
# Grippe Aviaire

Septembre 2007

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# LISTE DES TITRES

 

*070321629*
**PASCAL**

# Epidemiology of influenza in Hanoi, Vietnam, from 2001 to 2003

**Titre :** Epidemiology of influenza in Hanoi, Vietnam, from 2001 to 2003

**Auteur(s) :** NGUYEN Hang L K; SAITO Reiko; NGIEM Ha K; NISHIKAWA Makoto; SHOBUGAWA Yugo; NGUYEN Doan C; HOANG Long T; HUYNH Lien P; SUZUKI Hiroshi
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**Source :** The Journal of infection. 2007; 55 (1) : 58-63
**ISSN :** 0163-4453
**CODEN :** JINFD2
**Date de publication :** 2007
**Pays de publication :** United Kingdom
**Langue(s) :** English
**Type de document :** Serial
**Nombre de références :** 30 ref.

**Résumé :** Objective: The aim of this study was to clarify the epidemiology of laboratory-confirmed influenza in Hanoi, Vietnam. Methods: Influenza was detected by virus isolation from nasopharyngeal swabs of influenzalike-illness (ILI) patients who reported to outpatient clinics in Hanoi, Vietnam between 2001 and 2003, before the start of avian influenza A/H5N1 outbreaks. Influenza isolates were characterized by hemagglutinin inhibition test. Results: A total of 4708 nasopharyngeal swabs were collected from patients with ILI. Influenza was positive in 119 (2.5%) samples by virus isolation. Influenza circulated throughout the year, with possible two peaks in summer and winter. Influenza B viruses and A/H3N2 predominated in 2001 and 2002, respectively, and mixed circulation ofA/H1N1, A/H3N2 and B were observed in 2003. The seasonality of influenza roughly matched with clinical case reports in the North Region by National Communicable Disease Surveillance in Vietnam. Conclusions: The findings of year-round and biannual peak circulation of influenza in a subtropical area were in accordance with the results of previous studies in tropical and subtropical regions. Our observations indicated that establishment of laboratory-based surveillance in tropical and sub-tropical countries is important for taking actions for pandemic strategies, and links to the WHO global influenza network.

**Code(s) de classement :** 002B05C02C

**Descripteur(s) anglais**
*Descripteur(s) :* Influenza; Influenza A; Epidemiology; Vietnam; Nasopharynx; Virus; Influenza B; Flulike syndrome; Avian influenza
*Desc. génériques :* Virology; Infectious diseases; Medical sciences; Viral disease; Infection; Asia
**Descripteur(s) français**
*Descripteur(s) :* Grippe; Grippe A; Epidemiologie; Vietnam; Nasopharynx; Virus; Grippe B; Syndrome pseudogrippal; Grippe aviaire
*Desc. génériques :* Virologie; Maladies infectieuses; Sciences medicales; Virose; Infection; Asie
**Localisation :** INIST, Shelf number 18250, INIST No. 354000162876420090

**Origine de la notice :** INIST

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**PASCAL**

# Pandemic flu : Clinical management of patients with an influenza-like illness during an influenza pandemic

**Titre :** Pandemic flu : Clinical management of patients with an influenza-like illness during an influenza pandemic

**Auteur(s) :** British Infection Society British Thoracic Society Health Protection Agency, United States
**Source :** The Journal of infection. 2006; 53 (SUP1) : S1-S58
**ISSN :** 0163-4453
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**Date de publication :** 2006
**Pays de publication :** United Kingdom
**Langue(s) :** English
**Type de document :** Serial
**Nombre de références :** 169 ref.

**Code(s) de classement :** 002B05; 002B05C02C

**Descripteur(s) anglais**
*Descripteur(s) :* Infection; Influenza; Clinical management; Human; Flulike syndrome
*Desc. génériques :* Infectious diseases; Medical sciences; Virology; Infectious diseases; Medical sciences; Viral disease
**Descripteur(s) français**
*Descripteur(s) :* Infection; Grippe; Conduite a tenir; Homme; Pandemie; Syndrome pseudogrippal
*Desc. génériques :* Maladies infectieuses; Sciences medicales; Virologie; Maladies infectieuses; Sciences medicales; Virose
**Localisation :** INIST, Shelf number 18250, INIST No. 354000162876340010

**Origine de la notice :** INIST

*070309194*
**PASCAL**

# Surveillance akuter respiratorischer Erkrankungen (ARE) in Niedersachsen : Erste Erfahrungen aus den Jahren 2005-2006; Surveillance of acute respiratory illnesses (ARI) in lower saxony : First experience from the years 2005-2006

**Titre :** Surveillance akuter respiratorischer Erkrankungen (ARE) in Niedersachsen : Erste Erfahrungen aus den Jahren 2005-2006; Surveillance of acute respiratory illnesses (ARI) in lower saxony : First experience from the years 2005-2006

**Auteur(s) :** BEYRERL K; DREESMAN J; HECKLER R; BRADT K; SCHARLACH H; BAILLOT A; MONAZAHIAN M; TABELING D; HOLLE I; PULZ M; WINDORFER A
**Affiliation(s) :** Niedersachsisches Landesgesundheitsamt, Hannover, Germany; Gesundheitsamt des Landkreises Cloppenburg, Germany

**Source :** Das Gesundheitswesen Stuttgart Thieme. 2006; 68 (11) : 686-691
**ISSN :** 0941-3790
**Date de publication :** 2006
**Pays de publication :** Germany
**Langue(s) :** German
**Langue(s) du résumé :** English
**Type de document :** Serial
**Nombre de références :** 8 ref.

**Résumé :** In the context of influenza pandemic preparedness planning, a surveillance system for influenza and other acute respiratory illnesses was implemented in Lower Saxony at the beginning of the influenza season 2004/2005 and coordinated by the Governmental Institute of Public Health of Lower Saxony. This surveillance system represents an addition to already existing national monitoring systems. The goal of this surveillance system is to have available prompt information on the beginning, course and end of the influenza season and to recognise the spectrum of pathogens and identify outbreaks of other viral acute respiratory illnesses (ARI). For this purpose an all-season surveillance was established consisting of two supplementary modules. The first module is a symptom-oriented surveillance of acute respiratory illnesses in children of pre-school day care facilities. In the second module a virological surveillance in cooperation with selected medical practices was established. While the temporal course and burden of ARI in all Lower Saxony can be assessed by the surveillance of children in the day-care facilities in a sensitive, but less specific way, the virological surveillance provides highly specific information on the prevailing pathogens in ARI patients at a certain time. This information, in return, gives an indication about the responsible pathogens causing ARI in children of the day-care facilities. The first experience with these two complementary surveillance modules shows that in Lower Saxony a well accepted, prompt and meaningful monitoring system is available for the recognition and description of the occurrence of ARI and concomitantly of influenza. An extension of this surveillance to other pathogens or disease scenarios is possible.

**Code(s) de classement :** 002B05C02C

**Descripteur(s) anglais**
*Descripteur(s) :* Adult respiratory distress syndrome; Surveillance; Influenzavirus; Respiratory disease; Lower Saxony; 2005; Public health; 2006; Viral disease
*Desc. génériques :* Virology; Infectious diseases; Medical sciences; Orthomyxoviridae; Virus; Germany; Europe; Infection
**Descripteur(s) français**
*Descripteur(s) :* Detresse respiratoire adulte syndrome; Surveillance; Influenzavirus; Appareil respiratoire pathologie; Basse Saxe; 2005; Sante publique; 2006; Virose; Grippe pandemique; Pandemie
*Desc. génériques :* Virologie; Maladies infectieuses; Sciences medicales; Orthomyxoviridae; Virus; Allemagne;

 

Europe; Infection

*070308881*
**PASCAL**

# Factors influencing influenza vaccination rates among healthcare workers in Greek hospitals

**Titre :** Factors influencing influenza vaccination rates among healthcare workers in Greek hospitals

**Auteur(s) :** MALTEZOU H C; MARAGOS A; HALHARAPI T; KARAGIANNIS I; KARAGEORGOU K; REMOUDAKI H; PAPADIMITRIOU T; PIERROUTSAKOS I N
**Affiliation(s) :** Office for Nosocomial Infections, Microbe Resistance, and Rational Use of Antibiotics, Hellenic Center for Disease Control and Prevention, Athens, Greece

**Source :** The Journal of hospital infection. 2007; 66 (2) : 156-159
**ISSN :** 0195-6701
**Date de publication :** 2007
**Pays de publication :** United Kingdom
**Langue(s) :** English
**Type de document :** Serial
**Nombre de références :** 15 ref.

**Résumé :** Influenza vaccination rates are generally low among healthcare workers (HCWs) worldwide. In September 2005, the Hellenic Center for Disease Control and Prevention conducted a nationwide campaign to promote influenza vaccination in hospital HCWs. During the 2005-2006 influenza season, the overall vaccination rate among HCWs was 16.36% (range: 0-85.96%). The self-reported vaccination rate during the previous season was 1.72%, indicating a 9.5-fold increase. Compared with physicians, significantly fewer technical personnel were vaccinated, whereas administrative personnel were more likely to receive the vaccine. Among clinicians, rates for internal medicine departments exceeded those of surgical departments by a factor of 2.71 and laboratory medicine departments by a factor of 2.36. Multivariate analysis showed lower vaccination rates in large hospitals (>200 beds) than in smaller hospitals and lower rates in hospitals with specialist services (intensive care unit, psychiatry or dermatology) than in general hospitals. Factors associated with higher rates included working in northern Greece, in a paediatric or an oncology hospital, or in a prefecture with avian influenza H5N1 activity. In conclusion, in Greece influenza vaccination rates among HCWs remain low, but the implementation of a nationwide campaign had a considerable impact. Efforts should focus on hospital- and HCW-associated factors to increase vaccination uptake.

**Code(s) de classement :** 002B05C02C

**Descripteur(s) anglais**
*Descripteur(s) :* Influenza; Immunoprophylaxis; Surgery; Vaccination coverage; Health care staff; Health staff; Greece; Vaccination; Hospital; Risk factor; Treatment; Avian influenza
*Desc. génériques :* Virology; Infectious diseases; Medical sciences; Viral disease; Infection; Europe; Prevention
**Descripteur(s) français**
*Descripteur(s) :* Grippe; Immunoprophylaxie; Chirurgie; Couverture vaccinale; Equipe soignante; Personnel sanitaire; Grece; Vaccination; Hopital; Facteur risque; Traitement; Grippe aviaire
*Desc. génériques :* Virologie; Maladies infectieuses; Sciences medicales; Virose; Infection; Europe; Prevention
**Localisation :** INIST, Shelf number 18802, INIST No. 354000149908580090

**Origine de la notice :** INIST

*070308879*
**PASCAL**

# Preparations and limitations for prevention of severe acute respiratory syndrome in a tertiary care centre of India

**Titre :** Preparations and limitations for prevention of severe acute respiratory syndrome in a tertiary care centre of India

**Auteur(s) :** GAEL S; GUPTA A K; SINGH A; LENKA S R
**Affiliation(s) :** Department of Community Medicine, Post Graduate Institute of Medical Education and Research (PGIMER), Chandigarh, India; PGIMER, Chandigarh, India

**Source :** The Journal of hospital infection. 2007; 66 (2) : 142-147
**ISSN :** 0195-6701
**Date de publication :** 2007
**Pays de publication :** United Kingdom
**Langue(s) :** English
**Type de document :** Serial
**Nombre de références :** 16 ref.

**Résumé :** This short-term observational study of infection control practice was performed in the medical emergency outpatient department (EMOPD) of a tertiary-care hospital in India when threatened by an outbreak of severe acute respiratory syndrome (SARS). An investigator attended the lobby daily to screen patients with symptoms for SARS. Patient/attendant load, patient flow, medical staff working practices and position in the EMOPD were observed. Infection control measures such as fumigation and cleaning were noted, as was the EMOPD laboratory function, use of personnel protection and display of information on infectious diseases. A total of 162 (7.4%) of the 2165 patients surveyed had respiratory symptoms but no cases of SARS were found. The flow of patients and their attendants was not systematic. No laboratory tests for SARS were available, and no educational material on SARS was displayed. The EMOPDs in key hospitals need be able to screen for infectious diseases, especially in view of the threats from SARS and Avian influenza.

**Code(s) de classement :** 002B05C02C

**Descripteur(s) anglais**
*Descripteur(s) :* Severe acute respiratory syndrome; Limitation; Prevention; India; Check; Hospital; Emergency department; Ambulatory; Avian influenza
*Desc. génériques :* Virology; Infectious diseases; Medical sciences; Viral disease; Infection; Asia; Respiratory disease; Lung disease
**Descripteur(s) français**
*Descripteur(s) :* Syndrome respiratoire aigu severe; Limitation; Prevention; Inde; Controle; Hopital; Service urgence; Ambulatoire; Grippe aviaire
*Desc. génériques :* Virologie; Maladies infectieuses; Sciences medicales; Virose; Infection; Asie; Appareil respiratoire pathologie; Poumon pathologie
**Localisation :** INIST, Shelf number 18802, INIST No. 354000149908580070

**Origine de la notice :** INIST

*070306896*
**PASCAL**

# Performance of six influenza rapid tests in detecting human influenza in clinical specimens

**Titre :** Performance of six influenza rapid tests in detecting human influenza in clinical specimens

**Auteur(s) :** HURT Aeron C; ALEXANDER Robert; HIBBERT Jan; DEED Nicola; BARR Ian G
**Affiliation(s) :** World Health Organisation Collaborating Centre for Reference and Research on Influenza, 45 Poplar Road, Parkville, Victoria 3052, Australia; Monash University, School of Applied Sciences, Churchill, Victoria 3842, Australia; Royal Children's Hospital, Department of Microbiology and Virology, Flemington Road, Parkville, Victoria 3052, Australia

**Source :** Journal of clinical virology. 2007; 39 (2) : 132-135
**ISSN :** 1386-6532
**Date de publication :** 2007
**Pays de publication :** Netherlands
**Langue(s) :** English
**Type de document :** Serial
**Nombre de références :** 1/2 p.

**Résumé :** Background: The rapid diagnosis of influenza can alter the management of a patient's illness, resulting in reduced antibiotic usage, correct use of influenza antivirals and reduced length of stay in hospital emergency departments. The rapid tests have also been used to detect outbreaks in institutions and may play a role in pandemic influenza control. Objectives: To test six different rapid influenza tests, in a head-to-head comparison for the detection of seasonal influenza types A and B, compared to laboratory-based tests. Study design: One hundred and seventy-seven clinical specimens taken from mostly paediatric patients between June and October 2006 were tested using six influenza diagnostic tests and three laboratory-based techniques (immunofluorescence, cell culture and real-time RT-PCR). Results and conclusion: Compared with cell culture, five of the rapid tests (Binax Now Influenza A&B, Directigen EZ Flu A + B, Denka Seiken Quick Ex-Flu, Fujirebio Espline Influenza A&B-N, and Quidel Quick Vue Influenza A + B Test) demonstrated a similar influenza A sensitivity of between 67-71% and a specificity of 99-100%, however one rapid test (Rockeby Influenza A Antigen Test) had a significantly lower influenza A sensitivity of only 10% (specificity was 100%). For the five kits that detected influenza B antigen, sensitivity was considerably lower than that seen for influenza A (sensitivity for all the kits was 30%), although the number of specimens containing influenza B viruses was low.

**Code(s) de classement :** 002A05C10; 002B05C02J

**Descripteur(s) anglais**
*Descripteur(s) :* Human; Detection; Clinical isolate; Microbiology; Virology; Influenza
*Desc. génériques :* Virology; Microbiology; Biological sciences; Virology; Infectious diseases; Medical sciences; Viral disease; Infection
**Descripteur(s) français**
*Descripteur(s) :* Homme; Detection; Isolat clinique; Microbiologie; Virologie; Grippe
*Desc. génériques :* Virologie; Microbiologie; Sciences biologiques; Virologie; Maladies infectieuses; Sciences medicales; Virose; Infection
**Localisation :** INIST, Shelf number 26272, INIST No. 354000162331170110

**Origine de la notice :** INIST

*070303484*
**PASCAL**

# Mass vaccination for annual and pandemic influenza. Mass vaccination: Global aspects - progress and obstacles

**Titre :** Mass vaccination for annual and pandemic influenza. Mass vaccination: Global aspects - progress and obstacles

**Auteur(s) :** SCHWARTZ B; WORTLEY P; PLOTKIN Stanley A, ed
**Affiliation(s) :** Immunization Services Division, National Immunization Program, Centers for Disease Control and Prevention, 1600 Clifton Road NE, Atlanta, GA 30333, United States; Sanofi Pasteur, 4650 Wismer Road, Doylestown, PA 18901, United States

**Source :** Current Topics in Microbiology and Immunology. 2006; 304 : 131-152
**ISSN :** 0070-217X
**CODEN :** CTMIA3
**Date de publication :** 2006
**Pays de publication :** Germany
**Langue(s) :** English
**Type de document :** Serial
**Nombre de références :** 2 p.

**Code(s) de classement :** 002B05C02C

**Descripteur(s) anglais**
*Descripteur(s) :* Influenza; Vaccination; Review; Immunoprophylaxis; Prevention; United States; Human; Pandemic
*Desc. génériques :* Virology; Infectious diseases; Medical sciences; Viral disease; Infection; North America; America; Public health
**Descripteur(s) français**
*Descripteur(s) :* Grippe; Vaccination; Article synthese; Immunoprophylaxie; Prevention; Etats Unis; Homme; Pandemie
*Desc. génériques :* Virologie; Maladies infectieuses; Sciences medicales; Virose; Infection; Amerique du Nord; Amerique; Sante publique
**Localisation :** INIST, Shelf number 8358, INIST No. 354000142989220080

**Origine de la notice :** INIST

*070294455*
**PASCAL**

# La grippe aviaire : ce qu' il faut savoir

**Titre :** La grippe aviaire : ce qu' il faut savoir

**Auteur(s) :** Observatoire Regional de la Sante de Guyane ORSG Cayenne, France
**Source :** ORSG BULLETIN SANTE. 2006-03; (1) : 8 p.
**Date de publication :** 2006
**Pays de publication :** France
**Langue(s) :** French
**Type de document :** Serial

**Résumé :** Ce bulletin a vocation a apporter des reponses aux questions que peuvent se poser les Guyanais sur la grippe aviaire. Il a pour but d' ameliorer la connaissance sur une pandemie actuelle, de lever les doutes, les inquietudes

**Code(s) de classement :** 002B30A01A

**Descripteur(s) anglais**
*Descripteur(s) :* Virus; Epidemiology; Sanitary surveillance; Epizootics; Risk management
*Desc. génériques :* Public health; Medical sciences
**Descripteur(s) français**
*Descripteur(s) :* Virus; Epidemiologie; Surveillance sanitaire; Epizootie; Gestion risque
*Desc. génériques :* Sante publique; Sciences medicales
**Localisation :** BDSP/ORSLR, Shelf number ETUDES ORS

**Origine de la notice :** BDSP

*070293809*
**PASCAL**

# Le point sur la grippe aviaire

**Titre :** Le point sur la grippe aviaire

**Auteur(s) :** DELASSUS Jean Luc
**Source :** L'AIDE SOIGNANTE. 2007-05; (87) : 24-25
**ISSN :** 1166-3413
**Date de publication :** 2007
**Pays de publication :** France
**Langue(s) :** French
**Type de document :** Serial
**Nombre de références :** 3 ref.

**Résumé :** Apres un rappel historique des trois pandemies grippales du XXeme siecle, cet article donne les caracteristiques du virus H5N1 et fait le point sur la transmission interhumaine, les traitements et les mesures de prevention

**Code(s) de classement :** 002B30A11

**Descripteur(s) anglais**
*Descripteur(s) :* Influenza; Prevention; Epidemic; Virus; Contamination; Contagion; Antiviral; Epizootics
*Desc. génériques :* Public health; Medical sciences; Viral disease; Infection
**Descripteur(s) français**
*Descripteur(s) :* Grippe; Prevention; Epidemie; Virus; Contamination; Contagion; Antiviral; Epizootie
*Desc. génériques :* Sante publique; Sciences medicales; Virose; Infection
**Localisation :** BDSP/APHPDOC

**Origine de la notice :** BDSP

*070289221*
**PASCAL**

# Planning for pandemic influenza: effect of a pandemic on the supply and demand for blood products in the United States

**Titre :** Planning for pandemic influenza: effect of a pandemic on the supply and demand for blood products in the United States

**Auteur(s) :** ZIMRIN Ann B; HESS John R
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**Source :** Transfusion Philadelphia PA. 2007; 47 (6) : 1071-1079
**ISSN :** 0041-1132
**CODEN :** TRANAT
**Date de publication :** 2007
**Pays de publication :** United Kingdom
**Langue(s) :** English
**Type de document :** Serial
**Nombre de références :** 49 ref.

**Résumé :** BACKGROUND: Influenza causes episodic pandemics when viral antigens shift in ways that elude herd immunity. Avian influenza A H5N1, currently epizootic in bird populations in Asia and Europe, appears to have pandemic potential. STUDY DESIGN AND METHODS: The virology of influenza, the history of the 1918 pandemic, and the structure of the health care and the blood transfusion systems are briefly reviewed. Morbidity and mortality experience from the 1918 pandemic are projected onto the current health care structure to predict points of failure that are likely in a modern pandemic. RESULTS: Blood donor centers are likely to experience loss of donors, workers, and reliable transport of specimens to national testing laboratories and degradation of response times from national testing labs. Transfusion services are likely to experience critical losses of workers and of reagent red cells (RBCs) that will make their automated procedures unworkable. Loss of medical directors, supervisors, and lead technicians may make alternative procedures unworkable as well. CONCLUSIONS: Lower blood collection capacity and transfusion service support capability will reduce the availability of RBCs and especially of platelets. Plans for rationing medical care need to take the vulnerability of the blood transfusion system into account.

**Code(s) de classement :** 002B27D01; 002B02G; 002B24A02

**Descripteur(s) anglais**
*Descripteur(s) :* Transfusion; Planning; Influenza A; Supply; Blood product; United States
*Desc. génériques :* Transfusion; Medical sciences; Hematology; Pharmacology; Medical sciences; Pneumology; Respiratory system; Medical sciences; Viral disease; Infection; North America; America
**Descripteur(s) français**
*Descripteur(s) :* Transfusion; Planification; Grippe A; Approvisionnement; Constituant sang; Etats Unis
*Desc. génériques :* Transfusion; Sciences medicales; Hematologie; Pharmacologie; Sciences medicales; Pneumologie; Appareil respiratoire; Sciences medicales; Virose; Infection; Amerique du Nord; Amerique
**Localisation :** INIST, Shelf number 10224, INIST No. 354000146769110190

**Origine de la notice :** INIST

*070286706*
**PASCAL**

# Recombinant modified vaccinia virus Ankara-based vaccine induces protective immunity in mice against infection with influenza virus H5N1

**Titre :** Recombinant modified vaccinia virus Ankara-based vaccine induces protective immunity in mice against infection with influenza virus H5N1

**Auteur(s) :** KREIJTZ Joost H C M; SUEZER Yasemin; VAN AMERONGEN Geert; DE MUTSERT Gerrie; SCHNIERLE Barbara S; WOOD John M; KUIKEN Thijs; FOUCHIER Ron A M; LOWER Johannes; OSTERHAUS Albert D M E; SUTTER Gerd; RIMMELZWAAN Guus F
**Affiliation(s) :** Department of Virology, Erasmus Medical Center, Rotterdam, Netherlands; Paul-Ehrlich-Institut, Langen, Germany; National Institute for Biological Standards and Control, Potters Bar, United Kingdom

**Source :** The Journal of infectious diseases. 2007; 195 (11) : 1598-1606
**ISSN :** 0022-1899
**CODEN :** JIDIAQ
**Date de publication :** 2007
**Pays de publication :** United States
**Langue(s) :** English
**Type de document :** Serial
**Nombre de références :** 48 ref.

**Résumé :** Since 2003, the number of human cases of infections with highly pathogenic avian influenza viruses of the H5N1 subtype is still increasing, and, therefore, the development of safe and effective vaccines is considered a priority. However, the global production capacity of conventional vaccines is limited and insufficient for a worldwide vaccination campaign. In the present study, an alternative H5N1 vaccine candidate based on the replication-deficient modified vaccinia virus Ankara (MVA) was evaluated. C57BL/6J mice were immunized twice with MVA expressing the hemagglutinin (HA) gene from influenza virus A/Hongkong/156/97 (MVA-HA-HK/97) or A/Vietnam/1194/04 (MVA-HA-VN/04). Subsequently, recombinant MVA-induced protective immunity was assessed after challenge infection with 3 antigenically distinct strains of H5N1 influenza viruses: A/Hongkong/156/97, A/Vietnam/1194/04, and A/Indonesia/5/05. Our data suggest that recombinant MVA expressing the HA of influenza virus A/Vietnam/1194/04 is a promising alternative vaccine candidate that could be used for the induction of protective immunity against various H5N1 influenza strains.

**Code(s) de classement :** 002A05C10; 002B05; 002A05F04

**Descripteur(s) anglais**
*Descripteur(s) :* Vaccinia virus; Mouse; Influenzavirus; Recombinant virus; Vaccine; Immunoprotection; Microbiology; Infection; Viral disease; Avian influenza
*Desc. génériques :* Virology; Microbiology; Biological sciences; Infectious diseases; Medical sciences; Immunology; Pharmacology; Applied microbiology; Microbiology; Biological sciences; Orthopoxvirus; Chordopoxvirinae; Poxviridae; Virus; Rodentia; Mammalia; Vertebrata; Orthomyxoviridae
**Descripteur(s) français**
*Descripteur(s) :* Virus vaccine; Souris; Influenzavirus; Virus recombinant; Vaccin; Immunoprotection; Microbiologie; Infection; Virose; Grippe aviaire
*Desc. génériques :* Virologie; Microbiologie; Sciences biologiques; Maladies infectieuses; Sciences medicales; Immunologie; Pharmacologie; Microbiologie appliquee; Microbiologie; Sciences biologiques; Orthopoxvirus; Chordopoxvirinae; Poxviridae; Virus; Rodentia; Mammalia; Vertebrata; Orthomyxoviridae
**Localisation :** INIST, Shelf number 2052, INIST No. 354000162278040050

**Origine de la notice :** INIST

*070285361*
**PASCAL**

# India's new patent regime : aiding "access" or abetting "genericide"? : Biomedicine, patents, and access

**Titre :** India's new patent regime : aiding "access" or abetting "genericide"? : Biomedicine, patents, and access

**Auteur(s) :** BASHEER Shamnad
**Affiliation(s) :** Law George Washington University Law School 2000 H Street, N.W, Washington, DC 20052, United States

**Source :** International journal of biotechnology. 2007; 9 (2) : 122-137
**ISSN :** 0963-6048
**Date de publication :** 2007
**Pays de publication :** Switzerland
**Langue(s) :** English
**Type de document :** Serial
**Nombre de références :** 1 p.1/2
**Notes :** 34 notes

**Résumé :** This paper considers the impact of the new Indian patent regime on the important issue of access to affordable drugs. Access is dependent, in part, on the ability of generic manufacturers to produce cheap generic drugs. Working with the bird flu patent example, this paper will demonstrate that far from abetting 'genericide', the new regime provides adequate legal windows to aid the continued production of affordable generics. However, the mere existence of such windows/flexibilities is not enough - generic manufacturers will only exploit such windows when it is economically and politically viable to do so.

**Code(s) de classement :** 002A31; 215

**Descripteur(s) anglais**
*Descripteur(s) :* India; Patents; Drug; Medicine; Public health; Aves
*Desc. génériques :* Biotechnology; Biological sciences; Asia; Vertebrata
**Descripteur(s) français**
*Descripteur(s) :* Inde; Brevet; Medicament; Medecine; Sante publique; Aves
*Desc. génériques :* Biotechnologie; Sciences biologiques; Asie; Vertebrata
**Localisation :** INIST, Shelf number 27537, INIST No. 354000159868480020

**Origine de la notice :** INIST

*070273245*
**PASCAL**

# Amantadine-oseltamivir combination therapy for H5N1 influenza virus infection in mice

**Titre :** Amantadine-oseltamivir combination therapy for H5N1 influenza virus infection in mice

**Auteur(s) :** ILYUSHINA Natalia A; HOFFMANN Erich; SALOMON Rachelle; WEBSTER Robert G; GOVORKOVA Elena A
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**Source :** Antiviral therapy London. 2007; 12 (3) : 363-370
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**Date de publication :** 2007
**Pays de publication :** United Kingdom
**Langue(s) :** English
**Type de document :** Serial
**Nombre de références :** 44 ref.

**Résumé :** Background: The clinical management of H5N1 influenza virus infection in humans remains unclear. Combination chemotherapy with drugs that target different viral proteins might be more effective than monotherapy. Methods: BALB/c mice were treated by oral gavage for 5 days with amantadine (1.5, 15 or 30 mg/kg/day) and oseltamivir (1 or 10 mg/kg/day) separately or in combination. Mice were challenged 24 h after initiation of treatment with 10 mouse 50% lethal doses of either amantadine-sensitive (having S31 in the M2 protein) or amantadine-resistant (having N31 in the M2 protein) recombinant A/Vietnam/1203/04 (H5N1) virus. Results: Combination treatment with amantadine (15 or 30 mg/kg/day) and oseltamivir (10 mg/kg/day) provided greater protection (60% and 90%, respectively) against lethal infection with amantadine-sensitive H5N1 virus than did monotherapy. Moreover, spread of the virus to the brain was prevented by both combination regimens. The efficacy of the drug combinations against amantadine-resistant H5N1 virus was comparable to that of oseltamivir alone. Oseltamivir produced a dose-dependent effect against both recombinant H5N1 viruses ($P<0.05$) but did not provide complete protection against lethal infection. Importantly, no mutations in the HA, NA and M2 proteins were detected when the two drugs were used in combination. Conclusions: Combination chemotherapy provided a survival advantage over single-agent treatment of mice inoculated with neurotropic H5N1 influenza virus. This strategy might be an option for the control of pandemic influenza viruses that are sensitive to amantadine. Combinations that include other drugs should be explored.

**Code(s) de classement :** 002B02S05; 002B05C02C

**Descripteur(s) anglais**
*Descripteur(s) :* Oseltamivir; Combined treatment; Drug combination; Viral disease; Animal; Mouse; Antiviral; Avian influenza; Influenzavirus AH5N1
*Desc. génériques :* Virology; Infectious diseases; Pharmacology; Medical sciences; Virology; Infectious diseases; Medical sciences; Infection; Rodentia; Mammalia; Vertebrata; Amantadine derivatives; Agonist; Antagonist; Dopamine receptor; Glutamate receptor; NMDA receptor; Dopamine agonist; Exo <alpha> sialidase; O Glycosidases; Glycosidases; Hydrolases; Enzyme; Enzyme inhibitor; Neuraminidase inhibitor
**Descripteur(s) français**
*Descripteur(s) :* Oseltamivir; Traitement associe; Association medicamenteuse; Virose; Animal; Souris; Antiviral; Grippe aviaire; Influenzavirus AH5N1
*Desc. génériques :* Virologie; Maladies infectieuses; Pharmacologie; Sciences medicales; Virologie; Maladies infectieuses; Sciences medicales; Infection; Rodentia; Mammalia; Vertebrata; Amantadine derive; Agoniste; Antagoniste; Recepteur dopaminergique; Recepteur glutamate; Recepteur NMDA; Stimulant dopaminergique; Exo <alpha> sialidase; O Glycosidases; Glycosidases; Hydrolases; Enzyme; Inhibiteur enzyme; Inhibiteur neuraminidase
**Localisation :** INIST, Shelf number 27047, INIST No. 354000162224660090

*070265779*
**PASCAL**

# Evaluation of influenza virus-like particles and Novasome adjuvant as candidate vaccine for avian influenza

**Titre :** Evaluation of influenza virus-like particles and Novasome adjuvant as candidate vaccine for avian influenza

**Auteur(s) :** PUSHKO Peter; TUMPEY Terrence M; VAN HOEVEN Neal; BELSER Jessica A; ROBINSON Robin; NATHAN Margret; SMITH Gale; WRIGHT D Craig; BRIGHT Rick A
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**Date de publication :** 2007
**Pays de publication :** United Kingdom
**Langue(s) :** English
**Type de document :** Serial
**Nombre de références :** 25 ref.

**Résumé :** The development of safe and effective vaccines for avian influenza viruses is a priority for pandemic preparedness. Adjuvants improve the efficacy of vaccines and may allow antigen sparing during a pandemic. We have previously shown that influenza virus-like particles (VLPs) comprised of HA, NA, and Ml proteins represent a candidate vaccine for avian influenza H9N2 virus Pushko P, Tumpey TM, Fang Bu, Knell J, Robinson R, Smith G. Influenza virus-like particles comprised of the HA, NA, and Ml proteins of H9N2 influenza virus induce protective immune responses in BALB/c mice. Vaccine 2005;23(50):5751-9. In this study, an H9N2 VLP vaccine and recombinant HA (rH9) vaccine were evaluated in three animal models. The H9N2 VLP vaccine protected mice and ferrets from challenge with A/Hong Kong/1073/99 (H9N2) virus. Novasome adjuvant improved immunogenicity and protection. Positive effect of the adjuvant was also detected using the rH9 vaccine. The results have implications for the development of safe and effective vaccines for avian influenza viruses with pandemic potential.

**Code(s) de classement :** 002A05F04; 002A05C10

**Descripteur(s) anglais**
*Descripteur(s) :* Avian influenzavirus; Virus like particle; Immunological adjuvant; Vaccine; Flulike syndrome; Avian influenza
*Desc. génériques :* Immunology; Pharmacology; Applied microbiology; Microbiology; Biological sciences; Virology; Microbiology; Biological sciences; Influenzavirus A; Orthomyxoviridae; Virus; Infection; Viral disease
**Descripteur(s) français**
*Descripteur(s) :* Influenzavirus aviaire; Particule type viral; Adjuvant immunologique; Vaccin; Syndrome pseudogrippal; Grippe aviaire
*Desc. génériques :* Immunologie; Pharmacologie; Microbiologie appliquee; Microbiologie; Sciences biologiques; Virologie; Microbiologie; Sciences biologiques; Influenzavirus A; Orthomyxoviridae; Virus; Infection; Virose
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**Origine de la notice :** INIST

*070265757*
**PASCAL**

# Yield increases in intact influenza vaccine virus from chicken allantoic fluid through isolation from insoluble allantoic debris

**Titre :** Yield increases in intact influenza vaccine virus from chicken allantoic fluid through isolation from insoluble allantoic debris

**Auteur(s) :** HUGHES Kenneth; ZACHERTOWSKA Alicja; WAN Simmy; LI Lily; KLIMASZEWSKI Damian; EULOTH Michelle; HATCHETTE Todd F
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**Date de publication :** 2007
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**Langue(s) :** English
**Type de document :** Serial
**Nombre de références :** 24 ref.

**Résumé :** A yield enhancement technology for use in influenza vaccine manufacturing has been developed to maximize the recovery of influenza virus from allantoic fluid of virus-infected chick embryos; the standard raw material for influenza vaccine. Virus associated with amorphous debris in the allantoic fluid can be dissociated from the debris and recovered, thereby increasing viral yield. Dissociation can be achieved by subjecting the virus-debris complex to conditions of increased ionic strength at defined pH. Multifold increases in viral yield per ml of allantoic fluid were observed. The degree of yield enhancement is strain-specific, however, increases were observed in all type A and type B influenza strains tested. The heightened influenza virus recoveries can facilitate rapid vaccine manufacture, with increased numbers of doses produced, and may become essential at a time of influenza pandemic.

**Code(s) de classement :** 002A05F04; 002A05C10

**Descripteur(s) anglais**
*Descripteur(s) :* Influenzavirus; Chicken; Yield; Vaccine; Isolation; Influenza
*Desc. génériques :* Immunology; Pharmacology; Applied microbiology; Microbiology; Biological sciences; Virology; Microbiology; Biological sciences; Orthomyxoviridae; Virus; Aves; Vertebrata; Poultry; Viral disease; Infection; Veterinary; Farming animal
**Descripteur(s) français**
*Descripteur(s) :* Influenzavirus; Poulet; Rendement; Vaccin; Isolement; Grippe
*Desc. génériques :* Immunologie; Pharmacologie; Microbiologie appliquee; Microbiologie; Sciences biologiques; Virologie; Microbiologie; Sciences biologiques; Orthomyxoviridae; Virus; Aves; Vertebrata; Volaille; Virose; Infection; Veterinaire; Animal elevage
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**Origine de la notice :** INIST

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**PASCAL**

# Pandemic influenza planning : Shouldn't swine and poultry workers be included?

**Titre :** Pandemic influenza planning : Shouldn't swine and poultry workers be included?

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**Source :** Vaccine . 2007; 25 (22) : 4376-4381
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**Date de publication :** 2007
**Pays de publication :** United Kingdom
**Langue(s) :** English
**Type de document :** Serial
**Nombre de références :** 33 ref.

**Résumé :** Recent research has demonstrated that swine and poultry professionals, especially those who work in large confinement facilities, are at markedly increased risk of zoonotic influenza virus infections. In serving as a bridging population for influenza virus spread between animals and man, these workers may introduce zoonotic influenza virus into their homes and communities as well as expose domestic swine and poultry to human influenza viruses. Prolonged and intense occupational exposures of humans working in swine or poultry confinement buildings could facilitate the generation of novel influenza viruses, as well as accelerate human influenza epidemics. Because of their potential bridging role, we posit that such workers should be recognized as a priority target group for annual influenza vaccines and receive special training to reduce the risk of influenza transmission. They should also be considered for increased surveillance and priority receipt of pandemic vaccines and antivirals.

**Code(s) de classement :** 002A05F04

**Descripteur(s) anglais**
*Descripteur(s) :* Swine; Poultry; Influenza
*Desc. génériques :* Immunology; Pharmacology; Applied microbiology; Microbiology; Biological sciences; Artiodactyla; Ungulata; Mammalia; Vertebrata; Veterinary; Viral disease; Infection; Farming animal
**Descripteur(s) français**
*Descripteur(s) :* Porcin; Volaille; Grippe
*Desc. génériques :* Immunologie; Pharmacologie; Microbiologie appliquee; Microbiologie; Sciences biologiques; Artiodactyla; Ungulata; Mammalia; Vertebrata; Veterinaire; Virose; Infection; Animal elevage
**Localisation :** INIST, Shelf number 20289, INIST No. 354000149597880070

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**PASCAL**

# Serological response to vaccination against avian influenza in zoo-birds using an inactivated H5N9 vaccine

**Titre :** Serological response to vaccination against avian influenza in zoo-birds using an inactivated H5N9 vaccine

**Auteur(s) :** BERTEISEN Mads F; KLAUSEN Joan; HOLM Elisabeth; GRONDAHL Carsten; JORGENSEN Poul H
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**Date de publication :** 2007
**Pays de publication :** United Kingdom
**Langue(s) :** English
**Type de document :** Serial
**Nombre de références :** 12 ref.

**Résumé :** Five hundred and forty birds in three zoos were vaccinated twice against avian influenza with a 6-week interval using an inactivated H5N9 vaccine. Serological response was evaluated by hemagglutination inhibition test 4-6 weeks following the second vaccine administration. 84% of the birds seroconverted, and 76% developed a titre >=32. The geometric mean titre after vaccination was 137. A significant species variation in response was noted; penguins, pelicans, ducks, geese, herons, Guinea fowl, cranes, cockatiels, lovebirds, and barbets showed very poor response to vaccination, while very high titres and seroconversion rates were seen in flamingos, ibis, rheas, Congo peafowl, black-winged stilts, amazon parrots, and kookaburras.

**Code(s) de classement :** 002A05F04

**Descripteur(s) anglais**
*Descripteur(s) :* Aves; Humoral immunity; Vaccination; Inactivated strain; Avian influenza
*Desc. génériques :* Immunology; Pharmacology; Applied microbiology; Microbiology; Biological sciences; Vertebrata; Infection; Viral disease
**Descripteur(s) français**
*Descripteur(s) :* Aves; Immunite humorale; Vaccination; Souche inactivee; Grippe aviaire
*Desc. génériques :* Immunologie; Pharmacologie; Microbiologie appliquee; Microbiologie; Sciences biologiques; Vertebrata; Infection; Virose
**Localisation :** INIST, Shelf number 20289, INIST No. 354000149597880030

**Origine de la notice :** INIST

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**PASCAL**

# Australian general practice and pandemic influenza: models of clinical practice in an established pandemic

**Titre :** Australian general practice and pandemic influenza: models of clinical practice in an established pandemic

**Auteur(s) :** PHILLIPS Christine B; PATEL Mahomed S; GLASGOW Nicholas; PEARCE Christopher; DUGDALE Paul; DAVIES Alison; HALL Sally; KLJAKOVIC Marjan
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**ISSN :** 0025-729X
**CODEN :** MJAUAJ
**Date de publication :** 2007
**Pays de publication :** Australia
**Langue(s) :** English
**Type de document :** Serial
**Nombre de références :** 21 ref.

**Résumé :** <Mathematical point>To minimise the health impact of pandemic influenza, general practice will need to provide influenza-related and non-influenza primary health care, as well as contribute to the public health goal of disease control. <Mathematical point>Through interviews and workshops with general practitioners, nurses and policy leaders between March and July 2006, and literature analysis, we identified potential models of general practice in an established pandemic, and assessed their strengths and weaknesses. <Mathematical point>Three possible clinical models were identified: a default model of no change to service delivery; a streamed services model, where general practices reorganise themselves to take on either influenza-specific care or other clinical services; and a staff-determined mixed model, where staff move between different types of services. <Mathematical point>No single model or set of strategies meets the needs of all general practices to deliver and sustain the essential functions of primary health care during an established pandemic. Governments, general practice and the relevant peak professional bodies should decide before a pandemic on the suite of measures needed to support the models most suitable in their regions. <Mathematical point>Effective participation by general practice in a pandemic requires supplementary infrastructure support, changes to financial and staffing patterns, a review of legislation on medicolegal implications during an emergency, and intensive collaboration between general practices.

**Code(s) de classement :** 002B01; 002B30A11

**Descripteur(s) anglais**
*Descripteur(s) :* Australia; General practice; Models; Professional practice; Public health; World
*Desc. génériques :* Medical sciences; Public health; Medical sciences; Oceania
**Descripteur(s) français**
*Descripteur(s) :* Australie; Medecine generale; Modele; Pratique professionnelle; Sante publique; Monde; Pandemie; Grippe pandemique
*Desc. génériques :* Sciences medicales; Sante publique; Sciences medicales; Oceanie
**Localisation :** INIST, Shelf number 3557, INIST No. 354000146850370070

**Origine de la notice :** INIST

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**PASCAL**

# Les maladies infectieuses. De l' importance d' une activite coordonnee a l' echelle europeenne

**Titre :** Les maladies infectieuses. De l' importance d' une activite coordonnee a l' echelle europeenne

**Auteur(s) :** TER MEULEN Volker
**Affiliation(s) :** Deutsche Akademie der Naturforscher Leopoldina, Germany

**Source :** Bulletin de l'Academie nationale de medecine. 2006; 190 (9) : 1889-1895
**Informations congrès :** *Academie nationale de medecine. Seance, *Strasbourg France, *2006-05-16
**ISSN :** 0001-4079
**CODEN :** BANMAC
**Date de publication :** 2006
**Pays de publication :** France
**Langue(s) :** French
**Type de document :** Serial; *Conference-Meeting

**Résumé :** Les maladies infectieuses representent un probleme de sante majeur, tant pour les pays developpes, que pour les pays emergents. Envisagees a l' echelon mondial, les maladies infectieuses sont, en effet, a l' origine d' environ un tiers de tous les deces (46 % des causes de morts dans les pays en voie de developpement). D' importants appels ont ete lances travers le monde dans le but d' ameliorer les systemes de sante publique, compte tenu des dangers croissants que presentent les maladies infectieuses, du fait d' un ensemble de microbes d' apparition recente ou resurgents, tels le SRAS, la tuberculose, le sida, la legionellose, le microbe Ebola, l' encephalite du Nil, les infections nosocomiales opportunistes, les nouvelles varietes de grippe. Ces facteurs sont egalement associes a des problemes de securite microbiologiques des aliments et au role joue par le developpement des voyages internationaux, par la croissance du commerce mondial de l' agriculture, tous elements qui s' integrent dans les mailles du bioterrorisme. Les maladies infectieuses animales (aux consequences vitales) tels la grippe aviaire, le virus du singe, les maladies dues aux aliments, transmissibles ou non a l' homme, les maladies vegetales, posent, elles aussi, des problemes, et representent autant de cibles potentielles pour le bioterrorisme. Et, meme si nous disposons d' antibiotiques et de vaccins, les defis persistent dans la lutte contre les micro-organismes, car l' on assiste a une augmentation des resistances antibacteriennes et antivirales. Les strategies vaccinales, quant a elles, peuvent echouer du fait de leur cout trop eleve pour les pays en voie de developpement, voire de l' opposition rencontree dans certains pays de l' Union Europeenne, sans sous-estimer les variations antigeniques de certains micro-organismes, et de certains virus. L' Academie Allemande des Sciences Leopoldina, en collaboration avec le Comite Consultatif de l' Academie Europeenne des Sciences, a precise quelles devaient etre les actions a entreprendre pour lutter contre les maladies infectieuses, et identifie les zones les plus exposees, autant de realites auxquelles les responsables politiques de l' union Europeenne devront faire face. Ces priorites seront exposees et discutees.

**Code(s) de classement :** 002B30A11

**Descripteur(s) anglais**
*Descripteur(s) :* Infection; Coordination; Europe; Public health; Medicine
*Desc. génériques :* Public health; Medical sciences
**Descripteur(s) français**
*Descripteur(s) :* Infection; Coordination; Europe; Sante publique; Medecine
*Desc. génériques :* Sante publique; Sciences medicales
**Localisation :** INIST, Shelf number 740, INIST No. 354000146857550040

**Origine de la notice :** INIST

*070264810*
**PASCAL**

# Chemoenzymatic synthesis of artificial glycopolypeptides containing multivalent sialyloligosaccharides with a <gamma>-polyglutamic acid backbone and their effect on inhibition of infection by influenza viruses

**Titre :** Chemoenzymatic synthesis of artificial glycopolypeptides containing multivalent sialyloligosaccharides with a <gamma>-polyglutamic acid backbone and their effect on inhibition of infection by influenza viruses

**Auteur(s) :** OGATA Makoto; MURATA Takeomi; MURAKAMI Kouki; SUZUKI Takashi; HIDARI Kazuya I P J; SUZUKI Yasuo; USUI Taichi
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**Date de publication :** 2007
**Pays de publication :** United Kingdom
**Langue(s) :** English
**Type de document :** Serial
**Nombre de références :** 37 ref.

**Résumé :** Highly water-soluble, artificial glycopolypeptides with a <gamma>-polyglutamic acid (γ-PGA) backbone derived from Bacillus subtilis sp. and multivalent sialyloligosaccharide units have been chemoenzymatically synthesized as potential polymeric inhibitors of infection by bird and human influenza viruses. 5-Trifluoroacetamidopentyl <beta>-N-acetyllactosaminide and 5-trifluoroacetamidopentyl <beta>-lactoside were enzymatically synthesized from LacNAc and lactose, respectively, by cellulase-mediated condensation with 5-trifluoroacetamido-l-pentanol. After deacetylation, the resulting 5-aminopentyl p-LacNAc and <beta>-lactoside glycosides were coupled to the <alpha>-carboxyl groups of the <gamma>-PGA side chains. The artificial glycopolypeptides carrying LacNAc and lactose were further converted to Neu5Aca2-(3/6)Gal<beta>1-Glc<beta> and Neu5Ac<alpha>2-(3/6)Ga1<beta>1-4GlcNAc<beta> sialyloligosaccharide units by <alpha>2,3- and <alpha>2,6-sialyltransferase, respectively. The interaction of these glycopolypeptides with various influenza virus strains has been investigated by three different methods. Glycopolypeptides carrying Neu5Ac<alpha>2,6LacNAc inhibited hemagglutination mediated by influenza A and B viruses, and their relative binding affinities for hemagglutinin were 10<sup>2- to 10<sup>4-fold higher than that of the naturally occurring fetuin control. A glycopolypeptide carrying Neu5Ac<alpha>2,6LacNAc inhibited infection by A/Memphis/1/71 (H3N2) 93 times more strongly than fetuin, as assessed by cytopathic effects on virus-infected MDCK cells. The avian virus A/duck/Hong kong/4/78 (H5N3) bound strongly to Neu5Ac<alpha>2,3LacNAc/Lac-carrying glycopolypeptides, whereas the human virus A/Meniphis/1/71 (H3N2) bound to Neu5Ac<alpha>2,6LacNAc in preference to Neu5Ac<alpha>2,6Lac. Taken together, these results indicate that the binding of viruses to terminal sialic acids is markedly affected by the structure of the asialo portion, in this case either LacNAc or lactose, in the sugar chain of glycopolypeptides.

**Code(s) de classement :** 002B02S05

**Descripteur(s) anglais**
*Descripteur(s) :* Enzymatic reaction; Chemical synthesis; Glycopeptide; Antiviral; Avian influenzavirus; Water soluble compound; Cellulase; Glutamic acid derivative polymer; Glycosyltransferases; Influenzavirus B; In vitro; Structure activity relation; Peptides; Cell line; Kidney; Dog; Animal
*Desc. génériques :* Virology; Infectious diseases; Pharmacology; Medical sciences; Influenzavirus A;

 

Orthomyxoviridae; Virus; O Glycosidases; Glycosidases; Hydrolases; Enzyme; Transferases; Fissipedia; Carnivora; Mammalia; Vertebrata

**Descripteur(s) français**

*Descripteur(s) :* Reaction enzymatique; Synthese chimique; Glycopeptide; Antiviral; Influenzavirus aviaire; Compose hydrosoluble; Cellulase; Glutamique acide derive polymere; Glycosyltransferases; Influenzavirus B; In vitro; Relation structure activite; Peptide; Lignee cellulaire; Rein; Chien; Animal; Lignee MDCK; Sialique acide derive; Lactoside derive

*Desc. génériques :* Virologie; Maladies infectieuses; Pharmacologie; Sciences medicales; Influenzavirus A; Orthomyxoviridae; Virus; O Glycosidases; Glycosidases; Hydrolases; Enzyme; Transferases; Fissipedia; Carnivora; Mammalia; Vertebrata

**Localisation :** INIST, Shelf number 26564, INIST No. 354000145338720190

**Origine de la notice :** INIST

*070263636*
**PASCAL**

# Observations, symptomes et lesions releves sur l' avifaune sauvage de l' ain lors de l' episode d' influenza aviaire H5N1 HP en 2006; Observations, lesions and symptoms in wild avifauna in the east of France (Ain) during the 2006 H5N1 HP bird flu outbreak

**Titre :** Observations, symptomes et lesions releves sur l' avifaune sauvage de l' ain lors de l' episode d' influenza aviaire H5N1 HP en 2006; Observations, lesions and symptoms in wild avifauna in the east of France (Ain) during the 2006 H5N1 HP bird flu outbreak

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**Date de publication :** 2007
**Pays de publication :** France
**Langue(s) :** French
**Langue(s) du résumé :** English
**Type de document :** Serial
**Nombre de références :** 1/4 p.

**Résumé :** Entre fevrier et aout 2006, 490 oiseaux sauvages regroupes en 302 lots ont ete collectes dans le departement de l' Ain et analyses au Laboratoire Departemental d' Analyses. L' analyse virologique par PCR des ecouvillons tracheaux et cloacaux a revele la presence du gene M commun aux virus influenza aviaires de type A dans 41 lots dont 39 provenaient de la Dombes. Le Laboratoire National de Reference (AFSSA Ploufragan) a confirme la presence du virus H5N1 hautement pathogene (HP). Des oiseaux malades presentaient cliniquement des signes nerveux. A l' autopsie, les lesions congestivo-hemorragiques predominaient (cavite thoraco-abdominale, coeur et reins), souvent associees, chez les cygnes tubercules, a des lesions d' emphyseme pulmonaire, de pancreatite et d' encephalite. Certains oiseaux porteurs de lesions visibles a l' examen necropsique ou histologique avaient une PCR negative. Le virus, probablement introduit par des fuligules milouins, a affecte surtout des cygnes mais aussi, d' autres oiseaux aquatiques ou predateurs. La maladie est survenue entre fevrier et avril et est restee circonscrite a quelques communes; l' excretion de virus H5N1 HP a ete mise en evidence chez un faible nombre d' oiseaux sauvages et a disparu avec la remontee de la temperature ambiante.

**Code(s) de classement :** 002A05

**Descripteur(s) anglais**
*Descripteur(s) :* Cygnus olor; Lesion; Non steroidal antiinflammatory agent; France; Ain; Epidemiology; Microbiology; Veterinary; Avian influenza
*Desc. génériques :* Microbiology; Biological sciences; Aves; Vertebrata; Europe; Rhone Alpes; Infection; Viral disease
**Descripteur(s) français**
*Descripteur(s) :* Cygnus olor; Lesion; Antiinflammatoire non steroide; France; Ain; Epidemiologie; Microbiologie; Veterinaire; Grippe aviaire
*Desc. génériques :* Microbiologie; Sciences biologiques; Aves; Vertebrata; Europe; Rhone Alpes; Infection; Virose
**Localisation :** INIST, Shelf number 815, INIST No. 354000159906830070

 

*070263624*
**PASCAL**

# A conventional, inactivated oil emulsion vaccine suppresses shedding and prevents viral meat colonisation in commercial (Pekin) ducks challenged with HPAI H5N1

**Titre :** A conventional, inactivated oil emulsion vaccine suppresses shedding and prevents viral meat colonisation in commercial (Pekin) ducks challenged with HPAI H5N1

**Auteur(s) :** SERENA BEATO Maria; TOFFAN Anna; DE NARDI Roberta; CRISTALLI Alessandro; TERREGINO Calogero; CATTOLI Giovanni; CAPUA Ilaria
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**Source :** Vaccine . 2007; 25 (20) : 4064-4072
**ISSN :** 0264-410X
**CODEN :** VACCDE
**Date de publication :** 2007
**Pays de publication :** United Kingdom
**Langue(s) :** English
**Type de document :** Serial
**Nombre de références :** 39 ref.

**Résumé :** The ongoing H5N1 epidemic is currently affecting a number of avian species, including waterfowl. These birds appear to have an important role as reservoirs of infection and comprehensive data on the efficacy of vaccination is currently lacking. The present paper reports the effect of a two dose vaccination programme with a conventional inactivated product on infection, lateral spread, shedding and presence of virus in commodities such as meat and viscera of Pekin ducks. Vaccination of this species appears to be efficacious in suppressing viral shedding, and preventing viraemia and lateral spread of infection to unvaccinated and vaccinated Pekin ducks.

**Code(s) de classement :** 002A05F04

**Descripteur(s) anglais**
*Descripteur(s) :* Inactivated strain; Dissemination; Vaccination; Food; Toxicity; Avian influenza
*Desc. génériques :* Immunology; Pharmacology; Applied microbiology; Microbiology; Biological sciences; Infection; Viral disease
**Descripteur(s) français**
*Descripteur(s) :* Souche inactivee; Dissemination; Vaccination; Aliment; Toxicite; Grippe aviaire
*Desc. génériques :* Immunologie; Pharmacologie; Microbiologie appliquee; Microbiologie; Sciences biologiques; Infection; Virose
**Localisation :** INIST, Shelf number 20289, INIST No. 354000149579560170

**Origine de la notice :** INIST

*070263623*
**PASCAL**

# Comparison of neutralising antibody assays for detection of antibody to influenza A/H3N2 viruses : An international collaborative study

**Titre :** Comparison of neutralising antibody assays for detection of antibody to influenza A/H3N2 viruses : An international collaborative study

**Auteur(s) :** STEPHENSON Iain; GAINES DAS Rose; WOOD John M; KATZ Jacqueline M
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**Source :** Vaccine . 2007; 25 (20) : 4056-4063
**ISSN :** 0264-410X
**CODEN :** VACCDE
**Date de publication :** 2007
**Pays de publication :** United Kingdom
**Langue(s) :** English
**Type de document :** Serial
**Nombre de références :** 18 ref.

**Résumé :** A study was performed to investigate the reproducibility of haemagglutinin-inhibition (HI) and virus neutralising (VN) assays for detection of anti-influenza antibody. Participants in 11 laboratories from eight countries measured antibody to egg-grown A/Japan/434/2003, cell-grown A/Japan/434/2003 and A/Panama/2007/99 (H3N2) viruses in 18 human and two post-infection ferret sera. There was significant intra-laboratory assay variability for VN compared to HI. For replicate assays within laboratories, 14/410 (3%) and 130/631 (21%) titres differed by >2-fold ($p < 0.0001$), and 0/410 (0%) and 35/631 (6%) titres differed by >5-fold ($p < 0.0001$) by HI and VN, respectively. Although both assays showed inter-laboratory variation, VN assays were significantly more variable than HI. Median geometric coefficients of variation (GCV) forVN assays with each virus were 256%, 323% and 359% compared to 138%, 155% and 261% with HI. A serum standard improved inter-laboratory agreement and reduced median GCVs. This study raises concern about comparability of serology results from H5N1 vaccine trials and it is proposed that an International Standard for influenza H5N 1 antibody is developed.

**Code(s) de classement :** 002A05F04

**Descripteur(s) anglais**
*Descripteur(s) :* Neutralizing antibody; Detection; Serology; Influenza A
*Desc. génériques :* Immunology; Pharmacology; Applied microbiology; Microbiology; Biological sciences; Viral disease; Infection
**Descripteur(s) français**
*Descripteur(s) :* Anticorps neutralisant; Detection; Serologie; Grippe A
*Desc. génériques :* Immunologie; Pharmacologie; Microbiologie appliquee; Microbiologie; Sciences biologiques; Virose; Infection
**Localisation :** INIST, Shelf number 20289, INIST No. 354000149579560160

**Origine de la notice :** INIST

*070263587*
**PASCAL**

# Prophylactic effects of chitin microparticles on highly pathogenic H5N1 influenza virus

**Titre :** Prophylactic effects of chitin microparticles on highly pathogenic H5N1 influenza virus

**Auteur(s) :** ICHINOHE Takeshi; NAGATA Noriyo; STRONG Peter; TAMURA Shin Ichi; TAKAHASHI Hidehiro; NINOMIYA Ai; IMAI Masaki; ODAGIRI Takato; TASHIRO Masato; SAWA Hirofumi; CHIBA Joe; KURATA Takeshi; SATA Tetsutaro; HASEGAWA Hideki
**Affiliation(s) :** Department of Pathology, National Institute of Infectious Diseases, Gakuen, Musashimurayama-shi, Tokyo, Japan; Department of Biological Science and Technology, Tokyo University of Science, Yamazaki, Noda, Chiba, Japan; CMP Therapeutics Ltd, Oxford, United Kingdom; Department of Virology III, National Institute of Infectious Diseases, Gakuen, Musashimurayama-shi, Tokyo, Japan; Department of Molecular Pathobiology, 21st Century COE Program for Zoonosis Control, Hokkaido University Research Center for Zoonosis Control, Kita-ku, Sapporo, Japan

**Source :** Journal of medical virology. 2007; 79 (6) : 811-819
**ISSN :** 0146-6615
**CODEN :** JMVIDB
**Date de publication :** 2007
**Pays de publication :** United States
**Langue(s) :** English
**Type de document :** Serial
**Nombre de références :** 3/4 p.

**Résumé :** Highly pathogenic avian influenza virus (H5N1) is an emerging pathogen with the potential to cause great harm to humans, and there is concern about the potential for a new influenza pandemic. This virus is resistant to the antiviral effects of interferons and tumor necrosis factor-<alpha>. However, the mechanism of interferon-independent protective innate immunity is not well understood. The prophylactic effects of chitin microparticles as a stimulator of innate mucosal immunity against a recently obtained strain of H5N1 influenza virus infection were examined in mice. Clinical parameters and the survival rate of mice treated by intranasal application of chitin microparticles were significantly improved compared to non-treated mice after a lethal influenza virus challenge. Flow cytometric analysis revealed that the number of natural killer cells that expressed tumor necrosis factor-related apoptosis-inducing ligand (TRAIL) and that had migrated into the cervical lymph node was markedly increased (26-fold) after intranasal treatment with chitin microparticles. In addition, the level of IL-6 and interferon-gamma-inducible protein-10 (IP-10) in the nasal mucosa after H5N1 influenza virus challenge was decreased by prophylactictreatmentwith chitin microparticles. These results suggest that prophylactic intranasal administration of chitin microparticles enhanced the local accumulation of natural killer cells and suppressed hyper-induction of cytokines, resulting in an innate immune response to prevent pathogenesis of H5N1 influenza virus.

**Code(s) de classement :** 002A05C10; 002B05C02J; 002A05C04

**Descripteur(s) anglais**
*Descripteur(s) :* Influenzavirus; Prevention; Pathogenicity; Natural immunity; Avian influenza
*Desc. génériques :* Virology; Microbiology; Biological sciences; Virology; Infectious diseases; Medical sciences; Virology; Microbiology; Biological sciences; Orthomyxoviridae; Virus; Infection; Viral disease
**Descripteur(s) français**
*Descripteur(s) :* Influenzavirus; Prevention; Pouvoir pathogene; Immunite naturelle; Grippe aviaire
*Desc. génériques :* Virologie; Microbiologie; Sciences biologiques; Virologie; Maladies infectieuses; Sciences medicales; Virologie; Microbiologie; Sciences biologiques; Orthomyxoviridae; Virus; Infection; Virose
**Localisation :** INIST, Shelf number 17422, INIST No. 354000149577660210

**Origine de la notice :** INIST

*070263541*
**PASCAL**

# Surveillance for reassortant virus by multiplex reverse transcription-PCR specific for eight genomic segments of avian influenza A H5N1 viruses

**Titre :** Surveillance for reassortant virus by multiplex reverse transcription-PCR specific for eight genomic segments of avian influenza A H5N1 viruses

**Auteur(s) :** AUEWARAKUL Prasert; SANGSIRIWUT Kantima; CHAICHOUNE Kridsda; THITITHANYANONT Arunee; WIRIYARAT Witthawat; SONGSERM Taweesak; PONAK NGUEN Rasameepen; PRASERTSOPON Jarunee; POORUK Phisanu; SAWANPANYALERT Pathom; RATANAKORN Parntep; PUTHAVATHANA Pilaipan
**Affiliation(s) :** Department of Microbiology, Faculty of Medicine, Siriraj Hospital, Bangkok, Thailand; Faculty of Veterinary Science, Nakhon Pathom, Thailand; Faculty of Science, Bangkok, Thailand; Mahidol University, Faculty of Veterinary Medicine, Kasetsart University, Nakhon Pathom, Thailand; Department of Medical Sciences, Ministry of Public Health, Nonthaburi, Thailand

**Source :** Journal of clinical microbiology Print. 2007; 45 (5) : 1637-1639
**ISSN :** 0095-1137
**CODEN :** JCMIDW
**Date de publication :** 2007
**Pays de publication :** United States
**Langue(s) :** English
**Type de document :** Serial
**Nombre de références :** 5 ref.

**Résumé :** Avian influenza H5N1 virus is a global threat. An emergence of a reassortant virus with a pandemic potential is a major concern. Here we describe a multiplex reverse transcription-PCR assay that is specific for the eight genomic segments of the currently circulating H5N1 viruses to facilitate surveillance for a virus resulting from reassortment between human influenza virus and the H5N1 virus.

**Code(s) de classement :** 002A05C10; 002B05

**Descripteur(s) anglais**
*Descripteur(s) :* Virus; Avian influenzavirus; Multiplex polymerase chain reaction; Reverse transcription polymerase chain reaction; Genomics; Microbiology; Genetic reassortment; Avian influenza
*Desc. génériques :* Virology; Microbiology; Biological sciences; Infectious diseases; Medical sciences; Influenzavirus A; Orthomyxoviridae; Infection; Viral disease
**Descripteur(s) français**
*Descripteur(s) :* Virus; Influenzavirus aviaire; Reaction chaine polymerase multiplex; Reaction chaine polymerase RT; Genomique; Microbiologie; Reassortiment genetique; Grippe aviaire
*Desc. génériques :* Virologie; Microbiologie; Sciences biologiques; Maladies infectieuses; Sciences medicales; Influenzavirus A; Orthomyxoviridae; Infection; Virose
**Localisation :** INIST, Shelf number 17088, INIST No. 354000149466030430

**Origine de la notice :** INIST


 

*070263522*
**PASCAL**

# Design and validation of an H5 taqman real-time one-step reverse transcription-PCR and confirmatory assays for diagnosis and verification of influenza A virus H5 infections in humans

**Titre :** Design and validation of an H5 taqman real-time one-step reverse transcription-PCR and confirmatory assays for diagnosis and verification of influenza A virus H5 infections in humans

**Auteur(s) :** ELLIS Joanna S; SMITH Joanne W; BRAHAM Sharleen; LOCK Matthew; BARLOW Katrina; ZAMBON Maria C
**Affiliation(s) :** Centre for Infections, Health Protection Agency, 61 Colindale Avenue, Colindale, London NW9 5HT, United Kingdom

**Source :** Journal of clinical microbiology Print. 2007; 45 (5) : 1535-1543
**ISSN :** 0095-1137
**CODEN :** JCMIDW
**Date de publication :** 2007
**Pays de publication :** United States
**Langue(s) :** English
**Type de document :** Serial
**Nombre de références :** 35 ref.

**Résumé :** Increasing diversity among influenza H5N1 viruses has resulted in the need for sensitive and specific diagnostic assays, fully validated for the detection of H5 viruses belonging to all hemagglutinin (HA) clades, particularly the recently circulating H5N1 viruses of clade 2. In this report, the development and validation of a real-time, one-step TaqMan reverse transcription-PCR (RT-PCR) assay specific for the detection of influenza A H5 viruses from clades 1,1', 2, and 3 is described. The real-time assay for H5 virus was shown to be highly sensitive, detecting H5 virus levels of <1 PFU from each of the HA clades. Specificity of the H5 RT-PCR for influenza A H5 viruses was demonstrated by using influenza A viruses of different subtypes, clinical samples containing influenza A viruses H1N1, H3N2, and H5N1, influenza B viruses, and other respiratory viruses. The usefulness of the inclusion of a distinguishable assay positive control and of confirmatory assays for the laboratory diagnosis and verification of H5 virus infections was demonstrated. A real-time RT-PCR pyrose-quencing assay, a restriction enzyme digestion assay, and direct sequencing of the H5 real-time RT-PCR amplicon were validated for the confirmation of H5 detection by the diagnostic real-time assay. The H5 real-time assay was applied to diagnostic testing for suspected cases of influenza A virus H5 infection in the United Kingdom. Influenza A H5 viruses were not detected in the cases analyzed; however, influenza A H3N2 virus was detected in 57% of the suspected cases of H5. The H5 TaqMan real-time RT-PCR and confirmatory assays will be useful tools for the laboratory surveillance and rapid diagnosis of H5 infections in humans.

**Code(s) de classement :** 002A05C10; 002B05

**Descripteur(s) anglais**
*Descripteur(s) :* Influenza A virus; Human; Real time; Reverse transcription polymerase chain reaction; Diagnosis; Microbiology; Influenza A
*Desc. génériques :* Virology; Microbiology; Biological sciences; Infectious diseases; Medical sciences; Influenzavirus A; Orthomyxoviridae; Virus; Viral disease; Infection
**Descripteur(s) français**
*Descripteur(s) :* Virus grippal A; Homme; Temps reel; Reaction chaine polymerase RT; Diagnostic; Microbiologie; Grippe A
*Desc. génériques :* Virologie; Microbiologie; Sciences biologiques; Maladies infectieuses; Sciences medicales; Influenzavirus A; Orthomyxoviridae; Virus; Virose; Infection
**Localisation :** INIST, Shelf number 17088, INIST No. 354000149466030240

**Origine de la notice :** INIST

*070260391*
**PASCAL**

# An RNA conformational shift in recent H5N1 influenza A viruses

**Titre :** An RNA conformational shift in recent H5N1 influenza A viruses

**Auteur(s) :** GULTYAEV Alexander P; HEUS Hans A; OLSTHOORN Rene C L
**Affiliation(s) :** Department of Biophysical Chemistry, Institute for Molecules and Materials, Radboud University Nijmegen, P.O.Box 9010, 6500 GL Nijmegen, Netherlands; Leiden Institute of Chemistry, Leiden University, P.O.Box 9502, 2300 RA Leiden, Netherlands; Leiden Institute of Biology, Leiden University, P.O.Box 9516, 2300 RA Leiden, Netherlands

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**Date de publication :** 2007
**Pays de publication :** United Kingdom
**Langue(s) :** English
**Type de document :** Serial
**Nombre de références :** 1/4 p.

**Résumé :** Recent outbreaks of avian influenza are being caused by unusually virulent H5N1 strains. It is unknown what makes these recent H5N1 strains more aggressive than previously circulating strains. Here, we have compared more than 3000 RNA sequences of segment 8 of type A influenza viruses and found a unique single nucleotide substitution typically associated with recent H5N1 strains. By phylogenetic analysis, biochemical and biophysical experiments, we demonstrate that this substitution dramatically affects the equilibrium between a hairpin and a pseudoknot conformation near the 3' splice-site of the NS gene. This conformational shift may have consequences for splicing regulation of segment 8 mRNA. Our data suggest that besides changes at the protein level, changes in RNA secondary structure should be seriously considered when attempting to explain influenza virus evolution.

**Code(s) de classement :** 002A01B

**Descripteur(s) anglais**
*Descripteur(s) :* RNA; Conformation; Shift; Avian influenzavirus; Comparative study; Sequence; Substitution; Hairpin loop; Regulationcontrol; Structure; Scope note
*Desc. génériques :* Biological sciences; Influenzavirus A; Orthomyxoviridae; Virus; Bioinformatics
**Descripteur(s) français**
*Descripteur(s) :* RNA; Conformation; Decalage; Influenzavirus aviaire; Etude comparative; Sequence; Substitution; Structure double helice epingle; Regulation; Structure; Note application; note decouverte
*Desc. génériques :* Sciences biologiques; Influenzavirus A; Orthomyxoviridae; Virus; Bioinformatique
**Localisation :** INIST, Shelf number 21331, INIST No. 354000159758410020

**Origine de la notice :** LGMI

*070257259*
**PASCAL**

# Hemagglutinin pseudotyped lentiviral particles : Characterization of a new method for avian H5N1 influenza sero-diagnosis

**Titre :** Hemagglutinin pseudotyped lentiviral particles : Characterization of a new method for avian H5N1 influenza sero-diagnosis

**Auteur(s) :** NEFKENS Isabelle; GARCIA Jean Michel; CHU SHUI LING; LAGARDE Nadege; NICHOLLS John; DONG JIANG TANG; PEIRIS Malik; BUCHY Philippe; ALTMEYER Ralf
**Affiliation(s) :** HKU-Pasteur Research Center, Hong Kong; Departement of Pathology, University of Hong Kong, Hong Kong; University of Hong Kong, Hong Kong; Institut Pasteur in Cambodia, Phnom Penh, Cambodia

**Source :** Journal of clinical virology. 2007; 39 (1) : 27-33
**ISSN :** 1386-6532
**Date de publication :** 2007
**Pays de publication :** Netherlands
**Langue(s) :** English
**Type de document :** Serial
**Nombre de références :** 3/4 p.

**Résumé :** Background: Highly pathogenic avian influenza (HPAI) H5N1 has spread globally in birds and infected over 270 humans with an apparently high mortality rate. Serologic studies to determine the extent of asymptomatic H5N1 infection in humans and other mammals and to investigate the immunogenicity of current H5N1 vaccine candidates have been hampered by the biosafety requirements needed for H5N1 microneutralization tests. Objective: Development of a serodiagnostic tool for highly pathogenic influenza that reproduces H5N1 biology but can be used with less biohazard. Study Design: We have generated and evaluated H5 hemagglutinin pseudotyped lentiviral particles encoding the luciferase reporter (H5pp). Results: H5pp entry into target cells depends on a2-3 cell surface sialic acids and requires low pH for membrane fusion. H5pp infectivity is specifically neutralized by sera from patients and animals infected with H5N1 and correlates well with conventional microneutralization test. Conclusions: H5pp reproduce H5N1 influenza virus entry into target cells and potentially provides a high-throughput and safe method for sero-epidemiology.

**Code(s) de classement :** 002A05C10; 002B05C02J; 002A05C08

**Descripteur(s) anglais**
*Descripteur(s) :* Hemagglutinin; Method; Diagnosis; Microbiology; Virology; Avian influenza
*Desc. génériques :* Virology; Microbiology; Biological sciences; Virology; Infectious diseases; Medical sciences; Virology; Microbiology; Biological sciences; Infection; Viral disease
**Descripteur(s) français**
*Descripteur(s) :* Hemagglutinine; Methode; Diagnostic; Microbiologie; Virologie; Grippe aviaire
*Desc. génériques :* Virologie; Microbiologie; Sciences biologiques; Virologie; Maladies infectieuses; Sciences medicales; Virologie; Microbiologie; Sciences biologiques; Infection; Virose
**Localisation :** INIST, Shelf number 26272, INIST No. 354000149450680050

**Origine de la notice :** INIST


 

*070253407*
**PASCAL**

# Vaccination against highly pathogenic avian influenza H5N1 virus in zoos using an adjuvanted inactivated H5N2 vaccine

**Titre :** Vaccination against highly pathogenic avian influenza H5N1 virus in zoos using an adjuvanted inactivated H5N2 vaccine

**Auteur(s) :** PHILIPPA Joost; BAAS Chantal; BEYER Walter; BESTEBROER Theo; FOUCHIER Ron; SMITH Derek; SCHAFTENAAR Willem; OSTERHAUS Ab
**Affiliation(s) :** Institute of Virology, Erasmus MC, P.O. Box 2040, 3000 CA, Rotterdam, Netherlands; Rotterdam Zoo, P.O. Box 532, 3000 AM, Rotterdam, Netherlands; Department of Zoology, University of Cambridge, Downing Street, Cambridge CB2 3EJ, United Kingdom

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**ISSN :** 0264-410X
**CODEN :** VACCDE
**Date de publication :** 2007
**Pays de publication :** United Kingdom
**Langue(s) :** English
**Type de document :** Serial
**Nombre de références :** 47 ref.

**Résumé :** Highly pathogenic avian influenza (HPAI) H5N1 virus infections have recently caused unprecedented morbidity and mortality in a wide range of avian species. European Commission directive 2005/744/EC allowed vaccination in zoos under strict conditions, while reducing confinement measures. Vaccination with a commercial H5N2 vaccine with vaccine doses adapted to mean body weight per species was safe, and proved immunogenic throughout the range of species tested, with some variations between and within taxonomic orders. After booster vaccination the overall homologous geometric mean titre (GMT) to the vaccine strain, measured in 334 birds, was 190 (95% CI: 152-236), and 80.5% of vaccinated birds developed a titre of >=40. Titres to the HPAI H5N1 virus followed a similar trend, but were lower (GMT: 61 (95% CI: 49-76); 61% >=40). The breadth of the immune response was further demonstrated by measuring antibody titres against prototype strains of four antigenic clades of currently circulating H5N1 viruses. These data indicate that vaccination should be regarded as a beneficial component of the preventive measures (including increased bio-security and monitoring) that can be undertaken in zoos to prevent an outbreak of and decrease environmental contamination by HPAI H5N1 virus, while alleviating confinement measures.

**Code(s) de classement :** 002A05F04; 002A05C10

**Descripteur(s) anglais**
*Descripteur(s) :* Avian influenzavirus; Vaccination; Pathogenicity; Immunological adjuvant; Inactivated strain; Avian influenza
*Desc. génériques :* Immunology; Pharmacology; Applied microbiology; Microbiology; Biological sciences; Virology; Microbiology; Biological sciences; Influenzavirus A; Orthomyxoviridae; Virus; Infection; Viral disease
**Descripteur(s) français**
*Descripteur(s) :* Influenzavirus aviaire; Vaccination; Pouvoir pathogene; Adjuvant immunologique; Souche inactivee; Grippe aviaire
*Desc. génériques :* Immunologie; Pharmacologie; Microbiologie appliquee; Microbiologie; Sciences biologiques; Virologie; Microbiologie; Sciences biologiques; Influenzavirus A; Orthomyxoviridae; Virus; Infection; Virose
**Localisation :** INIST, Shelf number 20289, INIST No. 354000149427680080

**Origine de la notice :** INIST

*070253403*
**PASCAL**

# Influenza neuraminidase antibodies provide partial protection for chickens against high pathogenic avian influenza infection

**Titre :** Influenza neuraminidase antibodies provide partial protection for chickens against high pathogenic avian influenza infection

**Auteur(s) :** SYLTE Matthew J; HUBBY Bolyn; SUAREZ David L
**Affiliation(s) :** Southeast Poultry Research Laboratory, Agricultural Research Service, U.S. Department of Agriculture, 934 College Station Road, Athens, GA 30605, United States; Alphavax Inc., P.O. Box 110307, Research Triangle Park, NC 27709-0307, United States

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**CODEN :** VACCDE
**Date de publication :** 2007
**Pays de publication :** United Kingdom
**Langue(s) :** English
**Type de document :** Serial
**Nombre de références :** 35 ref.

**Résumé :** Protection of chickens against avian influenza (AI) is mostly attributed to production of antibodies against the viral glycoprotein hemagglutinin, whereas less is known about the protective role of antibodies to the other surface glycoprotein neuraminidase (NA). Therefore, vaccines encoding NA antigen (e.g., DNA and alphavirus-based virus like replicon particles (VRP)) or baculovirus-expressed recombinant NA (rN2) were tested for their ability to protect against highly pathogenic AI (HPAI) in chickens. Vaccination with A/Pheasant/Maryland/4457/93 (Ph/MD) rN2 protein produced significantly higher levels of NA-inhibition (NI) activity and 88% protection from HPAI H5N2 challenge than vaccination with Ph/MD N2 DNA (25% protection). Vaccination with Ph/MD N2 VRP a minimum of two times also produced high levels of NI activity and protection against HPAI challenge (63% protection). Vaccination with VRP encoding an N2 gene that was genetically distant from the challenge virus N2 failed to protect chickens. Vaccines producing higher levels of NI activity conferred partial protection, but failed to affect viral shedding. Consideration of the homology between vaccine and challenge virus isolate NA genes may provide improved immunity if high levels of NI activity are obtained.

**Code(s) de classement :** 002A05F04

**Descripteur(s) anglais**
*Descripteur(s) :* Chicken; Exo <alpha> sialidase; Antibody; Pathogenicity; Vaccine; Avian influenza
*Desc. génériques :* Immunology; Pharmacology; Applied microbiology; Microbiology; Biological sciences; Aves; Vertebrata; O Glycosidases; Glycosidases; Hydrolases; Enzyme; Infection; Viral disease; Poultry; Veterinary; Farming animal
**Descripteur(s) français**
*Descripteur(s) :* Poulet; Exo <alpha> sialidase; Anticorps; Pouvoir pathogene; Vaccin; Grippe aviaire
*Desc. génériques :* Immunologie; Pharmacologie; Microbiologie appliquee; Microbiologie; Sciences biologiques; Aves; Vertebrata; O Glycosidases; Glycosidases; Hydrolases; Enzyme; Infection; Virose; Volaille; Veterinaire; Animal elevage
**Localisation :** INIST, Shelf number 20289, INIST No. 354000149427680040

**Origine de la notice :** INIST

*070253366*
**PASCAL**

# Role of host cytokine responses in the pathogenesis of avian H5N1 influenza viruses in mice

**Titre :** Role of host cytokine responses in the pathogenesis of avian H5N1 influenza viruses in mice

**Auteur(s) :** SZRETTER Kristy J; GANGAPPA Shivaprakash; XUIHUA LU; SMITH Chalanda; SHIEH Wun Ju; ZAKI Sherif R; SAMBHARA Suryaprakash; TUMPEY Terrence M; KATZ Jacqueline M
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**Pays de publication :** United States
**Langue(s) :** English
**Type de document :** Serial

**Résumé :** Highly pathogenic avian H5N1 influenza viruses are now widespread in poultry in Asia and have recently spread to some African and European countries. Interspecies transmission of these viruses to humans poses a major threat to public health. To better understand the basis of pathogenesis of H5N1 viruses, we have investigated the role of proinflammatory cytokines in transgenic mice deficient in interleukin-6 (IL-6), macrophage inflammatory protein 1 alpha (MIP-la), IL-1 receptor (IL-1R), or tumor necrosis factor receptor 1 (TNFR1) by the use of two avian influenza A viruses isolated from humans, A/Hong Kong/483/97 (HK/483) and A/Hong Kong/486/97 (HK/486), which exhibit high and low lethality in mice, respectively. The course of disease and the extent of virus replication and spread in IL-6- and MIP-1<alpha>-deficient mice were not different from those observed in wild-type mice during acute infection with 1,000 50% mouse infective doses of either H5N1 virus. However, with HK/486 virus, IL-1R-deficient mice exhibited heightened morbidity and mortality due to infection, whereas no such differences were observed with the more virulent HK/483 virus. Furthermore, TNFR1-deficient mice exhibited significantly reduced morbidity following challenge with either H5N1 virus but no difference in viral replication and spread or ultimate disease outcome compared with wild-type mice. These results suggest that TNF-<alpha> may contribute to morbidity during H5N1 influenza virus infection, while IL-1 may be important for effective virus clearance in nonlethal H5N1 disease.

**Code(s) de classement :** 002A05C10; 002A05C04

**Descripteur(s) anglais**
*Descripteur(s) :* Avian influenzavirus; Mouse; Cytokine; Pathogenesis; Virology; Avian influenza
*Desc. génériques :* Virology; Microbiology; Biological sciences; Virology; Microbiology; Biological sciences; Influenzavirus A; Orthomyxoviridae; Virus; Rodentia; Mammalia; Vertebrata; Infection; Viral disease
**Descripteur(s) français**
*Descripteur(s) :* Influenzavirus aviaire; Souris; Cytokine; Pathogenie; Virologie; Grippe aviaire
*Desc. génériques :* Virologie; Microbiologie; Sciences biologiques; Virologie; Microbiologie; Sciences biologiques; Influenzavirus A; Orthomyxoviridae; Virus; Rodentia; Mammalia; Vertebrata; Infection; Virose
**Localisation :** INIST, Shelf number 13592, INIST No. 354000149370400190

**Origine de la notice :** INIST

*070253357*
**PASCAL**

# Evolution and molecular epidemiology of H9N2 influenza a viruses from quail in southern China, 2000 to 2005

**Titre :** Evolution and molecular epidemiology of H9N2 influenza a viruses from quail in southern China, 2000 to 2005

**Auteur(s) :** XU K M; LI K S; SMITH G J D; LI J W; TAI H; ZHANG J X; WEBSTER R G; PEIRIS J S M; CHEN H; GUAN Y
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**Date de publication :** 2007
**Pays de publication :** United States
**Langue(s) :** English
**Type de document :** Serial

**Résumé :** H9N2 influenza viruses have become established and maintain long-term endemicity in terrestrial poultry in Asian countries. Occasionally these viruses transmit to other mammals, including humans. Increasing epidemiological and laboratory findings suggest that quail may be an important host, as they are susceptible to different subtypes of influenza viruses. To better understand the role of quail in influenza virus ecology and evolution, H9N2 viruses isolated from quail during 2000 to 2005 were antigenically and genetically characterized. Our results showed that H9N2 viruses are prevalent year-round in southern China and replicate mainly asymptomatically in the respiratory tract of quail. Genetic analysis revealed that both the G1-like and Ck/Bei-like H9N2 lineages were cocirculating in quail since 2000. Phylogenetic analyses demonstrated that most of the isolates tested were double- or multiple-reassortant variants, with four G1-like and 16 Ck/Bei-like genotypes recognized. A novel genotype of Gl-like virus became predominant in quail since 2003, while multiple Ck/Bei-like genotypes were introduced into quail, wherein they incorporated G1-like gene segments, but none of them became established in this host. Those Ck/Bei-like reassortants generated in quail have then been introduced into other poultry. These complex interactions form a two-way transmission system between quail and other types of poultry. The present study provides evidence that H9N2 and H5N1 subtype viruses have also exchanged gene segments to generate currently circulating reassortants of both subtypes that have pandemic potential. Continuing influenza virus surveillance in poultry is critical to understanding the genesis and emergence of potentially pandemic strains in this region.

**Code(s) de classement :** 002A05C10

**Descripteur(s) anglais**
*Descripteur(s) :* Quail; Molecular evolution; Genotype; China; Virology; Influenza A
*Desc. génériques :* Virology; Microbiology; Biological sciences; Aves; Vertebrata; Asia; Viral disease; Infection
**Descripteur(s) français**
*Descripteur(s) :* Caille; Evolution moleculaire; Genotype; Chine; Virologie; Grippe A
*Desc. génériques :* Virologie; Microbiologie; Sciences biologiques; Aves; Vertebrata; Asie; Virose; Infection
**Localisation :** INIST, Shelf number 13592, INIST No. 354000149370400100

**Origine de la notice :** INIST

*070252285*
**PASCAL**

# Efficacy of orally administered T-705 on lethal avian influenza a (HSN1) virus infections in mice

**Titre :** Efficacy of orally administered T-705 on lethal avian influenza a (HSN1) virus infections in mice

**Auteur(s) :** SIDWELL Robert W; BARNARD Dale L; DAY Craig W; SMEE Donald F; BAILEY Kevin W; WONG Min Hui; MORREY John D; FURUTA Yousuke
**Affiliation(s) :** Institute for Antiviral Research, Utah State University, 5600 Old Main Hill, Logan, Utah 84322-5600, United States; Toyama Chemical Co., Ltd., 3-2-5 Nishishinjuku, Tokyo, Japan

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**ISSN :** 0066-4804
**CODEN :** AACHAX
**Date de publication :** 2007
**Pays de publication :** United States
**Langue(s) :** English
**Type de document :** Serial
**Nombre de références :** 27 ref.

**Résumé :** T-705 (6-fluoro-3-hydroxy-2-pyrazinecarboxamide) was inhibitory to four strains of avian H5N1 influenza virus in MDCK cells, with the 90% effective concentrations ranging from 1.3 to 7.7 <mu>M, as determined by a virus yield reduction assay. The efficacy was less than that exerted by oseltamivir carboxylate or zanamivir but was greater than that exerted by ribavirin. Experiments with mice lethally infected with influenza A/Duck/ MN/1525/81 (H5N1) virus showed that T-705 administered per os once, twice, or four times daily for 5 days beginning 1 h after virus exposure was highly inhibitory to the infection. Dosages from 30 to 300 mg/kg of body weight/day were well tolerated; each prevented death, lessened the decline of arterial oxygen saturation (SaO<sub>2), and inhibited lung consolidation and lung virus titers. Dosages from 30 to 300 mg/kg/day administered once or twice daily also significantly prevented the death of the mice. Oseltamivir (20 mg/kg/day), administered per os twice daily for 5 days, was tested in parallel in two experiments; it was only weakly effective against the infection. The four-times-daily T-705 treatments at 300 mg/kg/day could be delayed until 96 h after virus exposure and still significantly inhibit the infection. Single T-705 treatments administered up to 60 h after virus exposure also prevented death and the decline of SaO<sub>2. Characterization of the pathogenesis of the duck influenza H5N1 virus used in these studies was undertaken; although the virus was highly pathogenic to mice, it was less neurotropic than has been described for clinical isolates of the H5N1 virus. These data indicate that T-705 may be useful for the treatment of avian influenza virus infections.

**Code(s) de classement :** 002B02S; 002B05C02C

**Descripteur(s) anglais**
*Descripteur(s) :* Treatment efficiency; Oral administration; Mortality; Influenza A virus; Infection; Animal; Mouse; Avian influenza
*Desc. génériques :* Infectious diseases; Pharmacology; Medical sciences; Virology; Infectious diseases; Medical sciences; Influenzavirus A; Orthomyxoviridae; Virus; Rodentia; Mammalia; Vertebrata; Viral disease
**Descripteur(s) français**
*Descripteur(s) :* Efficacite traitement; Voie orale; Mortalite; Virus grippal A; Infection; Animal; Souris; Forme fatale; Grippe aviaire
*Desc. génériques :* Maladies infectieuses; Pharmacologie; Sciences medicales; Virologie; Maladies infectieuses; Sciences medicales; Influenzavirus A; Orthomyxoviridae; Virus; Rodentia; Mammalia; Vertebrata; Virose
**Localisation :** INIST, Shelf number 13334, INIST No. 354000149365390070

**Origine de la notice :** INIST

*070245051*
**PASCAL**

# Real-time RT-PCR for H5N1 avian influenza A virus detection

**Titre :** Real-time RT-PCR for H5N1 avian influenza A virus detection

**Auteur(s) :** WEIJUN CHEN; BO HE; CHANGGUI LI; XIAOWEI ZHANG; WEILI WU; XUYANG YIN; BAOXING FAN; XINGLIANG FAN; JIAN WANG
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**Source :** Journal of medical microbiology. 2007; 56 (5) : 603-607
**ISSN :** 0022-2615
**CODEN :** JMMIAV
**Date de publication :** 2007
**Pays de publication :** United States
**Langue(s) :** English
**Type de document :** Serial
**Nombre de références :** 3/4 p.

**Résumé :** The recent recurrence of highly pathogenic avian influenza virus A H5N1 was firstly reported in mid-December 2003 and continued through 2005. This study describes a sensitive and specific real-time RT-PCR method for the detection of influenza A subtype H5 and for monitoring virus loads. Using serial dilutions of influenza A H5N1 cultures, this assay reproducibly determined the lowest detection limit to be approximately 5<multiplication sign>10<sup>-<sup>2 50% egg infective doses (EID<sub>5<sub>0). In contrast, the minimum detection limit was approximately 3 EID<sub>5<sub>0 in conventional RT-PCR with WHO primers and 10 EID<sub>5<sub>0 in antigen-capture ELISA. In tests of serial dilutions of in vitro-transcribed influenza A H5 gene RNA, there was linear amplification from 40 copies to 4<multiplication sign>10<sup>8 copies of target RNA per reaction and approximately six copies, and sometimes even as few as three copies, of target RNA tested positive in our assay. Thirty-five throat swabs from ill birds were tested: 33 samples tested positive using this assay. In comparison, 27, 13 and 19 samples tested positive using conventional RT-PCR, antigen-capture ELISA and virus isolation, respectively. To evaluate further the sensitivity of this real-time RT-PCR, a standard panel and 60 H5N1 isolates that contained different clades of influenza virus A/H5N1 were tested and all tested positive. To evaluate the specificity of the assay, 60 throat swabs from patients infected with influenza virus A H1 were tested; all were negative. Thirteen other viruses were also tested and all tested negative.

**Code(s) de classement :** 002A05C10; 002B05

**Descripteur(s) anglais**
*Descripteur(s) :* Avian influenzavirus; Influenza A virus; Real time; Reverse transcription polymerase chain reaction; Detection; Microbiology; Avian influenza
*Desc. génériques :* Virology; Microbiology; Biological sciences; Infectious diseases; Medical sciences; Influenzavirus A; Orthomyxoviridae; Virus; Infection; Viral disease
**Descripteur(s) français**
*Descripteur(s) :* Influenzavirus aviaire; Virus grippal A; Temps reel; Reaction chaine polymerase RT; Detection; Microbiologie; Grippe aviaire
*Desc. génériques :* Virologie; Microbiologie; Sciences biologiques; Maladies infectieuses; Sciences medicales; Influenzavirus A; Orthomyxoviridae; Virus; Infection; Virose
**Localisation :** INIST, Shelf number 988B, INIST No. 354000149541280060

**Origine de la notice :** INIST

*070244792*
**PASCAL**

# Highly pathogenic avian influenza H5N1 virus in cats and other carnivores

**Titre :** Highly pathogenic avian influenza H5N1 virus in cats and other carnivores

**Auteur(s) :** THIRY E; ZICOLA A; ADDIE D; EGBERINK H; HANMANN K; LUTZ H; POULET H; HORZINEK M C
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**ISSN :** 0378-1135
**CODEN :** VMICDQ
**Date de publication :** 2007
**Pays de publication :** Netherlands
**Langue(s) :** English
**Type de document :** Serial
**Nombre de références :** 1 p.1/4

**Résumé :** The Asian lineage highly pathogenic avian influenza (HPAI) H5N1 virus is a known pathogen of birds. Only recently, the virus has been reported to cause sporadic fatal disease in carnivores, and its zoonotic potential has been dominating the popular media. Attention to felids was drawn by two outbreaks with high mortality in tigers, leopards and other exotic felids in Thailand. Subsequently, domestic cats were found naturally infected and experimentally susceptible to H5N1 virus. A high susceptibility of the dog to H3N8 equine influenza A virus had been reported earlier, and recently also HPAI H5N1 virus has been identified as a canine pathogen. The ferret, hamster and mouse are suitable as experimental animals; importantly, these species are also kept as pets. Experimental intratracheal and oral infection of cats with an HPAI H5N1 virus isolate from a human case resulted in lethal disease; furthermore, cats have been infected by the feeding of infected chickens. Spread of the infection from experimentally infected to in-contact cats has been reported. The epidemiological role of the cat and other pet animal species in transmitting HPAI H5N1 virus to humans needs continuous consideration and attention.

**Code(s) de classement :** 002A05C10

**Descripteur(s) anglais**
*Descripteur(s) :* Avian influenzavirus; Pathogenicity; Microbiology; Veterinary; Avian influenza
*Desc. génériques :* Virology; Microbiology; Biological sciences; Influenzavirus A; Orthomyxoviridae; Virus; Infection; Viral disease
**Descripteur(s) français**
*Descripteur(s) :* Influenzavirus aviaire; Pouvoir pathogene; Microbiologie; Veterinaire; Grippe aviaire
*Desc. génériques :* Virologie; Microbiologie; Sciences biologiques; Influenzavirus A; Orthomyxoviridae; Virus; Infection; Virose
**Localisation :** INIST, Shelf number 16884, INIST No. 354000149429740030

**Origine de la notice :** INIST


 

*070244777*
**PASCAL**

# Estimating the day of highly pathogenic avian influenza (H7N7) virus introduction into a poultry flock based on mortality data

**Titre :** Estimating the day of highly pathogenic avian influenza (H7N7) virus introduction into a poultry flock based on mortality data

**Auteur(s) :** BOS Marian E H; VAN BOVEN Michiel; NIELEN Mirjam; BOUMA Annemarie; ELBERS Armin R W; NODELIJK Gonnie; KOCH Guus; STEGEMAN Arjan; DE JONG Mart C M
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**Source :** Veterinary research Print. 2007; 38 (3) : 493-504
**ISSN :** 0928-4249
**Date de publication :** 2007
**Pays de publication :** France
**Langue(s) :** English
**Type de document :** Serial
**Nombre de références :** 22 ref.

**Résumé :** Despite continuing research efforts, knowledge of the transmission of the highly pathogenic avian influenza (HPAI) virus still has considerable gaps, which complicates epidemic control. The goal of this research was to develop a model to back-calculate the day HPAI virus is introduced into a flock, based on within-flock mortality data. The back-calculation method was based on a stochastic SEIR (susceptible (S) - latently infected (E) - infectious (I) - removed (= dead; R)) epidemic model. The latent and infectious period were assumed to be gamma distributed. Parameter values were based on experimental H7N7 within-flock transmission data. The model was used to estimate the day of virus introduction based on a defined within-flock mortality threshold (detection rule for determining AI). Our results indicate that approximately two weeks can elapse before a noticeable increase in mortality is observed after a single introduction into a flock. For example, it takes twelve (minimum 11 - - maximum 15) days before AI is detected if the detection rule is fifty dead chickens on two consecutive days in a 10000 chicken flock (current Dutch monitoring rule for notification). The results were robust for flock size and detection rule, but sensitive to the length of the latent and infectious periods. Furthermore, assuming multiple introductions on one day will result in a shorter estimated period between infection and detection. The implications of the model outcomes for detecting and tracing outbreaks of H7N7 HPAI virus are discussed.

**Code(s) de classement :** 002A05C10

**Descripteur(s) anglais**
*Descripteur(s) :* Avian influenzavirus; Influenza A virus; Pathogenicity; Poultry; Models; Microbiology; Veterinary; Avian influenza
*Desc. génériques :* Virology; Microbiology; Biological sciences; Influenzavirus A; Orthomyxoviridae; Virus; Farming animal; Infection; Viral disease
**Descripteur(s) français**
*Descripteur(s) :* Influenzavirus aviaire; Virus grippal A; Pouvoir pathogene; Volaille; Modele; Microbiologie; Veterinaire; Grippe aviaire
*Desc. génériques :* Virologie; Microbiologie; Sciences biologiques; Influenzavirus A; Orthomyxoviridae; Virus; Animal elevage; Infection; Virose
**Localisation :** INIST, Shelf number 14119, INIST No. 354000147039050100

**Origine de la notice :** INIST

 

*070243595*
**PASCAL**

# A vaccination strategy to enhance mucosal and systemic antibody and T cell responses against influenza

**Titre :** A vaccination strategy to enhance mucosal and systemic antibody and T cell responses against influenza

**Auteur(s) :** VAJDY Michael; BAUDNER Barbara; DEL GIUDICE Giuseppe; O' HAGAN Derek
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**ISSN :** 1521-6616
**CODEN :** CLIIFY
**Date de publication :** 2007
**Pays de publication :** United States
**Langue(s) :** English
**Type de document :** Serial
**Nombre de références :** 61 ref.

**Résumé :** Influenza infections are a major cause of mortality and morbidity worldwide. Therefore, there is a need to establish vaccines and immunization protocols that can prevent influenza infections. Herein, we show that one intranasal (IN) followed by one intramuscular (IM) immunizations with a combination of cell culture produced hemagglutinin (HA) antigens derived from 3 different influenza strains induced significantly higher serum hemagglutination inhibition (HI) and serum IgG antibody titers as well as Tcell responses, compared to 2 IM, 2 IN or 1 M followed by 1 IN immunizations. Moreover, while 2 IM immunizations did not induce any antibody responses in nasal secretions or cervical lymph nodes, which drain the nasal mucosa, IN immunizations alone or in combination with IM immunization induced mucosal and local responses. These data show that the IN followed by IM immunization strategy holds promise to significantly raise serum and local antibody and T cell responses against seasonal influenza strains, and possibly pandemic influenza strains, for which no pre-existing immunity exists.

**Code(s) de classement :** 002B06; 002A06

**Descripteur(s) anglais**
*Descripteur(s) :* Vaccination; Prevention; Mucosa; Immune response; Antibody; Humoral immunity; Influenza; Cell culture; Intranasal administration; Intramuscular administration
*Desc. génériques :* Immunology; Immunopathology; Medical sciences; Immunology; Biological sciences; Viral disease; Infection; Immunology; Immunopathology
**Descripteur(s) français**
*Descripteur(s) :* Vaccination; Prevention; Muqueuse; Reponse immune; Anticorps; Immunite humorale; Grippe; Culture cellulaire; Voie intranasale; Voie intramusculaire
*Desc. génériques :* Immunologie; Immunopathologie; Sciences medicales; Immunologie; Sciences biologiques; Virose; Infection; Immunologie; Immunopathologie
**Localisation :** INIST, Shelf number 15461, INIST No. 354000149559350060

**Origine de la notice :** INIST

*070239234*
**PASCAL**

# Influenza immunisation : attitudes and beliefs of UK healthcare workers

**Titre :** Influenza immunisation : attitudes and beliefs of UK healthcare workers

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**Date de publication :** 2007
**Pays de publication :** United Kingdom
**Langue(s) :** English
**Type de document :** Serial
**Nombre de références :** 14 ref.

**Résumé :** Aim: To explore attitudes to influenza immunisation and rates of uptake among staff working in acute hospitals in the UK. Method: A cross-sectional survey of 11 670 healthcare workers in six UK hospitals was carried out using a postal questionnaire. Results: Among 6302 responders (54% of those mailed), 19% had taken up influenza immunisation during winter 2002/3. Vaccination was well tolerated, with a low prevalence of side effects (13%) and associated time off work (2%). The majority of subjects who accepted vaccination (66%) were most strongly influenced by the personal benefits of protection against influenza. Prevention of sickness absence and protection of patients were the prime motivation for only 10% and 7% of subjects, respectively. Among 3967 who declined vaccination, the most common primary demotivators were concern about safety (31%) and efficacy (29%). 22% were most strongly deterred by lack of time to attend for vaccination. Free text answers indicated that 37% declined because of a perceived low ratio of personal benefits to adverse effects. Subjects said they would be persuaded to take up vaccination in future by easier access (36%), more information about personal benefit and risk (34%) and more information about effects on staff absence (24%). Conclusions: These findings indicate that the uptake of influenza immunisation among UK healthcare workers remains low. There is some scope for increasing uptake by improving accessibility and encouragement from professional peers. However, the results suggest that perception of small personal benefit in relation to risk mitigates, importantly, against higher uptake of routine annual influenza vaccination. Thus, resource might better be allocated to ensuring efficient management in epidemic years. The effect of publicity about pandemic influenza on risk perception and vaccine uptake among healthcare workers during winter 2005/6 warrants further study.

**Code(s) de classement :** 002B05C02C; 002B30A05

**Descripteur(s) anglais**
*Descripteur(s) :* Vaccination; Prevention; Immunoprophylaxis; Attitude; Belief; United Kingdom; Influenza; Health staff; Hospital environment; Cross sectional study; Survey; Perception; Awareness; Human
*Desc. génériques :* Virology; Infectious diseases; Medical sciences; Public health; Medical sciences; Europe; Viral disease; Infection
**Descripteur(s) français**
*Descripteur(s) :* Vaccination; Prevention; Immunoprophylaxie; Attitude; Croyance; Royaume Uni; Grippe; Personnel sanitaire; Milieu hospitalier; Etude transversale; Enquete; Perception; Prise conscience; Homme
*Desc. génériques :* Virologie; Maladies infectieuses; Sciences medicales; Sante publique; Sciences medicales; Europe; Virose; Infection
**Localisation :** INIST, Shelf number 5586, INIST No. 354000143514990020

**Origine de la notice :** INIST

*070238477*
**PASCAL**

# Inactivated influenza H5N1 whole-virus vaccine with aluminum adjuvant induces homologous and heterologous protective immunities against lethal challenge with highly pathogenic H5N1 avian influenza viruses in a mouse model

**Titre :** Inactivated influenza H5N1 whole-virus vaccine with aluminum adjuvant induces homologous and heterologous protective immunities against lethal challenge with highly pathogenic H5N1 avian influenza viruses in a mouse model

**Auteur(s) :** NINOMIYA Ai; IMAI Masaki; TASHIRO Masato; ODAGIRI Takato
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**Pays de publication :** United Kingdom
**Langue(s) :** English
**Type de document :** Serial
**Nombre de références :** 26 ref.

**Résumé :** In response to recent outbreaks of H5N1 highly pathogenic avian influenza virus (HPAIV), the development of an effective H5N1 influenza vaccine is urgently important. We assessed the efficacy of two inactivated H5N1 whole-virus vaccines, rgHK213/03 and rgVNJP1203/04, generated by reverse genetics in a mouse model in the presence or absence of aluminum hydroxide (alum) adjuvant. Mice immunized with rgHK213/03 vaccine produced sufficient levels of serum antibodies that were cross-reactive to recent heterologous HPAIV-H5N1 virus, A/Turkey/12/06. The vaccinated mice also elicited protective immunity against challenge with both homologous and heterologous HPAIV-H5N1 viruses. These immune responses were enhanced by addition of alum adjuvant, resulting in antigen sparing of vaccine. On the other hand, mice immunized with rgVNJP1203/04 vaccine had low levels of serum antibodies and less protective immunity than that elicited with rgHK213/03 vaccine regardless of addition of alum adjuvant. Our study suggests that rgHK213/03 vaccine is still useful as a backup vaccine for recent H5N1 viruses and that if rgVNJP1203/04 vaccine is employed, more vaccine antigen would be necessary to induce sufficient immunity.

**Code(s) de classement :** 002A05F04; 002A05C10

**Descripteur(s) anglais**
*Descripteur(s) :* Avian influenzavirus; Mouse; Inactivated strain; Immunological adjuvant; Immunoprotection; Pathogenicity; Animal model; Vaccine; Immune response; Avian influenza
*Desc. génériques :* Immunology; Pharmacology; Applied microbiology; Microbiology; Biological sciences; Virology; Microbiology; Biological sciences; Influenzavirus A; Orthomyxoviridae; Virus; Rodentia; Mammalia; Vertebrata; Infection; Viral disease
**Descripteur(s) français**
*Descripteur(s) :* Influenzavirus aviaire; Souris; Souche inactivee; Adjuvant immunologique; Immunoprotection; Pouvoir pathogene; Modele animal; Vaccin; Reponse immune; Grippe aviaire
*Desc. génériques :* Immunologie; Pharmacologie; Microbiologie appliquee; Microbiologie; Sciences biologiques; Virologie; Microbiologie; Sciences biologiques; Influenzavirus A; Orthomyxoviridae; Virus; Rodentia; Mammalia; Vertebrata; Infection; Virose
**Localisation :** INIST, Shelf number 20289, INIST No. 354000149522470050

**Origine de la notice :** INIST

*070238469*
**PASCAL**

# Avian influenza virus (H5N1) : a threat to human health

**Titre :** Avian influenza virus (H5N1) : a threat to human health

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**CODEN :** CMIREX
**Date de publication :** 2007
**Pays de publication :** United States
**Langue(s) :** English
**Type de document :** Serial
**Nombre de références :** 269 ref.

**Code(s) de classement :** 002A05C10; 002B05

**Descripteur(s) anglais**
*Descripteur(s) :* Avian influenzavirus; Influenza A virus; Human; Review; Avian influenza
*Desc. génériques :* Virology; Microbiology; Biological sciences; Infectious diseases; Medical sciences; Influenzavirus A; Orthomyxoviridae; Virus; Infection; Viral disease
**Descripteur(s) français**
*Descripteur(s) :* Influenzavirus aviaire; Virus grippal A; Homme; Article synthese; Grippe aviaire
*Desc. génériques :* Virologie; Microbiologie; Sciences biologiques; Maladies infectieuses; Sciences medicales; Influenzavirus A; Orthomyxoviridae; Virus; Infection; Virose
**Localisation :** INIST, Shelf number 21815, INIST No. 354000149485750030

**Origine de la notice :** INIST

*070234842*
**PASCAL**

# Infections virales emergentes et grossesse; Emerging viral infectious diseases and pregnancy

**Titre :** Infections virales emergentes et grossesse; Emerging viral infectious diseases and pregnancy

**Auteur(s) :** CECCALDI P F; LONGUET P; MANDELBROT L
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**Source :** Gynecologie obstetrique and fertilite. 2007; 35 (4) : 339-342
**ISSN :** 1297-9589
**Date de publication :** 2007
**Pays de publication :** France
**Langue(s) :** French
**Langue(s) du résumé :** English
**Type de document :** Serial
**Nombre de références :** 26 ref.

**Résumé :** Diverses infections emergentes sont rapportees depuis la mise en place d' une surveillance epidemiologique accrue. Ces infections peuvent compromettre le bon deroulement d' une grossesse, en mettant en jeu le pronostic vital maternel ou le developpement de l' enfant lors d' une transmission verticale. A travers une revue recente de la litterature, nous rapportons les consequences de ces virus emergents les plus cites (H5N1, Coronavirus du SRAS, Chikungunya, virus du Nil occidental) et discutons la prise en charge perinatale.

**Code(s) de classement :** 002B20; 002B05C02C

**Descripteur(s) anglais**
*Descripteur(s) :* Infection; Pregnancy; Viral disease; Severe acute respiratory syndrome; Female; Virus; Gynecology
*Desc. génériques :* Medical sciences; Virology; Infectious diseases; Medical sciences; Respiratory disease; Lung disease
**Descripteur(s) français**
*Descripteur(s) :* Infection; Gestation; Virose; Syndrome respiratoire aigu severe; Femelle; Virus; Gynecologie
*Desc. génériques :* Sciences medicales; Virologie; Maladies infectieuses; Sciences medicales; Appareil respiratoire pathologie; Poumon pathologie
**Localisation :** INIST, Shelf number 16665, INIST No. 354000147090350110

**Origine de la notice :** INIST

*070233279*
**PASCAL**

# Tamiflu et grippe aviaire

**Titre :** Tamiflu et grippe aviaire

**Auteur(s) :** SOMMET A; BAGHERI H; DAMASE MICHEL C; et al
**Source :** PRATIQUES LES CAHIERS DE LA MEDECINE UTOPIQUE. 2007-01/2007-06; (36) : 78-82
**ISSN :** 1161-3726
**Date de publication :** 2007
**Pays de publication :** France
**Langue(s) :** French
**Type de document :** Serial

**Résumé :** A partir des donnees validees concernant les effets, le mecanisme d' action et les actualites de pharmacovigilance concernant le Tamiflu, les auteurs presentent les bases pharmacologiques de l' utilisation de ce medicament dans la grippe en general, et dans la grippe aviaire en particulier. Ils discutent les motifs raisonnes et irraisonnes de la grande notoriete de ce medicament, finalement encore mal connu et insuffisamment evalue

**Code(s) de classement :** 002B30A01

**Descripteur(s) anglais**
*Descripteur(s) :* Influenza; Antiviral; Virus; Animal; Vector; Evaluation; Efficiency; Prevention; Health; Epizootics
*Desc. génériques :* Public health; Medical sciences; Viral disease; Infection
**Descripteur(s) français**
*Descripteur(s) :* Grippe; Antiviral; Virus; Animal; Vecteur; Evaluation; Efficacite; Prevention; Sante; Epizootie
*Desc. génériques :* Sante publique; Sciences medicales; Virose; Infection
**Localisation :** BDSP/ENSP, Shelf number 158309

**Origine de la notice :** BDSP

*070230424*
**PASCAL**

# A two-amino acid change in the hemagglutinin of the 1918 influenza virus abolishes transmission

**Titre :** A two-amino acid change in the hemagglutinin of the 1918 influenza virus abolishes transmission

**Auteur(s) :** TUMPEY Terrence M; MAINES Taronna R; VAN HOEVEN Neal; GLASER Laurel; SOLORZANO Alicia; PAPPAS Claudia; COX Nancy J; SWAYNE David E; PALESE Peter; KATZ Jacqueline M; GARCIA SASTRE Adolfo
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**Source :** Science Washington DC. 2007; 315 (5812) : 655-659
**ISSN :** 0036-8075
**CODEN :** SCIEAS
**Date de publication :** 2007
**Pays de publication :** United States
**Langue(s) :** English
**Type de document :** Serial
**Type de document :** review
**Nombre de références :** 29 ref.

**Résumé :** The 1918 influenza pandemic was a catastrophic series of virus outbreaks that spread across the globe. Here, we show that only a modest change in the 1918 influenza hemagglutinin receptor binding site alters the transmissibility of this pandemic virus. Two amino acid mutations that cause a switch in receptor binding preference from the human <alpha>-2,6 to the avian <alpha>-2,3 sialic acid resulted in a virus incapable of respiratory droplet transmission between ferrets but that maintained its lethality and replication efficiency in the upper respiratory tract. Furthermore, poor transmission of a 1918 virus with dual <alpha>-2,6 and <alpha>-2,3 specificity suggests that a predominant human <alpha>-2,6 sialic acid binding preference is essential for optimal transmission of this pandemic virus. These findings confirm an essential role of hemagglutinin receptor specificity for the transmission of influenza viruses among mammals.

**Code(s) de classement :** 002A05C04

**Descripteur(s) anglais**
*Descripteur(s) :* Influenza A virus; Hemagglutinin; Biological receptor; Property structure relationship; Mutation; Transmission from animal to animal; Host specificity; Host virus relation
*Desc. génériques :* Virology; Microbiology; Biological sciences; Influenzavirus A; Orthomyxoviridae; Virus; Epidemiology
**Descripteur(s) français**
*Descripteur(s) :* Virus grippal A; Hemagglutinine; Recepteur biologique; Relation structure propriete; Mutation; Transmission animal animal; Specificite hote; Relation hote virus; 1918
*Desc. génériques :* Virologie; Microbiologie; Sciences biologiques; Influenzavirus A; Orthomyxoviridae; Virus; Epidemiologie
**Localisation :** INIST, Shelf number 6040, INIST No. 354000159749270220

**Origine de la notice :** INIST


 

*070229945*
**PASCAL**

# Dhori virus (Orthomyxoviridae: Thogotovirus) infection in mice : A model of the pathogenesis of severe orthomyxovirus infection

**Titre :** Dhori virus (Orthomyxoviridae: Thogotovirus) infection in mice : A model of the pathogenesis of severe orthomyxovirus infection

**Auteur(s) :** MATEO Rosa I; XIAO Shu Yuan; HAO LEI; TRAVASSOS DA ROSA Amelia P A; TESH Robert B
**Affiliation(s) :** Departments of Pathology and of Internal Medicine and Center for Biodefense and Emerging Infectious Diseases, University of Texas Medical Branch, Galveston, Texas, United States

**Source :** The American journal of tropical medicine and hygiene. 2007; 76 (4) : 785-790
**ISSN :** 0002-9637
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**Date de publication :** 2007
**Pays de publication :** United States
**Langue(s) :** English
**Type de document :** Serial
**Nombre de références :** 36 ref.

**Résumé :** After intranasal, subcutaneous, or intraperitoneal infection with Dhori virus (DHOV), adult mice developed a fulminant and uniformly fatal illness with many of the clinical and pathologic findings seen in mice infected with H5N1 highly pathogenic avian influenza A virus. Histopathologic findings in lungs of DHOV-infected mice consisted of hemorrhage, inflammation, and thickening of the interstitium and the alveolar septa and alveolar edema. Extra-pulmonary findings included hepatocellular necrosis and steatosis, widespread severe fibrinoid necrosis in lymphoid organs, marked lymphocyte loss and karyorrhexis, and neuronal degeneration in brain. Similar systemic histopathologic findings have been reported in the few fatal human H5N1 cases examined at autopsy. Because of the relationship of DHOV to the influenza viruses, its biosafety level 2 status, and its similar pathology in mice, the DHOV-mouse model may offer a low-cost, relatively safe, and realistic animal model for studies on the pathogenesis and management of H5N1 virus infection.

**Code(s) de classement :** 002B05

**Descripteur(s) anglais**
*Descripteur(s) :* Viral disease; Orthomyxoviridae; Animal model; Mouse; Pathogenesis; Tropical medicine
*Desc. génériques :* Infectious diseases; Medical sciences; Infection; Virus; Rodentia; Mammalia; Vertebrata
**Descripteur(s) français**
*Descripteur(s) :* Virose; Orthomyxoviridae; Modele animal; Souris; Pathogenie; Medecine tropicale
*Desc. génériques :* Maladies infectieuses; Sciences medicales; Infection; Virus; Rodentia; Mammalia; Vertebrata
**Localisation :** INIST, Shelf number 6817, INIST No. 354000143440800330

**Origine de la notice :** INIST

*070227245*
**PASCAL**

# Recent expansion of highly pathogenic avian influenza H5N1 : a critical review

**Titre :** Recent expansion of highly pathogenic avian influenza H5N1 : a critical review

**Auteur(s) :** GAUTHIER CLERC M; LEBARBENCHON C; THOMAS F
**Affiliation(s) :** Station Biologique de la Tour du Valat, Le Sambuc, 13200 Arles, France; GEMI, UMR CNRS/IRD 2724, IRD, 911 av. Agropolis BP 64501, 34394 Montpellier, France

**Source :** Ibis London 1859. 2007; 149 (2) : 202-214
**ISSN :** 0019-1019
**CODEN :** IBISAL
**Date de publication :** 2007
**Pays de publication :** United Kingdom
**Langue(s) :** English
**Type de document :** Serial
**Nombre de références :** 2 p.1/2

**Résumé :** Wild birds, particularly waterfowl, are a key element of the viral ecology of avian influenza. Highly pathogenic avian influenza (HPAI) virus, subtype H5N1, was first detected in poultry in November 1996 in southeast China, where it originated. The virus subsequently dispersed throughout most of Asia, and also to Africa and Europe. Despite compelling evidence that the virus has been dispersed widely via human activities that include farming, and marketing of poultry, migratory birds have been widely considered to be the primary source of its global dispersal. Here we present a critical examination of the arguments both for and against the role of migratory birds in the global dispersal of HPAI H5N1. We conclude that, whilst wild birds undoubtedly contribute to the local spread of the virus in the wild, human commercial activities, particularly those associated with poultry, are the major factors that have determined its global dispersal.

**Code(s) de classement :** 002A14B02C2C; 002A15D

**Descripteur(s) anglais**
*Descripteur(s) :* Expansion; Pathogenic; Review; Aves
*Desc. génériques :* Autoecology; Ecology; Biological sciences; Vertebrates zoology; Biological sciences; Vertebrata
**Descripteur(s) français**
*Descripteur(s) :* Expansion; Pathogene; Article synthese; Aves
*Desc. génériques :* Autoecologie; Ecologie; Sciences biologiques; Zoologie des vertebres; Sciences biologiques; Vertebrata
**Localisation :** INIST, Shelf number 3739, INIST No. 354000143413180010

**Origine de la notice :** INIST

*070226668*
**PASCAL**

# Nucleic acid-based antiviral drugs against seasonal and avian influenza viruses. Vaccines, immunisation and immunotherapy. Based on the Fifth World Congress on Vaccines, Immunisation and Immunotherapy, Montreal, 6-9 November 2006

**Titre :** Nucleic acid-based antiviral drugs against seasonal and avian influenza viruses. Vaccines, immunisation and immunotherapy. Based on the Fifth World Congress on Vaccines, Immunisation and Immunotherapy, Montreal, 6-9 November 2006

**Auteur(s) :** WONG J P; CHRISTOPHER M E; SALAZAR A M; DALE R M K; SUN L Q; WANG M; KURSTAK Edouard, ed
**Auteur(s) :** Infections Control World Organization, Montreal, PQ, Canada, org cong.
**Affiliation(s) :** Defence R&D Canada -Suffield, Ralston, AB, Canada; Oncovir Inc, Washington, DC, United States; Oligos Etc Inc, Wilsonville, OR, United States; College of Veterinary Medicine, China Agriculture University, Beijing, China; Infections Control World Organization (ICWO), Faculty of Medicine, University of Montreal, Montreal, Que. H3C 3J7, Canada

**Source :** Vaccine . 2007; 25 (16) : 3175-3178
**Informations congrès :** *World Congress on Vaccines, Immunisation and Immunotherapy, *5, *Montreal, PQ Canada, *2006-11-06
**ISSN :** 0264-410X
**CODEN :** VACCDE
**Date de publication :** 2007
**Pays de publication :** United Kingdom
**Langue(s) :** English
**Type de document :** Serial; *Conference-Meeting
**Nombre de références :** 11 ref.

**Résumé :** Influenza viruses are etiological agents of deadly flu that continue to pose global health threats, and have caused global pandemics that killed millions of people worldwide. The availability of neuraminidase inhibitors and attenuated vaccines improves our ability to defend against influenza, but their benefits can be significantly limited by drug-resistance and virus mutations. Nucleic acid-based drugs may represent a promising class of antiviral agents that could play a role in the prevention and treatment of influenza. Efficacy studies in animals have shown that ds RNA, such as poly ICLC can provide effective and broad-spectrum prophylaxis against lethal challenges against various strains of influenza A virus. Furthermore, similar level of antiviral protection in mice can be provided by using short fragments of oligonucleotides that induce antiviral immunity. Finally, influenza virus expression can also be specifically inhibited or suppressed using antisense oligonucleotides that bind to viral mRNA encoding key viral proteins. The versatility and potency of nucleic acid-based drugs make them potential drug candidates for used in seasonal or pandemic influenza situations.

**Code(s) de classement :** 002A05F04; 002A05C10

**Descripteur(s) anglais**
*Descripteur(s) :* Avian influenzavirus; Nucleic acid; Antiviral; Avian influenza
*Desc. génériques :* Immunology; Pharmacology; Applied microbiology; Microbiology; Biological sciences; Virology; Microbiology; Biological sciences; Influenzavirus A; Orthomyxoviridae; Virus; Infection; Viral disease
**Descripteur(s) français**
*Descripteur(s) :* Influenzavirus aviaire; Acide nucleique; Antiviral; Grippe aviaire
*Desc. génériques :* Immunologie; Pharmacologie; Microbiologie appliquee; Microbiologie; Sciences biologiques; Virologie; Microbiologie; Sciences biologiques; Influenzavirus A; Orthomyxoviridae; Virus; Infection; Virose
**Localisation :** INIST, Shelf number 20289, INIST No. 354000149378260380

*070226645*
**PASCAL**

# Avian and pandemic influenza : An overview. Vaccines, immunisation and immunotherapy. Based on the Fifth World Congress on Vaccines, Immunisation and Immunotherapy, Montreal, 6-9 November 2006

**Titre :** Avian and pandemic influenza : An overview. Vaccines, immunisation and immunotherapy. Based on the Fifth World Congress on Vaccines, Immunisation and Immunotherapy, Montreal, 6-9 November 2006

**Auteur(s) :** POLAND Gregory A; JACOBSON Robert M; TARGONSKI Paul V; KURSTAK Edouard, ed
**Auteur(s) :** Infections Control World Organization, Montreal, PQ, Canada, org cong.
**Affiliation(s) :** Mayo Vaccine Research Group, Mayo Clinic College of Medicine, Rochester, MN 55905, United States; The Program in Translational Immunovirology and Biodefense, Mayo Clinic College of Medicine, Rochester, MN 55905, United States; Department of Internal Medicine. Mayo Clinic College of Medicine, Rochester, MN 55905, United States; Department ofPediatric and Adolescent Medicine, Mayo Clinic College of Medicine, Rochester, MN 55905, United States; Infections Control World Organization (ICWO), Faculty of Medicine, University of Montreal, Montreal, Que. H3C 3J7, Canada

**Source :** Vaccine . 2007; 25 (16) : 3057-3061
**Informations congrès :** *World Congress on Vaccines, Immunisation and Immunotherapy, *5, *Montreal, PQ Canada, *2006-11-06
**ISSN :** 0264-410X
**CODEN :** VACCDE
**Date de publication :** 2007
**Pays de publication :** United Kingdom
**Langue(s) :** English
**Type de document :** Serial; *Conference-Meeting
**Nombre de références :** 37 ref.

**Résumé :** Influenza A/H5N1 (avian influenza) has now caused 258 human infections (as of November 13, 2006), with an approximate 50% mortality rate. Because the virus is novel in terms of antigenic type and causes infection and illness, and because humans have no pre-existing immunity, the conditions for a possible pandemic exist. Additionally, wild migratory birds appear to be spreading the virus across ever larger geographic areas, and newer clade 2 influenza A/H5N1 viruses have begun to emerge. The US Congressional Budget Office has formally modeled the likely consequences of pandemic influenza and estimates that up to 2 million of the US population might die, with up to 40% of all workers ill for as long as 3 or more weeks. This brief overview will review basic virologic, immunologic and epidemiologic information relevant to understanding and preparing for this threat. In particular, the role of avian influenza vaccines will be reviewed.

**Code(s) de classement :** 002A05F04

**Descripteur(s) anglais**
*Descripteur(s) :* Avian influenza
*Desc. génériques :* Immunology; Pharmacology; Applied microbiology; Microbiology; Biological sciences; Infection; Viral disease
**Descripteur(s) français**
*Descripteur(s) :* Grippe aviaire
*Desc. génériques :* Immunologie; Pharmacologie; Microbiologie appliquee; Microbiologie; Sciences biologiques; Infection; Virose
**Localisation :** INIST, Shelf number 20289, INIST No. 354000149378260150

**Origine de la notice :** INIST

*070226633*
**PASCAL**

# Immunogenicity of novel consensus-based DNA vaccines against avian influenza. Vaccines, immunisation and immunotherapy. Based on the Fifth World Congress on Vaccines, Immunisation and Immunotherapy, Montreal, 6-9 November 2006

**Titre :** Immunogenicity of novel consensus-based DNA vaccines against avian influenza. Vaccines, immunisation and immunotherapy. Based on the Fifth World Congress on Vaccines, Immunisation and Immunotherapy, Montreal, 6-9 November 2006

**Auteur(s) :** LADDY Dominick J; JIAN YAN; CORBITT Natasha; KOBASA Darwyn; KOBINGER Gary P; WEINER David B; KURSTAK Edouard, ed
**Auteur(s) :** Infections Control World Organization, Montreal, PQ, Canada, org cong.
**Affiliation(s) :** Department of Pathology & Laboratory Medicine, University of Pennsylvania School of Medicine, 505 Stellar-Chance Labs, 422 Curie Boulevard, Philadelphia, PA 19104, United States; Infections Control World Organization (ICWO), Faculty of Medicine, University of Montreal, Montreal, Que. H3C 3J7, Canada

**Source :** Vaccine . 2007; 25 (16) : 2984-2989
**Informations congrès :** *World Congress on Vaccines, Immunisation and Immunotherapy, *5, *Montreal, PQ Canada, *2006-11-06
**ISSN :** 0264-410X
**CODEN :** VACCDE
**Date de publication :** 2007
**Pays de publication :** United Kingdom
**Langue(s) :** English
**Type de document :** Serial; *Conference-Meeting
**Nombre de références :** 25 ref.

**Résumé :** The frequency of H5N1 avian influenza outbreaks in China and Eastern Europe has raised concern in the world health community regarding the potential for an influenza pandemic. Efforts to monitor the disease will only provide minimal warning in a global society, and steps must be taken to prevent the morbidity and mortality associated with past pandemics. The current stockpiling of antibody-inducing "bird flu" vaccines assumes the strain that emerges will be the same as strains currently circulating. We propose a novel consensus-based approach to vaccine development, employing a DNA vaccine strategy that can provide more highly cross-reactive cellular immunity against lethal influenza infection. We show such constructs can induce strong cellular immunity against H5 influenza antigens.

**Code(s) de classement :** 002A05F04

**Descripteur(s) anglais**
*Descripteur(s) :* Immunogenicity; Genetic vaccine; Avian influenza
*Desc. génériques :* Immunology; Pharmacology; Applied microbiology; Microbiology; Biological sciences; Infection; Viral disease
**Descripteur(s) français**
*Descripteur(s) :* Immunogenicite; Vaccin genetique; Grippe aviaire
*Desc. génériques :* Immunologie; Pharmacologie; Microbiologie appliquee; Microbiologie; Sciences biologiques; Infection; Virose
**Localisation :** INIST, Shelf number 20289, INIST No. 354000149378260030

**Origine de la notice :** INIST

*070226598*
**PASCAL**

# Comparison of the MChip to viral culture, reverse transcription-PCR, and the QuickVue Influenza A+B test for rapid diagnosis of influenza

**Titre :** Comparison of the MChip to viral culture, reverse transcription-PCR, and the QuickVue Influenza A+B test for rapid diagnosis of influenza

**Auteur(s) :** MEHLMANN Martin; BONNER Aleta B; WILLIAMS John V; DANKBAR Daniela M; MOORE Chad L; KUCHTA Robert D; PODSIAD Amy B; TAMERIUS John D; DAWSON Erica D; ROWLEN Kathy L
**Affiliation(s) :** Department of Chemistry and Biochemistry UCB 215, University of Colorado at Boulder, Boulder, Colorado 80309, United States; Department of Emergency Medicine, Texas A&M University HSC College of Medicine, 2401 South 31st Street, Temple, Texas 77840, United States; Pediatric Emergency Medicine, Children's Hospital of Austin, 601 East 15th Street, Austin, Texas 78701, United States; Department of Pediatrics, 1161 21st Avenue South, Vanderbilt University Medical Center, Nashville, Tennessee 37232, United States; Department of Microbiology and Immunology, 1161 21st Avenue South, Vanderbilt University Medical Center, Nashville, Tennessee 37232, United States; Quidel Corporation, 10165 McKellar Court, San Diego, California 92121, United States; InDevR, LLC, 2100 Central Ave., Suite 106, Boulder, Colorado 80301, United States

**Source :** Journal of clinical microbiology Print. 2007; 45 (4) : 1234-1237
**ISSN :** 0095-1137
**CODEN :** JCMIDW
**Date de publication :** 2007
**Pays de publication :** United States
**Langue(s) :** English
**Type de document :** Serial
**Nombre de références :** 36 ref.

**Résumé :** The performance of a diagnostic microarray (the MChip assay) for influenza was compared in a blind study to that of viral culture, reverse transcription (RT)-PCR, and the QuickVue Influenza A+B test. The patient sample data set was composed of 102 respiratory secretion specimens collected between 29 December 2005 and 2 February 2006 at Scott & White Hospital and Clinic in Temple, Texas. Samples were collected from a wide range of age groups by using direct collection, nasal/nasopharyngeal swabs, or nasopharyngeal aspiration. Viral culture and the QuickVue assay were performed at the Texas site at the time of collection. Aliquots for each sample, identified only by study numbers, were provided to the University of Colorado and Vanderbilt University teams for blinded analysis. When referenced to viral culture, the MChip exhibited a clinical sensitivity of 98% and a clinical specificity of 98%. When referenced to RT-PCR, the MChip assay exhibited a clinical sensitivity of 92% and a clinical specificity of 98%. While the MChip assay currently requires 7 to 8 h to complete the analysis, a significant advantage of the test for influenza virus-positive samples is simultaneous detection and full subtype identification for the two subtypes currently circulating in humans (A/H3N2 and A/H1N1) and avian (A/H5N1) viruses.

**Code(s) de classement :** 002A05; 002B05

**Descripteur(s) anglais**
*Descripteur(s) :* Reverse transcription polymerase chain reaction; Diagnosis; Microbiology; Influenza
*Desc. génériques :* Microbiology; Biological sciences; Infectious diseases; Medical sciences; Viral disease; Infection
**Descripteur(s) français**
*Descripteur(s) :* Reaction chaine polymerase RT; Diagnostic; Microbiologie; Grippe
*Desc. génériques :* Microbiologie; Sciences biologiques; Maladies infectieuses; Sciences medicales; Virose; Infection
**Localisation :** INIST, Shelf number 17088, INIST No. 354000143524060240

**Origine de la notice :** INIST

*070225808*
**PASCAL**

# Risk factors and outcomes of influenza a (H3N2) pneumonia in an area where avian influenza (H5N1) is endemic

**Titre :** Risk factors and outcomes of influenza a (H3N2) pneumonia in an area where avian influenza (H5N1) is endemic

**Auteur(s) :** APISARNTHANARAK Anucha; PUTHAVATHANA Pilaipan; MUNDY Linda M
**Affiliation(s) :** Division of Infectious Diseases, Department of Medicine, Thammasart University Hospital, Pratumthani, Thailand; Department of Microbiology, Siriraj Hospital, Bangkok, Thailand; Saint Louis University School of Public Health, St. Louis, Missouri, United States

**Source :** Infection control and hospital epidemiology. 2007; 28 (4) : 479-482
**ISSN :** 0899-823X
**Date de publication :** 2007
**Pays de publication :** United States
**Langue(s) :** English
**Type de document :** Serial
**Type de document :** short-communication
**Nombre de références :** 13 ref.

**Résumé :** We conducted a cohort study to identify the risks and outcomes of influenza A (H3N2) pneumonia. Of the 145 patients studied, 10 (7%) had influenza A pneumonia. Logistic regression identified multiple comorbidities (P<.001) and diarrhea at the initial presentation (P =.001) as associated risks. Infection with influenza A (P =.01) and receipt of inadequate antimicrobial therapy (P =.005) were predictors of mortality.

**Code(s) de classement :** 002B05C02C

**Descripteur(s) anglais**
*Descripteur(s) :* Influenza A; Pneumonia; Risk factor; Prognosis; Avian influenza; Influenzavirus AH5N1
*Desc. génériques :* Virology; Infectious diseases; Medical sciences; Viral disease; Infection; Respiratory disease; Lung disease
**Descripteur(s) français**
*Descripteur(s) :* Grippe A; Pneumonie; Facteur risque; Pronostic; Grippe aviaire; Influenzavirus AH5N1
*Desc. génériques :* Virologie; Maladies infectieuses; Sciences medicales; Virose; Infection; Appareil respiratoire pathologie; Poumon pathologie
**Localisation :** INIST, Shelf number 19430, INIST No. 354000143437690170

**Origine de la notice :** INIST

*070142823*
**PASCAL**

# A pseudo-outbreak of human A/H5N1 infections in Greece and its public health implications

**Titre :** A pseudo-outbreak of human A/H5N1 infections in Greece and its public health implications

**Auteur(s) :** SPALA G; PANAGIOTOPOULOS T; MAVROIDI N; DEDOUKOU X; BAKA A; TSONOU P; TRIANTAFYLLOU P; MENTIS A; KYRIAZOPOULOU V; MELIDOU A; TSIODRAS S
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**PASCAL**

# A/H5N1 in the European Union : current levels of risk to humans, and responding to human cases and outbreaks; La grippe aviaire A/H5N1 dans l' Union Europeenne : le point sur le risque pour l' homme et les reponses aux cas et epidemies chez l' homme

**Titre :** A/H5N1 in the European Union : current levels of risk to humans, and responding to human cases and outbreaks; La grippe aviaire A/H5N1 dans l' Union Europeenne : le point sur le risque pour l' homme et les reponses aux cas et epidemies chez l' homme

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**Résumé :** Ce numero d' Eurosurveillance publie un rapport d' investigation de Georgia Spala et ses collegues decrivant une epidemie suspectee de cas humains de grippe aviaire A/H5N1 en Grece. Les evenements ont eu lieu au debut du printemps 2006, alors que des cas d' infection par le A/H5N1 chez des oiseaux sauvages etaient rapportes dans plusieurs pays de l' Union Europeenne (UE). De telles infections etaient confirmees chez des oiseaux en Grece, mais apres investigation, aucun cas humain n' a ete confirme. Cependant, les enquetes et les controles de masse qui ont ete realises autour des cas infectes et des deces lors de l' epidemie survenue en Turquie en decembre 2005 et janvier 2006 restent dans les memoires et temoignent de ce qui aurait pu se passer en Grece ou dans d' autres pays de l' UE

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**PASCAL**

# Two clusters of human infection with influenza A/H5N1 virus in the Republic of Azerbaijan, February - March 2006; Deux clusters de cas humains de grippe A/H5N1 en Republique d' Azerbaidjan, fevrier-mars 2006

**Titre :** Two clusters of human infection with influenza A/H5N1 virus in the Republic of Azerbaijan, February - March 2006; Deux clusters de cas humains de grippe A/H5N1 en Republique d' Azerbaidjan, fevrier-mars 2006

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**Résumé :** Suite a l' apparition du virus A/H5 chez des oiseaux domestiques et sauvages en Azerbaidjan en fevrier 2006, deux clusters de cas possibles de grippe aviaire humaine (HAI) dus a des cas de A/H5N1 ont ete detectes et rapportes au bureau regional Europe de l' OMS (Organisation mondiale de la sante) par le ministere de la Sante au cours des deux premieres semaines de mars 2006. Le 15 mars 2006, l' OMS a forme une equipe internationale, comprenant des experts en controle d' infection, en gestion clinique, en epidemiologie, en microbiologie et en communication, afin d' aider le ministere de la Sante dans ses investigation et ses actions de reponse. Apres une surveillance active, 22 personnes - dont 6 decedees - reparties sur 6 districts, ont fait l' objet d' une recherche de grippe aviaire. L' investigation a permis de mettre en evidence 8 cas d' infection par le virus A/H5N1 confirmes par le Centre Collaborateur OMS de la Grippe et un cas probable pour lequel aucun echantillon n' etait disponible. Les cas appartenaient a deux clusters independants sur le plan epidemiologique identifies dans les districts de Salyan (sept cas confirmes, dont 4 deces) et de Tarter (un cas confirme et un cas probable, tous deux fatals). Des contacts etroits et le fait de plumer des cygnes infectes ont ete consideres comme la source la plus plausible d' exposition au virus A/H5N1 pour le foyer de Salyan, malgre les difficultes a recueillir des informations au cours de l' investigation, du fait de la pratique d' activites illegales au cours desquelles une exposition a pu se produire (chasse et vente d' animaux sauvage et de produits derives). Ces cas constituent la premiere epidemie a l' echelon mondial au cours de laquelle des oiseaux sauvages sont la source la plus probable d' infections humaines par le virus A/H5N1. La mobilisation rapide de ressources pour contenir la dissemination du virus A/H5 dans les deux districts est le resultat d' une collaboration entre le ministere de la Sante, l' OMS et ses partenaires internationaux. Les activites de controle ont ete menees au moyen d' un laboratoire de terrain ou il etait possible de detecter le virus A/H5 en temps reel par RT-PCR. La surveillance quotidienne chez l' habitant entreprise dans les deux districts affectes rend peu vraisemblable l' eventualite de nouveaux cas humains de grippe aviaire non detectes. (R.A.)

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# Les solutions vaccinales chez l' homme et l' animal face aux virus influenza aviaire H<sub>5N<sub>1; H<sub>5N<sub>1 : Vaccine solutions in men and animals

**Titre :** Les solutions vaccinales chez l' homme et l' animal face aux virus influenza aviaire H<sub>5N<sub>1; H<sub>5N<sub>1 : Vaccine solutions in men and animals

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