox, C. Dr	State Veterinarian: Oudtshoorn	044-203-9445 (tel) 082-699-6043 (cell)	cathy.fox@westerncape.gov.za
13.	Pepler, A. Dr	Sate Veterinarian: Worcester	021-808-5052 (tel) 060-962-0118 (cell)	ansulize.pepler@westerncape.gov.za

Table 2. Public health officials responsible for Communicable Disease Control, Environmental Health, and CDC coordinators / equivalent, In the Western Cape

	Province	Name	Designation	Tel/Cell	Email
1.	SPC: Communicable Disease Control	Ms Charlene Lawrence	Provincial CDC Coordinator	021- 830-3727 (tel) 072-356-5146 (cell)	Charlene.Lawrence@westerncape.gov.za
2.		Ms Janine Bezuidenhoudt	Provincial NICD Epidemiologist	021-815-8663 (tel) 082-327-0394 (cell)	Janine.Bezuidenhoudt@westerncape.gov.za janineb@nicd.ac.za
3.		Ms Washiefa Isaacs	CDC: Provincial NICD NMC Surveillance Manager	072-310-6881(cell)	Washiefa.Isaacs@westerncape.gov.za washiefai@nicd.ac.za
4.		Ms Levani Naidoo	ASD: Outbreak Response	021-815-8676 (tel) 060-508-0896 (cell)	Levani.Naidoo@westerncape.gov.za
5.		Ms Farzanah Frieslaar	ASD: EPI Disease Surveillance	021-815-8740 (tel) 079-368-3693 (cell)	Farzanah.Frieslaar@westerncape.gov.za

7.		Mr. Francois Booyesen	CDC: Administrative Officer	021-815-8661(tel) 061-600-3385 (cell)	Francois.Booyesen@westerncape.gov.za
7.		Ms Felencia Daniels	CDC: Administrative Clerk	021-815-8660 (tel) 082-585-7295 (cell)	Felencia.Daniels@westerncape.gov.za
8.	Facilities Infrastructure Management	Mr. Stanley Nomdo	Assistant Director: Environmental Health	021-918-1564 (tel) 072-133-5644 (cell)	Stanley.Nomdo@westerncape.gov.za
9.	Assurance: Infection Prevention and Control	Dr. Ziyanda Vundle	Public Health Specialist	082-862-4331 (cell)	Ziyanda.Vundle@westerncape.gov.za
10.	Communication	Ms Marika Champion	Director	074-011-2244 (tel) 021-483-3235 (cell)	Marika.champion@westerncape.gov.za
11.	Emergency Medical Services	Dr. Wayne Smith	Head of Disaster Medicine and Special Events	021-815-8819 (tel) 082-991-0760 (cell)	Wayne.Smith@westerncape.gov.za
12.	Tygerberg Hospital	Prof. Jantjie Taljaard	Infectious Disease Specialist	021-938-9645 (tel) 083-419-1452 (cell)	jjt@sun.ac.za
13.	Groote Schuur Hospital	Prof. Marc Mendelson	Infectious Disease Specialists	021-404-5105 (tel) 082-684-5742 (cell)	Marc.mendelson@uct.ac.za
14.	Forensic Pathology Services	Ms Vonita Thompson	Director	082-443-3009 (cell)	Vonita.thompson@westerncape.gov.za
	Rural Health Services (Districts)	Name	Designation	Tel/Cell	Email address
1.	Rural Health Services Chief Directorate	Dr. David Pienaar	Public Health Specialist	021-483-9901 (tel) 083-275-9333 (cell)	David.Pienaar@westerncape.gov.za
2.		Ms Eugenia Sidumo	Deputy Director: Professional Support Services	044-695-0047 (tel) 082-735-5463 (cell)	Eugenia.Sidumo@westerncape.gov.za
3.	Cape Winelands	Ms Surina Neethling	Deputy Director: Specialised Support Services	023-348-8120 (tel) 072-227-6058 (cell)	Surina.Neethling@westerncape.gov.za
4.		Ms Roenell Balie	Manager: Facility Based Services	023-348-8122 (tel) 082-397-4467 (cell)	Roenell.balie@westerncape.gov.za
5.		Mr. Randall Humphreys	Cape Winelands District Municipality Environmental Health	023-348-2336 (tel) 082-824-2010 (cell)	humphreys@capewinelands.gov.za
6.	Central Karoo	Dr. Abraham Muller	Medical Manager: Central Karoo	023-414-8200 (tel) 078-214-3300 (cell)	Abraham.Muller2@westerncape.gov.za
7.		Ms Annalette Jooste	Deputy Director: Specialised Support Services	023-414-3590 (tel) 083-445-8106 (cell)	annalette.jooste@westerncape.gov.za
8.		Ms Janine Nel	Deputy Director: Comprehensive Health	023-414-3590 (tel) 083-708-1679 (cell)	Janine.Nel@westerncape.gov.za
9.		Mr. Gerrit van Zyl	Central Karoo District Municipality Environmental Health	023-449-1000 (tel) 083-654-9688 (cell)	gerrit@skdm.co.za
10.		Mr. Nathan Jacobs	Environmental Health	044-813-2926 (tel) 081-030-4557 (cell)	Nathan.Jacobs@westerncape.gov.za
11.	Garden Route	Mr. Eugene Engle	Deputy Director: Specialised Support Services	044-803-2752 (tel) 083-441-8555 (cell)	Eugene.Engle@westerncape.gov.za
12.		Mr. Nathan Jacobs	Environmental Health	044-813-2926 (tel) 081-030-4557 (cell)	Nathan.Jacobs@westerncape.gov.za
13.		Ms Gerda Terblanche	Assistant Manager: Nursing	044-803-2755/2700 (tel) 084-581-6648 (cell)	Gerda.Terblanche@westerncape.gov.za
14.		Mr. Johan Compion	Garden Route District Municipality	044-803-1501(tel) 082-803-5161 (cell)	jcompion@edendm.co.za
15.	Overberg	Ms Beatrice Groenewald	Child Health Coordinator	028-214-5852 (tel) 082-969-9297 (cell)	Beatrice.groenewald@westerncape.gov.za
16.		Ms Aletta Ludik	Assistant Manager: Facility Based Services	028-214-5851 (tel)	Aletta.Ludik@westerncape.gov.za
17.		Ms Petro Robertson	Deputy Director: Comprehensive Health	023-348-8142 (tel) 072-067-1309 (cell)	petro.robertson@westerncape.gov.za