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LISTE DES TITRES

Serological evidence of influenza virus infections in domestic animals and birds in North-Eastern Nigeria

Titre : Serological evidence of influenza virus infections in domestic animals and birds in North-Eastern Nigeria

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Source : International journal of food agriculture and environment Print. 2008; 6 (1) : 67-70
ISSN : 1459-0255
Date de publication : 2008
Pays de publication : Finland
Langue(s) : English
Type de document : Serial
Nombre de références : 3/4 p.

Résumé : Retrospective surveys for prevalence of influenza (FLU) virus types A and B antibodies among various species of domestic animals in North-Eastern Nigeria were carried out using haemagglutination inhibition (HI) test. The results of the retrospective antibody survey showed an overall prevalence rate of 64% of FLU virus antibodies among the domestic animals and birds. The highest prevalence of 83% was found in Guinea fowls followed in descending order by 75% in horses, 74% goat, 73% in sheep, 72% in chicken 63% in donkeys and 58% in pigeons. Statistically significant difference ($p<0.05$) was observed in the prevalence between the various animal species. The study therefore provided a serological evidence of high prevalence of FLU virus HI antibodies among domestic animals in the study area. Consistently high prevalence of monotypic infections with FLU A virus when compared with FLU B has also been observed. High geometric mean titre (GMT) values of the reciprocal of HI antibody titres between 25 and 112 were recorded with FLU A while low to moderate GMT values of 21 to 41 were observed among FLU B positive sera. There was significant difference in the prevalence of mixed virus infections with both FLU serotypes between animal species. The highest prevalence of mixed infection was observed in goats (52%) followed in descending order of prevalence by sheep (42%), Guinea fowl (36%), horse (33%), pigeon (19%), chicken (15%) and donkey (13%). The presence of FLU virus HI antibodies in horses, donkeys, chickens, pigeons and Guinea fowls in this environment was observed for the first time in this study. It is suggested that the various domestic animals investigated may be playing some important roles in the epidemiology of influenza virus infection in this environment which could be of great veterinary and public health importance in phase of the recent outbreaks of highly pathogenic avian influenza (HPAI) in Nigeria.

Code(s) de classement : 002A36C03

Descripteur(s) anglais
Descripteur(s) : Serological method; Viral disease; Influenzavirus; Domestic animal; Aves; Nigeria
Desc. génériques : Terrestrial vertebrates zootechny; Agriculture; Animal production; Biological sciences; Infection; Orthomyxoviridae; Virus; Vertebrata; Africa; Sub Saharan Africa; West Africa; Tropical zone
Descripteur(s) français
Descripteur(s) : Methode serologique; Virose; Influenzavirus; Animal domestique; Aves; Nigeria
Desc. génériques : Zootechnie des vertebres terrestres; Agriculture; Production animale; Sciences biologiques; Infection; Orthomyxoviridae; Virus; Vertebrata; Afrique; Afrique subsaharienne; Afrique Ouest; Zone tropicale

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Origine de la notice : INIST

080284955
PASCAL

Establishment of a UK national influenza H5 laboratory network

Titre : Establishment of a UK national influenza H5 laboratory network

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Source : Journal of medical microbiology. 2007; 56 (10) : 1263-1267
ISSN : 0022-2615
CODEN : JMMIAV
Date de publication : 2007
Pays de publication : United Kingdom
Langue(s) : English
Type de document : Serial
Nombre de références : 1/2 p.

Résumé : Avian (H5N1) influenza continues to pose a significant threat to human health, although it remains a zoonotic infection. Sensitive and robust surveillance measures are required to detect any evidence that the virus has acquired the ability to transmit between humans and emerge as the next pandemic strain. An integral part of the pandemic planning response in the UK was the creation in 2005 of the UK National H5 Laboratory Network, capable of rapidly and accurately identifying potential human H5N1 infections in all regions of the UK, and the Republic of Ireland. This review details the challenges that designing molecular detection methods for a rapidly evolving virus present, and the strategic decisions and choices required to ensure successful establishment of a functional national laboratory network, providing round the clock testing for H5N1. Laboratory partnerships have delivered improved real-time one-step multiplex PCR methodologies to ensure streamlined testing capable of not only detecting H5 but also a differential diagnosis of seasonal influenza A/B. A range of fully validated real-time PCR H5 confirmatory assays have been developed to run in parallel with a universal first-screening assay. Regular proficiency panels together with weekly surveillance runs, intermittent on-call testing for suspect cases of avian flu in returning travellers, and several outbreaks of avian influenza outbreaks in poultry that have occurred since 2005 in the UK have fully tested the network and the current diagnostic strategies for avian influenza. The network has clearly demonstrated its capability of delivering a confirmed H5N1 diagnosis within 3-4 h of receipt of a sample, an essential prerequisite for administration of the appropriate antiviral therapy, effective clinical management, disease containment and implementation of infection control measures. A functional network is an important means of enhancing laboratory capability and building diagnostic capacity for a newly emerging pandemic of influenza, and is an essential part of pandemic preparedness.

Code(s) de classement : 002A05C07; 002B05C02C

Descripteur(s) anglais
Descripteur(s) : Diagnosis; Method; Collaborative work; Influenza A; Avian influenza
Desc. génériques : Immunology; Pharmacology; Virology; Microbiology; Biological sciences; Virology; Infectious diseases; Medical sciences; Infection; Viral disease
Descripteur(s) français
Descripteur(s) : Diagnostic; Methode; Travail collaboratif; Grippe A; Grippe aviaire
Desc. génériques : Immunologie; Pharmacologie; Virologie; Microbiologie; Sciences biologiques; Virologie; Maladies infectieuses; Sciences medicales; Infection; Virose

Localisation : INIST, Shelf number 988B, INIST No. 354000173440040010
Origine de la notice : INIST

080288749
PASCAL

Actualites sur les zoonose emergentes et resurgentes; News on emerging and resurging zoonoses

Titre : Actualites sur les zoonose emergentes et resurgentes; News on emerging and resurging zoonoses

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Source : Bulletin de l'Academie veterinaire de France. 2007; 160 (4) : 279-288
ISSN : 0001-4192
CODEN : BAVFAV
Date de publication : 2007
Pays de publication : France
Langue(s) : French
Langue(s) du résumé : English
Type de document : Serial
Nombre de références : 1 p.

Résumé : L' emergence et la resurgence de nombreuses zoonoses, avec leurs consequences medicales et/ou economiques parfois dramatiques, posent un probleme croissant a cause de l' intensification des deplacements humains et animaux, des modifications de l' environnement, et du risque de terrorisme biologique. Les veterinaires jouent un role primordial dans l' amelioration de nos connaissances sur ces maladies car plus de 70 % des maladies infectieuses humaines sont dotees d' un reservoir animal. Ces zoonoses peuvent avoir une origine alimentaire, par ex. les toxi-infections par des souches d' Escherichia coli productrices de shigatoxines ou par Cryptosporidium parvum, et l' encephalopathie spongiforme bovine (ESB). D' autres ont emerge chez les sujets immunodeprimes. Certaines zoonoses sont plus frequentes chez les professionnels de l' elevage (leptospirose, brucellose, chlamydophilose aviaire, streptococcie du porc, viroses a virus Nipah et Hendra, hantaviroses). L' emergence ou l' extension des viroses et des infections bacteriennes transmises par des vecteurs (tiques, moustiques ou autres vecteurs) est remarquable : fievre du Nil occidental, encephalite japonaise, encephalite a tiques, fievre de la vallee du Rift, bartonelloses, ehrlichiose... Pour ces zoonoses emergentes, il est important de connaitre le reservoir animal : animaux de production (influenza aviaire due au virus hautement pathogene de sous-type H5N1, hepatite E...), animaux de compagnie (Staphylococcus aureus resistant a la methicilline, leishmaniose...), animaux exotiques (salmonelloses, tularemie, hantavirose), ou animaux sauvages (en particulier les chauves-souris et les rongeurs). Enfin, certaines pathologies animales peuvent potentiellement devenir des zoonoses (maladie de Borna, paratuberculose, encephalomyocardite...). Une etroite collaboration entre les medecines veterinaire et humaine est essentielle pour actualiser regulierement les priorites dans la lutte contre ces zoonoses.

Code(s) de classement : 002B05A02

Descripteur(s) anglais
Descripteur(s) : Review; Epidemiology; Reservoir; Animal; Zoonosis; Emerging disease
Desc. génériques : Infectious diseases; Medical sciences; Infection
Descripteur(s) français
Descripteur(s) : Article synthese; Epidemiologie; Reservoir; Animal; Zoonose; Maladie emergente
Desc. génériques : Maladies infectieuses; Sciences medicales; Infection

Localisation : INIST, Shelf number 815, INIST No. 354000172609780020
Origine de la notice : INIST

080288962
PASCAL

Definitive Care for the Critically III During a Disaster : A Framework for Optimizing Critical Care Surge Capacity. Definitive Care for the Critically ill during a Disaster

Titre : Definitive Care for the Critically III During a Disaster : A Framework for Optimizing Critical Care Surge Capacity. Definitive Care for the Critically ill during a Disaster

Auteur(s) : RUBINSON Lewis; HICK John L; HANFLING Dan G; DEVEREAUX Asha V; DICHTER Jeffrey R; CHRISTIAN Michael D; TALMOR Daniel; MEDINA Justine; CURTIS J Randall; CEILING James A
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Source : Chest . 2008; 133 (5; SUP) : 18S-31S
Informations congrès : *Task Force for Mass Critical Care Summit Meeting, *Chicago, IL United States, *2007-01-26
ISSN : 0012-3692
CODEN : CHETBF
Date de publication : 2008
Pays de publication : United States
Langue(s) : English
Type de document : Serial; *Conference-Meeting
Nombre de références : 48 ref.

Résumé : Background: Plausible disasters may yield hundreds or thousands of critically ill victims. However, most countries, including those with widely available critical care services, lack sufficient specialized staff, medical equipment, and ICU space to provide timely, usual critical care for a large influx of additional patients. Shifting critical care disaster preparedness efforts to augment limited, essential critical care (emergency mass critical care EMCC), rather than to marginally increase unrestricted, individual-focused critical care may provide many additional people with access to life-sustaining interventions. In 2007, in response to the increasing concern over a severe influenza pandemic, the Task Force on Mass Critical Care (hereafter called the Task Force) convened to suggest the essential critical care therapeutics and interventions for EMCC. Task Force suggestions: EMCC should include the following: (1) mechanical ventilation, (2) IV fluid resuscitation, (3) vasopressor administration, (4) medication administration for specific disease states (eg, antimicrobials and antidotes), (5) sedation and analgesia, and (6) select practices to reduce adverse consequences of critical illness and critical care delivery. Also, all hospitals with ICUs should prepare to deliver EMCC for a daily critical care census at three times their usual ICU capacity for up to 10 days. Discussion: By using the Task Force suggestions for EMCC, communities may better prepare to deliver augmented critical care in response to disasters. In light of current mass critical care data limitations, the Task Force suggestions were developed to guide preparedness but are not intended as strict policy mandates. Additional research is required to evaluate EMCC and revise the strategy as warranted.

Code(s) de classement : 002B11; 002B12; 002B05C02C

Descripteur(s) anglais
Descripteur(s) : Influenza; Tumor; Intensive care; Disaster; Optimization; Capacity; Disaster medicine; Mass; Anesthesia; Circulatory system; Cardiology
Desc. génériques : Pneumology; Respiratory system; Medical sciences; Cardiovascular system; Medical sciences; Virology; Infectious diseases; Medical sciences; Viral disease; Infection
Descripteur(s) français
Descripteur(s) : Grippe; Tumeur; Soin intensif; Sinistre; Optimisation; Capacite; Medecine catastrophe; Masse;

Anesthesie; Appareil circulatoire; Cardiologie

Desc. génériques : Pneumologie; Appareil respiratoire; Sciences medicales; Systeme cardiovasculaire; Sciences medicales; Virologie; Maladies infectieuses; Sciences medicales; Virose; Infection

080299247
PASCAL

Lessons from 40 years' surveillance of influenza in England and Wales

Titre : Lessons from 40 years' surveillance of influenza in England and Wales

Auteur(s) : FLEMING D M; ELLIOT A J
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Source : Epidemiology and infection. 2008; 136 (7) : 866-875
ISSN : 0950-2688
CODEN : EPINEU
Date de publication : 2008
Pays de publication : United Kingdom
Langue(s) : English
Type de document : Serial
Nombre de références : 40 ref.

Résumé : The influenza virus continues to pose a significant threat to public health throughout the world. Current avian influenza outbreaks in humans have heightened the need for improved surveillance and planning. Despite recent advances in the development of vaccines and antiviral drugs, seasonal epidemics of influenza continue to contribute significantly to general practitioner workloads, emergency hospital admissions, and deaths. In this paper we review data produced by the Royal College of General Practitioners Weekly Returns Service, a sentinel general practice surveillance network that has been in operation for over 40 years in England and Wales. We show a gradually decreasing trend in the incidence of respiratory illness associated with influenza virus infection (influenza-like illness; ILI) over the 40 years and speculate that there are limits to how far an existing virus can drift and yet produce substantial new epidemics. The burden of disease caused by influenza presented to general practitioners varies considerably by age in each winter. In the pandemic winter of 1969/70 persons of working age were most severely affected; in the serious influenza epidemic of 1989/90 children were particularly affected; in the millennium winter (in which the NHS was severely stretched) ILI was almost confined to adults, especially the elderly. Serious confounders from infections due to respiratory syncytial virus are discussed, especially in relation to assessing influenza vaccine effectiveness. Increasing pressure on hospitals during epidemic periods are shown and are attributed to changing patterns of health-care delivery.

Code(s) de classement : 002A05

Descripteur(s) anglais
Descripteur(s) : England; Wales; Microbiology; Epidemiology; Human; Influenza
Desc. génériques : Microbiology; Biological sciences; Great Britain; United Kingdom; Europe; Viral disease; Infection
Descripteur(s) français
Descripteur(s) : Angleterre; Pays de Galles; Microbiologie; Epidemiologie; Homme; Grippe
Desc. génériques : Microbiologie; Sciences biologiques; Grande Bretagne; Royaume Uni; Europe; Virose; Infection

Localisation : INIST, Shelf number 6056, INIST No. 354000195961630010
Origine de la notice : INIST

080298934
PASCAL

Rapid multiplex nested PCR for detection of respiratory viruses

Titre : Rapid multiplex nested PCR for detection of respiratory viruses

Auteur(s) : LAM W Y; YEUNG Apple C M; TANG Julian W; IP Margaret; CHAN Edward W C; HUI Mamie; CHAN Paul K S
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Source : Journal of clinical microbiology Print. 2007; 45 (11) : 3631-3640
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Date de publication : 2007
Pays de publication : United States
Langue(s) : English
Type de document : Serial
Nombre de références : 34 ref.

Résumé : Respiratory tract infections can be caused by a heterogeneous group of viruses and bacteria that produce similar clinical presentations. Specific diagnosis therefore relies on laboratory investigation. This study developed and evaluated five groups of multiplex nested PCR assays that could simultaneously detect 21 different respiratory pathogens: influenza A virus (H1N1, H3N2, and H5N1); influenza B virus; parainfluenza virus types 1, 2, 3, 4a, and 4b; respiratory syncytial virus A and B; human rhinoviruses; human enteroviruses; human coronaviruses OC43 and 229E; severe acute respiratory syndrome coronavirus; human metapneumo-viruses; Mycoplasma pneumoniae; Chlamydophila pneumoniae; Legionella pneumophila; and adenoviruses (A to F). These multiplex nested PCRs adopted fast PCR technology. The high speed of fast PCR (within 35 min) greatly improved the efficiency of these assays. The results show that these multiplex nested PCR assays are specific and more sensitive (100- to 1,000-fold) than conventional methods. Among the 303 clinical specimens tested, the multiplex nested PCR achieved an overall positive rate of 48.5% (95% confidence interval CI, 42.9 to 54.1%), which was significantly higher than that of virus isolation (20.1% 95% CI, 15.6 to 24.6%) and that of direct detection by immunofluorescence assay (13.5% 95% CI, 9.7 to 17.4%). The improved sensitivity was partly due to the higher sensitivity of multiplex nested PCR than that of conventional methods in detecting cultivatable viruses. Moreover, the ability of the multiplex nested PCR to detect noncultivatable viruses, particularly rhinoviruses, coronavirus OC43, and metapneumoviruses, contributed a major gain (15.6%) in the overall positive rate. In conclusion, rapid multiplex nested PCR assays can improve the diagnostic yield for respiratory infections to allow prompt interventive actions to be taken.

Code(s) de classement : 002A05C07

Descripteur(s) anglais
Descripteur(s) : Virus; Multiplex polymerase chain reaction; Nested polymerase chain reaction; Detection; Respiratory disease; Method
Desc. génériques : Immunology; Pharmacology; Virology; Microbiology; Biological sciences
Descripteur(s) français
Descripteur(s) : Virus; Reaction chaine polymerase multiplex; Reaction chaine polymerase nichee; Detection; Pathologie de l' appareil respiratoire; Methode
Desc. génériques : Immunologie; Pharmacologie; Virologie; Microbiologie; Sciences biologiques

Localisation : INIST, Shelf number 17088, INIST No. 354000174214970240
Origine de la notice : INIST

080296267
PASCAL

Current and future antiviral therapy of severe seasonal and avian influenza. Treatment of highly pathogenic RNA viral infections

Titre : Current and future antiviral therapy of severe seasonal and avian influenza. Treatment of highly pathogenic RNA viral infections

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CODEN : ARSRDR
Date de publication : 2008
Pays de publication : Netherlands
Langue(s) : English
Type de document : Serial
Nombre de références : 3 p.1/2

Résumé : The currently circulating H3N2 and H1N1 subtypes of influenza A virus cause a transient, febrile upper respiratory illness in most adults and children ("seasonal influenza"), but infants, the elderly, immunodeficient and chronically ill persons may develop life-threatening primary viral pneumonia or complications such as bacterial pneumonia. By contrast, avian influenza viruses such as the H5N1 virus that recently emerged in Southeast Asia can cause severe disease when transferred from domestic poultry to previously healthy people ("avian influenza"). Most H5N1 patients present with fever, cough and shortness of breath that progress rapidly to adult respiratory distress syndrome. In seasonal influenza, viral replication remains confined to the respiratory tract, but limited studies indicate that H5N1 infections are characterized by systemic viral dissemination, high cytokine levels and multiorgan failure. Gastrointestinal infection and encephalitis also occur. The licensed anti-influenza drugs (the M2 ion channel blockers, amantadine and rimantadine, and the neuraminidase inhibitors, oseltamivir and zanamivir) are beneficial for uncomplicated seasonal influenza, but appropriate dosing regimens for severe seasonal or H5N1 viral infections have not been defined. Treatment options may be limited by the rapid emergence of drug-resistant viruses. Ribavirin has also been used to a limited extent to treat influenza. This article reviews licensed drugs and treatments under development, including high-dose oseltamivir; parenterally administered neuraminidase inhibitors, peramivir and zanamivir; dimeric forms of zanamivir; the RNA polymerase inhibitor T-705; a ribavirin prodrug, viramidine; polyvalent and monoclonal antibodies; and combination therapies.

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

Descripteur(s) anglais
Descripteur(s) : Antiviral; Treatment; Influenza; Avian influenza; Exo <alpha> sialidase; Peramivir; Oseltamivir; Zanamivir; Influenzavirus A; Monoclonal antibody; Influenzavirus AH5N1
Desc. génériques : Virology; Infectious diseases; Pharmacology; Medical sciences; Virology; Infectious diseases; Medical sciences; Viral disease; Infection; Glycosidases; Glycosylases; Hydrolases; Enzyme; Orthomyxoviridae; Virus; Cyclopentane derivatives; Enzyme inhibitor; Neuraminidase inhibitor
Descripteur(s) français
Descripteur(s) : Antiviral; Traitement; Grippe; Grippe aviaire; Adamantane; Exo <alpha> sialidase; Peramivir; Oseltamivir; Zanamivir; Influenzavirus A; Anticorps monoclonal; Forme grave; Viramidine; Influenzavirus AH5N1
Desc. génériques : Virologie; Maladies infectieuses; Pharmacologie; Sciences medicales; Virologie; Maladies infectieuses; Sciences medicales; Virose; Infection; Glycosidases; Glycosylases; Hydrolases; Enzyme; Orthomyxoviridae; Virus; Derive du cyclopentane; Inhibiteur enzyme; Inhibiteur neuraminidase

080296258
PASCAL

The Southeast Asian Influenza Clinical Research Network : Development and challenges for a new multilateral research endeavor. Treatment of highly pathogenic RNA viral infections

Titre : The Southeast Asian Influenza Clinical Research Network : Development and challenges for a new multilateral research endeavor. Treatment of highly pathogenic RNA viral infections

Auteur(s) : HIGGS Elizabeth S; HAYDEN Frederick G; CHOTPITAYASUNONDH Tawee; WHITWORTH Jimmy; FARRAR Jeremy; BRAY Mike, limin; NEYTS Johan, limin
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CODEN : ARSRDR
Date de publication : 2008
Pays de publication : Netherlands
Langue(s) : English
Type de document : Serial
Nombre de références : 1/4 p.

Résumé : The Southeast Asia Influenza Clinical Research Network (SEA ICRN) (www.seaclinicalresearch.org) is a recently developed multilateral, collaborative partnership that aims to advance scientific knowledge and management of human influenza through integrated clinical investigation. The partnership of hospitals and institutions in Indonesia, Thailand, United Kingdom, United States, and Viet Nam was established in late 2005 after agreement on the general principles and mission of the initiative and after securing initial financial support. The establishment of the SEA ICRN was both a response to the re-emergence of the highly pathogenic avian influenza A(H5N1) virus in Southeast Asia in late 2003 and an acknowledgment that clinical trials on emerging infectious diseases require prepared and coordinated research capacity. The objectives of the Network also include building sustainable research capacity in the region, compliance with international standards, and prompt dissemination of information and sharing of samples. The scope of research includes diagnosis, pathogenesis, treatment and prevention of human influenza due to seasonal or novel viruses. The Network has overcome numerous logistical and scientific challenges but has now successfully initiated several clinical trials. The establishment of a clinical research network is a vital part of preparedness and an important element during an initial response phase to a pandemic.

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

Descripteur(s) anglais
Descripteur(s) : Avian influenza; Research and development; Network; Emerging disease; South east Asia; Clinical trial; Influenzavirus AH5N1
Desc. génériques : Virology; Infectious diseases; Pharmacology; Medical sciences; Virology; Infectious diseases; Medical sciences; Viral disease; Infection; Asia
Descripteur(s) français
Descripteur(s) : Grippe aviaire; Recherche et developpement; Reseau; Maladie emergente; Asie du sud est; Essai clinique; Pandemie; Influenzavirus AH5N1
Desc. génériques : Virologie; Maladies infectieuses; Pharmacologie; Sciences medicales; Virologie; Maladies infectieuses; Sciences medicales; Virose; Infection; Asie

WHOLE GENOME SEQUENCES OF H5N1 INFLUENZA A VIRUS ISOLATED FROM A LITTLE GREBE IN THAILAND

Titre : WHOLE GENOME SEQUENCES OF H5N1 INFLUENZA A VIRUS ISOLATED FROM A LITTLE GREBE IN THAILAND

Auteur(s) : NAKSUPAN Nikhom; SANGUANSERMSRI Donruedee; WONGVILAIRAT Rosarin; NIUMSUP Pannika R; PONGCHAROEN Sutatip; CHAMNANPOOD Pornchai; CHAMNANPOOD Chanpen; SANGUANSERMSRI Phanchana
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Source : Southeast Asian journal of tropical medicine and public health. 2008; 39 (3) : 373-381
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CODEN : SJTMAK
Date de publication : 2008
Pays de publication : Thailand
Langue(s) : English
Type de document : Serial
Nombre de références : 1 p.1/4

Résumé : This is the first report of the whole genome sequence of influenza A virus in an aquatic resident bird of Thailand. It was categorized into genotype Z according to its characteristics of a 20 amino acid deletion in neuraminidase and a five amino acid deletion in the non-structural protein. The indicator for a highly pathogenic trait of the virus is the presence of a polybasic amino acid sequence at the cleavage site of HAO. The feature of resistance to the antiviral drug amantadine is found at the 31<sup>s<sup>t amino acid position of M2 (serine to asparagine). Phylogenic analyses revealed that virus A/little grebe/Thailand/Phichit-01/2004 (H5N1) is closely related to the chicken and human isolates recovered from Thailand. The high degrees of similarity among the sequences and phylogenic trees indicate there was no difference between the viruses isolated from poultry and aquatic birds in Thailand at the time of study. The results also suggest the source of H5N1 avian influenza virus in the little grebe and others in Thailand may have the same origin.

Code(s) de classement : 002B01

Descripteur(s) anglais
Descripteur(s) : Nucleotide sequence; Influenza A virus; Thailand; Tropical medicine
Desc. génériques : Medical sciences; Influenzavirus A; Orthomyxoviridae; Virus; Asia
Descripteur(s) français
Descripteur(s) : Sequence nucleotide; Virus grippal A; Thailande; Medecine tropicale
Desc. génériques : Sciences medicales; Influenzavirus A; Orthomyxoviridae; Virus; Asie

Localisation : INIST, Shelf number 19778, INIST No. 354000200271580010
Origine de la notice : INIST

Real-time supply chain control via multi-agent adjustable autonomy : Topics in real-time supply chain management

Titre : Real-time supply chain control via multi-agent adjustable autonomy : Topics in real-time supply chain management

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Source : Computers and operations research. 2008; 35 (11) : 3452-3464
ISSN : 0305-0548
CODEN : CMORAP
Date de publication : 2008
Pays de publication : United Kingdom
Langue(s) : English
Type de document : Serial
Nombre de références : 18 ref.

Résumé : Real-time supply chain management in a rapidly changing environment requires reactive and dynamic collaboration among participating entities. In this work, we model supply chain as a multi-agent system where agents are subject to an adjustable autonomy. The autonomy of an agent refers to its capability to make and influence decisions within a multi-agent system. Adjustable autonomy means changing the autonomy of the agents during runtime as a response to changes in the environment. In the context of a supply chain, different entities will have different autonomy levels and objective functions as the environment changes, and the goal is to design a real-time control technique to maintain global consistency and optimality. We propose a centralized fuzzy framework for sensing and translating environmental changes to the changes in autonomy levels and objectives of the agents. In response to the changes, a coalition-formation algorithm will be executed to allow agents to negotiate and re-establish global consistency and optimality. We apply our proposed framework to two supply chain control problems with drastic changes in the environment: one in controlling a military hazardous material storage facility under peace-to-war transition, and the other in supply management during a crisis (such as bird-flu or terrorist attacks). Experimental results show that by adjusting autonomy in response to environmental changes, the behavior of the supply chain system can be controlled accordingly.

Code(s) de classement : 001D01A15; 001D01A08

Descripteur(s) anglais
Descripteur(s) : Real time; Logistics; Multiagent system; Autonomy; Multiple decision; Objective function; Global optimum; Fuzzy logic; Coalition; Military application; Hazard; Storage; Crisis management; Avian influenza; Terrorism; Fuzzy control; Warehousing; Modeling
Desc. génériques : Operations research; Management; Applied sciences; Operations research; Management; Applied sciences; Viral disease; Infection
Descripteur(s) français
Descripteur(s) : Temps reel; Logistique; Systeme multiagent; Autonomie; Decision multiple; Fonction objectif; Optimum global; Logique floue; Coalition; Application militaire; Risque accidentel; Stockage; Gestion crise; Grippe aviaire; Terrorisme; Commande floue; Entreposage; Modelisation
Desc. génériques : Recherche operationnelle; Gestion; Sciences appliquees; Recherche operationnelle; Gestion; Sciences appliquees; Virose; Infection

Localisation : INIST, Shelf number 16412, INIST No. 354000172741770040
Origine de la notice : INIST

080294441
PASCAL

Survey of State Practices During the 2004-2005 Influenza Vaccine Shortage

Titre : Survey of State Practices During the 2004-2005 Influenza Vaccine Shortage

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Source : Public health reports 1974. 2007; 122 (3) : 311-318
ISSN : 0033-3549
CODEN : PHRPA6
Date de publication : 2007
Pays de publication : United States
Langue(s) : English
Type de document : Serial
Nombre de références : 20 ref.

Résumé : To describe state-level actions and policies during the 2004-2005 influenza vaccine shortage and determine whether these or other factors were related to vaccination coverage, we surveyed all state health departments (including the District of Columbia). We included 2004-2005 Behavioral Risk Factor Surveillance System data to examine whether state-level actions, policies, or other factors like vaccine supply were related to changes in vaccination coverage in adults aged >=65 years from the previous non-shortage year. We found that 96% (n=49) of states reported adopting or recommending adherence to the initial national interim influenza vaccination recommendations. Of these, at some point during the season, 22% (n=11) reported local public health agencies issued prioritization recommendations that differed from the state health department's guidance. Eighty percent (n=41) initiated at least one emergency response activity and 43% (n=22) referred to or implemented components of their pandemic influenza plans. In 35% (n=18), emergency or executive orders were issued or legislative action occurred. In a multivariable linear regression model, the availability and use of practitioner contact lists and having a relatively high vaccine supply in early October 2004 were associated with smaller decreases in coverage for adults aged >=65 years from the previous non-shortage season (p=0.003, r<sup>2=0.26). States overwhelmingly followed national vaccination prioritization guidelines and used a range of activities to manage the 2004-2005 vaccine shortage. The availability and use of practitioner contact lists and having a relatively high vaccine supply early in the season were associated with smaller decreases in coverage from the previous non-shortage season.

Code(s) de classement : 002B30A11; 002B05C02C; 002B30A03

Descripteur(s) anglais
Descripteur(s) : Influenza; Immunoprophylaxis; Surveillance; Survey; Professional practice; 2004; 2005; Public health; Vaccine; Prevention; Shortage; Accessibility; United States
Desc. génériques : Public health; Medical sciences; Virology; Infectious diseases; Medical sciences; Public health; Medical sciences; Viral disease; Infection; North America; America
Descripteur(s) français
Descripteur(s) : Grippe; Immunoprophylaxie; Surveillance; Enquete; Pratique professionnelle; 2004; 2005; Sante publique; Vaccin; Prevention; Penurie; Accessibilite; Etats Unis
Desc. génériques : Sante publique; Sciences medicales; Virologie; Maladies infectieuses; Sciences medicales; Sante

publique; Sciences medicales; Virose; Infection; Amerique du Nord; Amerique

Localisation : INIST, Shelf number 3073, INIST No. 354000183086440040
Origine de la notice : INIST

080291007
PASCAL

Emerging zoonoses and vector-borne infections affecting humans in Europe

Titre : Emerging zoonoses and vector-borne infections affecting humans in Europe

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Source : Epidemiology and infection. 2007; 135 (8) : 1231-1247
ISSN : 0950-2688
CODEN : EPINEU
Date de publication : 2007
Pays de publication : United Kingdom
Langue(s) : English
Type de document : Serial
Nombre de références : 177 ref.

Résumé : The purpose of this study was to assess and describe the current spectrum of emerging zoonoses between 2000 and 2006 in European countries. A computerized search of the Medline database from January 1966 to August 2006 for all zoonotic agents in European countries was performed using specific criteria for emergence. Fifteen pathogens were identified as emerging in Europe from 2000 to August 2006: Rickettsiae spp., Anaplasma phagocytophilum, Borrelia burgdorferi, Bartonella spp., Francisella tularensis, Crimean Congo Haemorrhagic Fever Virus, Hantavirus, Toscana virus, Tick-borne encephalitis virus group, West Nile virus, Sindbis virus, Highly Pathogenic Avian influenza, variant Creutzfeldt-Jakob disease, Trichinella spp., and Echinococus multilocularis. Main risk factors included climatic variations, certain human activities as well as movements of animals, people or goods. Multi-disciplinary preventive strategies addressing these pathogens are of public health importance. Uniform harmonized case definitions should be introduced throughout Europe as true prevalence and incidence estimates are otherwise impossible.

Code(s) de classement : 002B05A02

Descripteur(s) anglais
Descripteur(s) : Human; Vector; Europe; Zoonosis; Epidemiology; Emerging disease
Desc. génériques : Infectious diseases; Medical sciences; Infection
Descripteur(s) français
Descripteur(s) : Homme; Vecteur; Europe; Zoonose; Epidemiologie; Maladie emergente
Desc. génériques : Maladies infectieuses; Sciences medicales; Infection

Localisation : INIST, Shelf number 6056, INIST No. 354000174202340010
Origine de la notice : INIST

080289959
PASCAL

Finding the real case-fatality rate of H5N1 avian influenza

Titre : Finding the real case-fatality rate of H5N1 avian influenza

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Source : Journal of epidemiology and community health 1979. 2008; 62 (6) : 555-559
ISSN : 0143-005X
Date de publication : 2008
Pays de publication : United Kingdom
Langue(s) : English
Type de document : Serial
Nombre de références : 52 ref.

Résumé : Background: Accurate estimation of the case-fatality (CF) rate, or the proportion of cases that die, is central to pandemic planning. While estimates of CF rates for past influenza pandemics have ranged from about 0.1% (1957 and 1968 pandemics) to 2.5% (1918 pandemic), the official World Health Organization estimate for the current outbreak of H5N1 avian influenza to date is around 60%. Methods and results: The official estimate of the H5N1 CF rate has been described by some as an overestimate, with little relevance to the rate that would be encountered under pandemic conditions. The reasons for such opinions are typically: (i) numerous undetected asymptomatic/mild cases, (ii) under-reporting of cases by some countries for economic or other reasons, and (iii) an expected decrease in virulence if and when the virus becomes widely transmitted in humans. Neither current data nor current literature, however, adequately supports these scenarios. While the real H5N1 CF rate could be lower than the current estimate of 60%, it is unlikely that it will be at the 0.1-0.4% level currently embraced by many pandemic plans. We suggest that, based on surveillance and seroprevalence studies conducted in several countries, the real H5N1 CF rate should be closer to 14-33%. Conclusions: Clearly, if such a CF rate were to be sustained in a pandemic, H5N1 would present a truly dreadful scenario. A concerted and dedicated effort by the international community to avert a pandemic through combating avian influenza in animals and humans in affected countries needs to be a global priority.

Code(s) de classement : 002B30A11; 002B01; 002B05C02C

Descripteur(s) anglais
Descripteur(s) : Avian influenza; Case fatality rate; Mortality; Medicine; Public health; Influenzavirus AH5N1
Desc. génériques : Public health; Medical sciences; Medical sciences; Virology; Infectious diseases; Medical sciences; Viral disease; Infection
Descripteur(s) français
Descripteur(s) : Grippe aviaire; Taux de letalite; Mortalite; Medecine; Sante publique; Influenzavirus AH5N1
Desc. génériques : Sante publique; Sciences medicales; Sciences medicales; Virologie; Maladies infectieuses; Sciences medicales; Virose; Infection

Localisation : INIST, Shelf number 9272, INIST No. 354000195884670140
Origine de la notice : INIST

080289163
PASCAL

Definitive Care for the Critically III During a Disaster : A Framework for Allocation of Scarce Resources in Mass Critical Care. Definitive Care for the Critically ill during a Disaster

Titre : Definitive Care for the Critically III During a Disaster : A Framework for Allocation of Scarce Resources in Mass Critical Care. Definitive Care for the Critically ill during a Disaster

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Source : Chest . 2008; 133 (5; SUP) : 51S-66S
Informations congrès : *Task Force for Mass Critical Care Summit Meeting, *Chicago, IL United States, *2007-01-26
ISSN : 0012-3692
CODEN : CHETBF
Date de publication : 2008
Pays de publication : United States
Langue(s) : English
Type de document : Serial; *Conference-Meeting
Nombre de références : 58 ref.

Résumé : Background: Anticipated circumstances during the next severe influenza pandemic highlight the insufficiency of staff and equipment to meet the needs of all critically ill victims. It is plausible that an entire country could face simultaneous limitations, resulting in severe shortages of critical care resources to the point where patients could no longer receive all of the care that would usually be required and expected. There may even be such resource shortfalls that some patients would not be able to access even the most basic of life-sustaining interventions. Rationing of critical care in this circumstance would be difficult, yet may be unavoidable. Without planning, the provision of care would assuredly be chaotic, inequitable, and unfair. The Task Force for Mass Critical Care Working Group met in Chicago in January 2007 to proactively suggest guidance for allocating scarce critical care resources. Task Force suggestions: In order to allocate critical care resources when systems are overwhelmed, the Task Force for Mass Critical Care Working Group suggests the following: (1) an equitable triage process utilizing the Sequential Organ Failure Assessment scoring system; (2) the concept of triage by a senior clinician(s) without direct clinical obligation, and a support system to implement and manage the triage process; (3) legal and ethical constructs underpinning the allocation of scarce resources; and (4) a mechanism for rapid revision of the triage process as further disaster experiences, research, planning, and modeling come to light.

Code(s) de classement : 002B11; 002B12; 002B18C08D

Descripteur(s) anglais
Descripteur(s) : Tumor; Posttraumatic stress disorder; Intensive care; Disaster; Allocation; Attribution; Organ; Resource; Mass; Ethics; Health; Health staff; Medicine; Anesthesia; Circulatory system; Cardiology
Desc. génériques : Pneumology; Respiratory system; Medical sciences; Cardiovascular system; Medical sciences; Psychiatry; Psychopathology; Medical sciences; Anxiety disorder

Descripteur(s) français

Descripteur(s) : Tumeur; Etat de stress posttraumatique; Soin intensif; Sinistre; Affectation; Attribution; Organe; Ressource; Masse; Ethique; Sante; Personnel sanitaire; Medecine; Anesthesie; Appareil circulatoire; Cardiologie

Desc. génériques : Pneumologie; Appareil respiratoire; Sciences medicales; Systeme cardiovasculaire; Sciences medicales; Psychiatrie; Psychopathologie; Sciences medicales; Trouble anxieux

Localisation : INIST, Shelf number 7627, INIST No. 354000183108140040
Origine de la notice : INIST

080302095
PASCAL

Exposure Assessment of Carcass Disposal Options in the Event of a Notifiable Exotic Animal Disease : Application to Avian Influenza Virus

Titre : Exposure Assessment of Carcass Disposal Options in the Event of a Notifiable Exotic Animal Disease : Application to Avian Influenza Virus

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Source : Environmental science and technology. 2008; 42 (9) : 3145-3154
ISSN : 0013-936X
CODEN : ESTHAG
Date de publication : 2008
Pays de publication : United States
Langue(s) : English
Type de document : Serial
Nombre de références : 37 ref.

Résumé : We present a generalized exposure assessment of 28 disposal options for poultry carcasses in the event of a highly pathogenic avian influenza (HPAI) outbreak. The analysis supports a hereto unverified disposal hierarchy for animal carcasses, placing waste processing (e.g., incineration and rendering) above controlled disposal (e.g., landfill), above uncontrolled disposal (e.g., burial on-farm). We illustrate that early stages of the disposal chain (on-farm) pose greater opportunities for exposure to hazardous agents than later stages, where agents are generally contained, wastes are treated, and residues are managed by regulated processes. In selecting carcass disposal options, practitioners are advised to consider the full range of hazards rather than focusing solely on the HPAI agent, and to give preference to technologies that (i) offer high destruction efficiencies for target pathogens; (ii) do not give rise to significant releases of other pathogenic organisms; and (iii) do not release unacceptable concentrations of toxic chemicals. The approach offers an exposure assessment perspective for carcass disposal, thus providing a risk-informed basis for contingency planning and operational intervention. The authors recognize that relevant legislation, public perception, available capacity, and cost also need to be considered when selecting disposal options in the event of HPAI.

Code(s) de classement : 001D16

Descripteur(s) anglais
Descripteur(s) : Pathogenic; Animal waste; Waste treatment; Incineration; Uncontrolled landfill; Legislation; Biological contamination; Microbiology; Heat treatment
Desc. génériques : Pollution; Nuisances; Applied sciences
Descripteur(s) français
Descripteur(s) : Pathogene; Dechet animal; Traitement dechet; Incineration; Decharge brute; Legislation; Contamination biologique; Microbiologie; Traitement thermique
Desc. génériques : Pollution; Nuisances; Sciences appliquees

Localisation : INIST, Shelf number 13615, INIST No. 354000195865030030

RNA interference of avian influenza virus H5N1 by inhibiting viral mRNA with siRNA expression plasmids

Titre : RNA interference of avian influenza virus H5N1 by inhibiting viral mRNA with siRNA expression plasmids

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Source : Journal of biotechnology. 2008; 135 (2) : 140-144
ISSN : 0168-1656
CODEN : JBITD4
Date de publication : 2008
Pays de publication : Netherlands
Langue(s) : English
Type de document : Serial
Nombre de références : 1/4 p.

Résumé : Avian influenza virus H5N1 causes widespread infection in the birds and human respiratory tract, but existing vaccines and drug therapy are of limited value. Here we show that small interfering RNAs (siRNAs) specific for conserved regions of the viral genome can potently inhibit influenza virus production in cell lines, embryonated chicken eggs and BALB/c mice. siRNA expression plasmid pBabe-Super was chosen in the study, which directed the synthesis of small interfering RNAs in cells. The inhibition depended on the presence of a functional antisense strand in the small interfering RNA duplex, suggesting that viral mRNA is the target of RNA interference (RNAi). Among the three small interfering RNA expression plasmids we designed, we found that small interfering RNA for nucleocapsid protein (NP) had a specific effect in inhibiting the accumulation of RNAs in infected cells because of a critical requirement for newly synthesized nucleocapsid proteins in avian influenza viral RNA transcription and replication. The findings reveal that newly synthesized nucleocapsid, polymerase A (PA) and polymerase B1 (PB1) proteins are required for avian influenza virus transcription and replication and provide a basis for the development of small interfering RNAs as prophylaxis and therapy for avian influenza infection in birds and humans.

Code(s) de classement : 002A31; 215

Descripteur(s) anglais
Descripteur(s) : RNA interference; Messenger RNA; Plasmid; Influenza; Avian influenzavirus; H5N1; Influenzavirus AH5N1
Desc. génériques : Biotechnology; Biological sciences; Gene silencing; Viral disease; Infection; Influenzavirus A; Orthomyxoviridae; Virus
Descripteur(s) français
Descripteur(s) : Interference ARN; RNA messager; Plasmide; Grippe; Influenzavirus aviaire; Souche H5N1; Influenzavirus AH5N1
Desc. génériques : Biotechnologie; Sciences biologiques; Silence expression genique; Virose; Infection; Influenzavirus A; Orthomyxoviridae; Virus

Localisation : INIST, Shelf number 20305, INIST No. 354000197806010030
Origine de la notice : INIST

080314644
PASCAL

Appraisal of recommended respiratory infection control practices in primary care and emergency department settings. Airborne Infection Control

Titre : Appraisal of recommended respiratory infection control practices in primary care and emergency department settings. Airborne Infection Control

Auteur(s) : TURNBERG Wayne; DANIELL William; SEIXAS Noah; SIMPSON Terri; VAN BUREN Jude; LIPKIN Edward; DUCHIN Jeffery
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Source : American journal of infection control. 2008; 36 (4) : 268-275
ISSN : 0196-6553
Date de publication : 2008
Pays de publication : United States
Langue(s) : English
Type de document : Serial
Nombre de références : 41 ref.

Résumé : Background: The severe acute respiratory syndrome (SARS) epidemic and concern about pandemic influenza prompted the Centers for Disease Control and Prevention (CDC) to develop guidelines to prevent the transmission of all respiratory infections in health care settings during first contact with a potentially infected person. The extent to which health care workers and institutions use these CDC recommended practices is uncertain. Methods: The study examined health care worker adherence to CDC recommended respiratory infection control practices in primary care clinics and emergency departments of 5 medical centers in King County, Washington, using a self-administered questionnaire. All clinical, allied, and administrative health care workers in study settings were invited to participate: 653 (53%) responded, and 630 were included. Results: The survey revealed important shortcomings in overall personal and institutional use of CDC recommended practices, including deficiencies in posted alerts, patient masking and separation, hand hygiene, personal protective equipment, staff training, and written procedures. Use of recommended measures was generally higher among nursing staff than medical practitioners. Conclusion: This study found significant gaps in adherence to CDC recommendations for the control of respiratory infections in ambulatory care clinical settings. Practical strategies are needed to identify and reduce barriers to implementation of recommended practices for control of respiratory infections.

Code(s) de classement : 002B05A02

Descripteur(s) anglais
Descripteur(s) : Respiratory tract; Check; Emergency department; Infection
Desc. génériques : Infectious diseases; Medical sciences; Prevention
Descripteur(s) français
Descripteur(s) : Voie respiratoire; Controle; Service urgence; Infection
Desc. génériques : Maladies infectieuses; Sciences medicales; Prevention

Localisation : INIST, Shelf number 19097, INIST No. 354000195925270040
Origine de la notice : INIST

080311046
PASCAL

Oseltamivir (Tamiflu<Registered>) increases dopamine levels in the rat medial prefrontal cortex

Titre : Oseltamivir (Tamiflu<Registered>) increases dopamine levels in the rat medial prefrontal cortex

Auteur(s) : YOSHINO Tatsuki; NISIJIMA Koichi; SHIODA Katsutoshi; YUI Kunio; KATO Satoshi
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Source : Neuroscience letters. 2008; 438 (1) : 67-69
ISSN : 0304-3940
CODEN : NELED5
Date de publication : 2008
Pays de publication : Ireland
Langue(s) : English
Type de document : Serial
Type de document : research-paper
Nombre de références : 17 ref.

Résumé : Oseltamivir (Tamiflu<Registered>), a neuraminidase inhibitor, is effective for treating both seasonal flu and H5N1 influenza A virus infection. Oseltamivir is generally well tolerated, and its most common adverse effects are nausea and vomiting. However, neuropsychiatric behaviors including jumping and falling from balconies by young patients being treated by oseltamivir have been reported from Japan; this has led to warnings against its prescribing by many authorities. The pharmacological mechanism of the neuropsychiatric effects of oseltamivir remains unclear. Many studies reported that changes in neurotransmission and abnormal behaviors are closely related. We investigated the changes in dopamine and serotonin metabolism after systemic administration of oseltamivir in the medial prefrontal cortex (mPFC) of rats by using microdialysis. After systemic administration of oseltamivir (25 mg/kg or 100mg/kg; intraperitoneally (i.p.)), extracellular dopamine in the mPFC was significantly increased as compared to the control values; 3,4-dihydroxyphenylacetic acid and homovanillic acid, the metabolites of dopamine, had also increased significantly. Serotonin was unchanged after the administration of oseltamivir. These findings suggest that oseltamivir increased dopamine release in the mPFC; further, they suggest that the increase in dopamine during oseltamivir treatment may have caused abnormal behaviors in young patients. In cases where oseltamivir is prescribed to children, close observation is required.

Code(s) de classement : 002A25

Descripteur(s) anglais
Descripteur(s) : Oseltamivir; Dopamine; Prefrontal cortex; Behavior; Rat; Animal
Desc. génériques : Vertebrates physiology; Vertebrates neurophysiology; Nervous system; Biological sciences; Catecholamine; Neurotransmitter; Encephalon; Central nervous system; Rodentia; Mammalia; Vertebrata
Descripteur(s) français
Descripteur(s) : Oseltamivir; Dopamine; Cortex prefrontal; Comportement; Rat; Animal
Desc. génériques : Physiologie des vertebres; Neurophysiologie des vertebres; Systeme nerveux; Sciences biologiques; Catecholamine; Neurotransmetteur; Encephale; Systeme nerveux central; Rodentia; Mammalia; Vertebrata

Localisation : INIST, Shelf number 17240, INIST No. 354000197796600160
Origine de la notice : INIST

080309033
PASCAL

Thermal Inactivation of Avian Influenza and Newcastle Disease Viruses in Chicken Meat

Titre : Thermal Inactivation of Avian Influenza and Newcastle Disease Viruses in Chicken Meat

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Source : Journal of food protection. 2008; 71 (6) : 1214-1222
ISSN : 0362-028X
CODEN : JFPRDR
Date de publication : 2008
Pays de publication : United States
Langue(s) : English
Type de document : Serial
Nombre de références : 27 ref.

Résumé : Avian influenza viruses (AIV) and Newcastle disease viruses (NDV) of high pathogenicity cause severe systemic disease with high mortality in chickens and can be isolated from the meat of infected chickens. Although AIV and NDV strains of low pathogenicity are typically not present in chicken meat, virus particles in respiratory secretions or feces are possible sources of carcass contamination. Because spread of AIV and NDV is associated with movement of infected birds or their products, the presence of these viruses in chicken meat is cause for concern. This study presents thermal inactivation data for two viruses of high pathogenicity in chickens (AIV strain A/chicken/Pennsylvania/1370/1983 and NDV strain APMV-1/ chicken/California/S0212676/2002) and two viruses of low pathogenicity in chickens (AIV strain A/chicken/Texas/298313/ 2004 and NDV strain APMV-1/chicken/Northern Ireland/Ulster/1967). Under the conditions of the assay, high-pathogenicity AIV was inactivated more slowly in meat from naturally infected chickens than in artificially infected chicken meat with a similar virus titer. In contrast, high-pathogenicity NDV was inactivated similarly in naturally and artificially infected meat. Linear regression models predicted that the current U.S. Department of Agriculture-Food Safety and Inspection Service time-temperature guidelines for cooking chicken meat to achieve a 7-log reduction of Salmonella also would effectively inactivate the AIV and NDV strains tested. Experimentally, the AIV and NDV strains used in this study (and the previously studied H5N1 high-pathogenicity AIV strain A/chicken/Korea/ES/2003) were effectively inactivated in chicken meat held at 70 or 73.9<degree>C for less than 1 s.

Code(s) de classement : 002A35D; 002A35B05

Descripteur(s) anglais
Descripteur(s) : Inactivation; Disease; Chicken meat; Virus
Desc. génériques : Food microbiology; Agriculture; Food industry; Biological sciences; Agriculture; Food industry; Biological sciences; Meat product
Descripteur(s) français
Descripteur(s) : Inactivation; Maladie; Viande poulet; Virus
Desc. génériques : Microbiologie alimentaire; Agriculture; Industries alimentaires; Sciences biologiques; Agriculture; Industries alimentaires; Sciences biologiques; Produit carne

Localisation : INIST, Shelf number 547, INIST No. 354000161776600150
Origine de la notice : INIST

Highly pathogenic RNA viral infections; Challenges for antiviral research. Treatment of highly pathogenic RNA viral infections

Titre : Highly pathogenic RNA viral infections; Challenges for antiviral research. Treatment of highly pathogenic RNA viral infections

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Source : Antiviral research. 2008; 78 (1) : 1-8
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CODEN : ARSRDR
Date de publication : 2008
Pays de publication : Netherlands
Langue(s) : English
Type de document : Serial
Nombre de références : 3/4 p.

Résumé : A number of RNA viruses can cause severe disease when transmitted to humans from an animal reservoir. One of them, the recently emerged H5N1 subtype of influenza A virus, has caused several hundred cases of severe disease when transferred directly from domestic poultry. This or another avian subtype could potentially evolve to a form more transmissible by the respiratory route or reassort with a circulating strain to initiate a pandemic. Other zoonotic RNA viruses cause sporadic single cases or outbreaks of hemorrhagic fever or encephalitis that spread inefficiently from person-to-person, and thus remain confined to the geographic range of the maintenance host. RNA viral infections of farm animals, such as foot and mouth disease and classical swine fever, also pose a major threat to human well-being through economic loss and impaired nutrition. Only a few licensed antiviral drugs are available to prevent or treat these conditions. Medications that inhibit the replication of influenza virus might be used in an epidemic both to treat severe disease and to block the spread of infection. The guanosine analog ribavirin has been used to treat a few types of hemorrhagic fever, but there is no specific therapy for the others, or for any type of RNA viral encephalitis. The quest for new antivirals is being supported by government programs and new collaborative research networks. Major efforts will be required to identify active compounds, test their efficacy in laboratory animals, obtain approval for human use and develop rapid diagnostic methods that can identify patients early enough in the disease course for treatment to be of benefit.

Code(s) de classement : 002B02S05; 002B05C

Descripteur(s) anglais
Descripteur(s) : Pathogenicity; Influenza; Antiviral; RNA virus; Research and development; Vaccine; Hemorrhagic fever; Livestock; Veterinary; Human; Review; Viral encephalitis
Desc. génériques : Virology; Infectious diseases; Pharmacology; Medical sciences; Virology; Infectious diseases; Medical sciences; Viral disease; Infection; Arbovirus disease
Descripteur(s) français
Descripteur(s) : Pouvoir pathogene; Grippe; Antiviral; Virus a ARN; Recherche et developpement; Vaccin; Fievre hemorragique; Betail; Veterinaire; Homme; Article synthese; Encephalite virale
Desc. génériques : Virologie; Maladies infectieuses; Pharmacologie; Sciences medicales; Virologie; Maladies infectieuses; Sciences medicales; Virose; Infection; Arbovirose

Localisation : INIST, Shelf number 18839, INIST No. 354000172642930005
Origine de la notice : INIST

080308374
PASCAL

Estimating the impact of school closure on influenza transmission from Sentinel data

Titre : Estimating the impact of school closure on influenza transmission from Sentinel data

Auteur(s) : CAUCHEMEZ Simon; VALLERON Alain Jacques; BOELLE Pierre Yves; FLAHAULT Antoine; FERGUSON Neil M
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CODEN : NATUAS
Date de publication : 2008
Pays de publication : United Kingdom
Langue(s) : English
Type de document : Serial
Type de document : correspondence,-letters
Nombre de références : 22 ref.

Résumé : The threat posed by the highly pathogenic H5N1 influenza virus requires public health authorities to prepare for a human pandemic. Although pre-pandemic vaccines and antiviral drugs might significantly reduce illness rates<sup>1<sup>,<sup>2, their stockpiling is too expensive to be practical for many countries. Consequently, alternative control strategies, based on non-pharmaceutical interventions, are a potentially attractive policy option. School closure is the measure most often considered. The high social and economic costs of closing schools for months make it an expensive and therefore controversial policy, and the current absence of quantitative data on the role of schools during influenza epidemics means there is little consensus on the probable effectiveness of school closure in reducing the impact of a pandemic. Here, from the joint analysis of surveillance data and holiday timing in France, we quantify the role of schools in influenza epidemics and predict the effect of school closure during a pandemic. We show that holidays lead to a 20-29% reduction in the rate at which influenza is transmitted to children, but that they have no detectable effect on the contact patterns of adults. Holidays prevent 16-18% of seasonal influenza cases (18-21% in children). By extrapolation, we find that prolonged school closure during a pandemic might reduce the cumulative number of cases by 13-17% (18-23% in children) and peak attack rates by up to 39-45% (47-52% in children). The impact of school closure would be reduced if it proved difficult to maintain low contact rates among children for a prolonged period.

Code(s) de classement : 002B05C02C

Descripteur(s) anglais
Descripteur(s) : Avian influenza; Influenzavirus; France; Models; Public health; Epidemiology; Human; Simulation
Desc. génériques : Virology; Infectious diseases; Medical sciences; Viral disease; Infection; Orthomyxoviridae; Virus; Europe
Descripteur(s) français
Descripteur(s) : Grippe aviaire; Influenzavirus; France; Modele; Sante publique; Epidemiologie; Homme; Simulation; Fermeture scolaire
Desc. génériques : Virologie; Maladies infectieuses; Sciences medicales; Virose; Infection; Orthomyxoviridae; Virus; Europe

Localisation : INIST, Shelf number 142, INIST No. 354000183351260180

080307043
PASCAL

Microbiological disinfection of water and air by photocatalysis. Franco-Chinese chemical bonds

Titre : Microbiological disinfection of water and air by photocatalysis. Franco-Chinese chemical bonds

Auteur(s) : GUILLARD Chantal; BUI Thu Hoai; FELIX Caroline; MOULES Vincent; LINA Bruno; LEJEUNE Philippe; QUENEAU Yves, ed
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Source : Comptes rendus Chimie. 2008; 11 (1-2) : 107-113
ISSN : 1631-0748
Date de publication : 2008
Pays de publication : France
Langue(s) : English
Langue(s) du résumé : French
Type de document : Serial
Nombre de références : 22 ref.

Résumé : Dans cette publication, nous rapportons une etude fondamentale sur l' efficacite du procede photocatalytique pour eliminer les bacteries presentes en solution aqueuse ainsi qu' une etude preliminaire concernant l' efficacite d' un prototype photocatalytique, developpe par la societe Buxair, pour eliminer le virus de la grippe aviaire present dans l' air. En phase aqueuse, deux souches de E. coli ont ete selectionnees (la souche K12 PHL849 et la souche K12 PHL1273) et inactivees en presence de deux photocatalyseurs. Une inactivation beaucoup plus importante de la souche adherente (PHL1273) se produit en presence du photocatalyseur TiO<sub>2 PC500. L' importance du contact entre photocatalyseur et bacterie et le role du peroxyde d' hydrogene susceptible d' etre produit lors du procede photocatalytique sont etudies en utilisant une membrane de dialyse..

Code(s) de classement : 001C01F01; 001C01A03

Descripteur(s) anglais
Descripteur(s) : Water; Air; Photocatalysis; Titanium oxide; Binary compound; Bacteria; Avian influenza; Avian influenzavirus; Disinfection; Heterogeneous catalysis
Desc. génériques : Photochemistry; General chemistry; Physical chemistry; Chemistry; Catalysis; General chemistry; Physical chemistry; Chemistry; Transition element compounds; Viral disease; Infection; Influenzavirus A; Orthomyxoviridae; Virus
Descripteur(s) français
Descripteur(s) : Eau; Air; Photocatalyse; Oxyde de titane; Compose binaire; Bacterie; Grippe aviaire; Influenzavirus aviaire; Desinfection; Catalyse heterogene; TiO2; O Ti
Desc. génériques : Photochimie; Chimie generale; Chimie physique; Chimie; Catalyse; Chimie generale; Chimie physique; Chimie; Compose de metal de transition; Virose; Infection; Influenzavirus A; Orthomyxoviridae; Virus

Localisation : INIST, Shelf number 116BC1B, INIST No. 354000173949910140
Origine de la notice : INIST

Experiences of an OIE collaborating centre in molecular diagnosis of transboundary animal diseases : A review. First International Conference of the OIE Reference Laboratories and Collaborating Centres, Florianopolis, Brazil, 3-5 December 2006

Titre : Experiences of an OIE collaborating centre in molecular diagnosis of transboundary animal diseases : A review. First International Conference of the OIE Reference Laboratories and Collaborating Centres, Florianopolis, Brazil, 3-5 December 2006

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Source : Developments in biologicals. 2007; 128 : 103-112
Informations congrès : *International Conference of the OIE Reference Laboratories and Collaborating Centres, *1, *Florianopolis Brazil, *2006-12-03
ISSN : 1424-6074
Date de publication : 2007
Pays de publication : Switzerland
Langue(s) : English
Type de document : Serial; *Conference-Meeting
Nombre de références : 18 ref.

Résumé : The highly contagious transboundary animal diseases (TADs), e.g., foot-and-mouth disease (FMD), classical swine fever (CSF), African swine fever (ASF) and highly pathogenic avian influenza (HPAI) are regularly occurring and re-occurring on various continents, causing severe losses. This epidemiological situation indicates the urgent need for the development of powerful, robust and high capacity new diagnostic methods in order to detect and identify the causative agents very rapidly. This report is on the experiences of an OIE Collaborating Centre and those of the MULTIPLEX-PCR and the LAB-ON-SITE EU project consortia with the development of novel methods for the improved molecular diagnosis of a range of viral diseases. Thermal amplification based real-time PCR methods (e.g.,TaqMan, Molecular Beacons, Primer-Probe Energy Transfer, and Light Upon extension (LUX) fluorogenic primers), and amplification without thermocycling have been elaborated for the improved diagnosis of TADs, such as FMD, swine vesicular disease, vesicular stomatitis, CSF, ASF, HPAI and Newcastle disease (ND). The simultaneous detection of various pathogens in a disease complex is facilitated by the development of multiplex PCR packages. By introducing nucleic acid extraction and pipetting robotics, together with the multi-channel real-time PCR machines, the molecular diagnostic procedures have become rapid, robust and automated. Quality control is strengthened by special precautions to avoid false positive and false negative results. By following the steps of OIE standardisation and validation, the diagnostic PCR assays have become nationally and internationally standardised and harmonised. The development of additional methods, like padlock probes and microarrays, is further improving the arsenal of nucleic acid based novel molecular diagnostic tests for TADs.

Code(s) de classement : 002B05C03; 002A36A

Descripteur(s) anglais
Descripteur(s) : Diagnosis; Review; Polymerase chain reaction; Automation; Viral disease; Veterinary; Method; Multiplex polymerase chain reaction; World Organisation for Animal Health
Desc. génériques : Virology; Infectious diseases; Medical sciences; Agriculture; Animal production; Biological sciences; Infection

Descripteur(s) français

Descripteur(s) : Diagnostic; Article synthese; Reaction chaine polymerase; Automatisation; Virose; Veterinaire; Methode; Reaction chaine polymerase multiplex; Organisation Mondiale de la Sante Animale

Desc. génériques : Virologie; Maladies infectieuses; Sciences medicales; Agriculture; Production animale; Sciences biologiques; Infection

Localisation : INIST, Shelf number 13557, INIST No. 354000173471480150
Origine de la notice : INIST

080305714
PASCAL

A Clinical Trial of a Whole-Virus H5N1 Vaccine Derived from Cell Culture

Titre : A Clinical Trial of a Whole-Virus H5N1 Vaccine Derived from Cell Culture

Auteur(s) : EHRLICH Hartmut J; MULLER Markus; OH Helen M L; TAMBYAH Paul A; JOUKHADAR Christian; MONTOMOLI Emanuele; FISHER Dale; BEREZUK Greg; FRITSCH Sandor; LOW BASELLI Alexandra; VARTIAN Nina; BOBROVSKY Roman; PAVLOVA Borislava G; POLLABAUER Eva Maria; KISTNER Otfried; BARRETT P Noel
Auteur(s) : Baxter H5N1 Pandemic Influenza Vaccine Clinical Study Team, Unknown
Source : The New England journal of medicine. 2008; 358 (24) : 2573-2584
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CODEN : NEJMAG
Date de publication : 2008
Pays de publication : United States
Langue(s) : English
Type de document : Serial
Nombre de références : 23 ref.

Résumé : BACKGROUND Widespread infections of avian species with avian influenza H5N1 virus and its limited spread to humans suggest that the virus has the potential to cause a human influenza pandemic. An urgent need exists for an H5N1 vaccine that is effective against divergent strains of H5N1 virus. METHODS In a randomized, dose-escalation, phase 1 and 2 study involving six subgroups, we investigated the safety of an H5N1 whole-virus vaccine produced on Vero cell cultures and determined its ability to induce antibodies capable of neutralizing various H5N1 strains. In two visits 21 days apart, 275 volunteers between the ages of 18 and 45 years received two doses of vaccine that each contained 3.75 <mu>g, 7.5 <mu>g, 15 <mu>g, or 30 <mu>g of hemagglutinin antigen with alum adjuvant or 7.5 <mu>g or 15 <mu>g of hemagglutinin antigen without adjuvant. Serologic analysis was performed at baseline and on days 21 and 42. RESULTS The vaccine induced a neutralizing immune response not only against the clade 1 (A/Vietnam/1203/2004) virus strain but also against the clade 2 and 3 strains. The use of adjuvants did not improve the antibody response. Maximum responses to the vaccine strain were obtained with formulations containing 7.5 <mu>g and 15 <mu>g of hemagglutinin antigen without adjuvant. Mild pain at the injection site (in 9 to 27% of subjects) and headache (in 6 to 31% of subjects) were the most common adverse events identified for all vaccine formulations. CONCLUSIONS A two-dose vaccine regimen of either 7.5 <mu>g or 15 <mu>g of hemagglutinin antigen without adjuvant induced neutralizing antibodies against diverse H5N1 virus strains in a high percentage of subjects, suggesting that this may be a useful H5N1 vaccine.

Code(s) de classement : 002B01; 002B30A03

Descripteur(s) anglais
Descripteur(s) : Clinical trial; Virus; Vaccine; Immunoprophylaxis; Prevention; Cell culture; Medicine; Influenzavirus AH5N1
Desc. génériques : Medical sciences; Public health; Medical sciences
Descripteur(s) français
Descripteur(s) : Essai clinique; Virus; Vaccin; Immunoprophylaxie; Prevention; Culture cellulaire; Medecine; Influenzavirus AH5N1
Desc. génériques : Sciences medicales; Sante publique; Sciences medicales

Localisation : INIST, Shelf number 6013, INIST No. 354000197843630050
Origine de la notice : INIST

Development of a multiplex real-time polymerase chain reaction for the detection of influenza virus type A including H5 and H9 subtypes

Titre : Development of a multiplex real-time polymerase chain reaction for the detection of influenza virus type A including H5 and H9 subtypes

Auteur(s) : LI Pei Qiong; JUN ZHANG; MULLER Claude P; CHEN Jing Xian; YANG Zi Feng; REN ZHANG; JUAN LI; HE Yun Shao
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CODEN : DMIDDZ
Date de publication : 2008
Pays de publication : United States
Langue(s) : English
Type de document : Serial
Nombre de références : 1/2 p.

Résumé : Avian influenza viruses (AIVs) are endemic in wild birds and, if transmitted to poultry, can cause serious economic losses. The aim of this study was to develop a multiplex real-time reverse transcriptase polymerase chain reaction (RT-PCR) for rapid detection of influenza virus type A, including H5 and H9 subtypes. The selected primers and various labeled TaqMan reporter probes corresponding to matrix, H5, and H9 genes were used in a multiplex real-time RT-PCR to simultaneously detect triple fluorescent signals. The results showed that the multiplex real-time RT-PCR assay can be applied to detect RNA of influenza virus type A including H5 and H9 subtypes with a high specificity and a sensitivity of 10 copies per reaction. As a result of its short turnaround times and a high specificity and sensitivity, the assay is very suitable for large-scale screening during AIV outbreaks.

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

Descripteur(s) anglais
Descripteur(s) : Influenza A virus; Avian influenzavirus; Multiplex polymerase chain reaction; Real time; Detection; Subtype; Method; Microbiology; Infection
Desc. génériques : Virology; Microbiology; Biological sciences; Infectious diseases; Medical sciences; Influenzavirus A; Orthomyxoviridae; Virus; Zoopathogen
Descripteur(s) français
Descripteur(s) : Virus grippal A; Influenzavirus aviaire; Reaction chaine polymerase multiplex; Temps reel; Detection; Soustype; Methode; Microbiologie; Infection
Desc. génériques : Virologie; Microbiologie; Sciences biologiques; Maladies infectieuses; Sciences medicales; Influenzavirus A; Orthomyxoviridae; Virus; Zoopathogene

Localisation : INIST, Shelf number 20217, INIST No. 354000197828880110
Origine de la notice : INIST

080322956
PASCAL

A simple screening assay for receptor switching of avian influenza viruses

Titre : A simple screening assay for receptor switching of avian influenza viruses

Auteur(s) : SUPTAWIWAT Ompreya; KONGCHANAGUL Alita; CHAN IT Wisoot; THITITHANYANONT Arunee; WIRIYARAT Witawat; CHAICHUEN Krisada; SONGSERM Taweesak; SUZUKI Yasuo; PUTHAVATHANA Pilaipan; AUEWARAKUL Prasert
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Source : Journal of clinical virology. 2008; 42 (2) : 186-189
ISSN : 1386-6532
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Pays de publication : Netherlands
Langue(s) : English
Type de document : Serial
Type de document : short-communication
Nombre de références : 1/4 p.

Résumé : Background: Adaptation of the receptor-binding preference from a2,3- to a2,6-linked sialic acid is an essential step for an avian influenza virus to transmit efficiently in human population and become a pandemic virus. The currently available assays for receptor-binding preference are complex and not widely available. Objectives: A simple high-throughput screening assay will facilitate early detection of a potential pandemic virus, which is crucial for the prevention and control of the possible pandemic. We wanted to develop a simple assay to differentiate influenza viruses with <alpha>2,3- or <alpha>2,6-linked receptor-binding preference. Study design: The assay employs a specific sialidase (from Salmonella thyphimurium) that can eliminate <alpha>2,3-linked sialic acid from red blood cells. A reduction of hemagglutination titer indicates <alpha>2,3-linked receptor preference in this assay. Results: Using a panel of H5N1 avian influenza isolates and H1/H3 human influenza isolates, as well as mutated H5 reverse genetics virus, the assay could accurately differentiate the viruses according to their receptor-binding preference. Furthermore, the assay was sufficiently sensitive to detect a minor variant with a2,6-linkage-specificity in a background of a2,3-linkage-specific virus. Conclusions: We have developed a simple screening assay capable of detecting avian influenza viruses that have switched their receptor-binding preference. <Copyright> 2008 Elsevier B.V. All rights reserved.

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

Descripteur(s) anglais
Descripteur(s) : Avian influenzavirus; Sialic acid; Exo <alpha> sialidase; Red blood cell; Microbiology; Virology; Avian influenza
Desc. génériques : Virology; Microbiology; Biological sciences; Virology; Infectious diseases; Medical sciences; Influenzavirus A; Orthomyxoviridae; Virus; Glycosidases; Glycosylases; Hydrolases; Enzyme; Zoopathogen; Viral disease; Infection; Blood cell
Descripteur(s) français
Descripteur(s) : Influenzavirus aviaire; Acide sialique; Exo <alpha> sialidase; Erythrocyte; Microbiologie; Virologie; Grippe aviaire
Desc. génériques : Virologie; Microbiologie; Sciences biologiques; Virologie; Maladies infectieuses; Sciences medicales; Influenzavirus A; Orthomyxoviridae; Virus; Glycosidases; Glycosylases; Hydrolases; Enzyme; Zoopathogene; Virose; Infection; Cellule sanguine

080321070
PASCAL

Plasmid DNA-Based Vaccines Protect Mice and Ferrets against Lethal Challenge with A/Vietnam/ 1203/04 (H5N1) Influenza Virus

Titre : Plasmid DNA-Based Vaccines Protect Mice and Ferrets against Lethal Challenge with A/Vietnam/ 1203/04 (H5N1) Influenza Virus

Auteur(s) : LALOR Peggy A; WEBBY Richard J; MORROW Jane; RUSALOV Denis; KASLOW David C; ROLLAND Alain; SMITH Larry R
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Source : The Journal of infectious diseases. 2008; 197 (12) : 1643-1652
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CODEN : JIDIAQ
Date de publication : 2008
Pays de publication : United States
Langue(s) : English
Type de document : Serial
Nombre de références : 48 ref.

Résumé : Plasmid DNA (pDNA) vaccines represent an alternative to conventional inactivated influenza vaccines that are likely to experience supply constraints during a pandemic. Several Vaxfectin-formulated pDNA vaccines were tested in mice and ferrets for efficacy against a lethal challenge with the highly pathogenic A/Vietnam/1203/04 (H5N1) influenza virus strain; the vaccines encoded influenza A virus hemagglutinin (HA), and/or nucleoprotein (NP), and M2 protein. Complete protection from death and disease was achieved in mice and ferrets with 2 doses of a Vaxfectin-formulated vaccine containing H5 HA, NP, and M2 plasmids and in ferrets with only 1 dose. A Vaxfectin-formulated vaccine containing NP and M2 pDNA provided significant protection against death in mice and provided some benefit in ferrets (i.e., 17% survival, delayed time to illness and death, and significant reduction in viral load compared with that in negative control animals). These experiments support the clinical testing of pDNA vaccine candidates that may ultimately increase global vaccine supply options during pandemics.

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

Descripteur(s) anglais
Descripteur(s) : Mouse; Influenzavirus; Plasmid; Genetic vaccine; Vietnam; Microbiology; Infection
Desc. génériques : Virology; Microbiology; Biological sciences; Infectious diseases; Medical sciences; Rodentia; Mammalia; Vertebrata; Orthomyxoviridae; Virus; Asia
Descripteur(s) français
Descripteur(s) : Souris; Influenzavirus; Plasmide; Vaccin genetique; Vietnam; Microbiologie; Infection
Desc. génériques : Virologie; Microbiologie; Sciences biologiques; Maladies infectieuses; Sciences medicales; Rodentia; Mammalia; Vertebrata; Orthomyxoviridae; Virus; Asie

Localisation : INIST, Shelf number 2052, INIST No. 354000197956410020
Origine de la notice : INIST

080315805
PASCAL

Cellular and Humoral Responses to Influenza in Gabonese Children Living in Rural and Semi-Urban Areas

Titre : Cellular and Humoral Responses to Influenza in Gabonese Children Living in Rural and Semi-Urban Areas

Auteur(s) : VAN RIET E; ADEGNIKA A A; RETRA K; VIEIRA R; TIELENS A G M; LELL B; ISSIFOU S; HANGERS F C; RIMMELZWAAN G F; KREMSNER P G; YAZDANBAKHSH M
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Pays de publication : United States
Langue(s) : English
Type de document : Serial
Nombre de références : 41 ref.

Résumé : Background. With the current attention to the pandemic threat of avian influenza viruses, it is recognized that there is little information on influenza in Africa. In addition, the effects of influenza vaccination in African countries could be very different from the effects in regions with less exposure to microorganisms and parasites. Methods. To monitor the presence of influenza viruses and investigate the immunological responses to influenza vaccination, schoolchildren in semi-urban and rural regions of Gabon were studied. Influenza-specific antibody responses to the 3 strains represented in the vaccine were determined in the serum. Furthermore, cytokine responses were measured after in vitro stimulation of whole blood by influenza antigens, before and after vaccination. Results. Prevaccination titers of antibody against H3N2 were high. At vaccination, the titers of antibody against the 3 influenza strains increased significantly. The anti-H1N1 and anti-B responses after vaccination were weaker in rural schoolchildren than in semi-urban schoolchildren. Influenza-specific cytokine responses were induced within a week, showing significantly lower interferon-y and significantly higher interleukin-5 in the children from rural areas. Conclusions. Prevaccination antibody levels indicated that influenza viruses circulate in Gabon. Altogether, influenza vaccination induces weaker immune responses in a rural population than in a semi-urban population of Gabonese schoolchildren.

Code(s) de classement : 002B05C02C

Descripteur(s) anglais
Descripteur(s) : Humoral immunity; Child; Gabon; Rural environment; Immune response; Serology; Influenza
Desc. génériques : Virology; Infectious diseases; Medical sciences; Human; Africa; Viral disease; Infection
Descripteur(s) français
Descripteur(s) : Immunite humorale; Enfant; Gabon; Milieu rural; Reponse immune; Serologie; Grippe
Desc. génériques : Virologie; Maladies infectieuses; Sciences medicales; Homme; Afrique; Virose; Infection

Localisation : INIST, Shelf number 2052, INIST No. 354000173810300130
Origine de la notice : INIST

080338500
PASCAL

Undernutrition Can Affect the Invading Microorganism

Titre : Undernutrition Can Affect the Invading Microorganism

Auteur(s) : LOURIA Donald B
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Source : Clinical infectious diseases. 2007; 45 (4) : 470-474
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Date de publication : 2007
Pays de publication : United States
Langue(s) : English
Type de document : Serial
Nombre de références : 28 ref.

Résumé : Undernutrition or malnutrition adversely affects host defenses against many invading microorganisms, thereby increasing the severity of infection. Studies of RNA viruses (e.g., coxsackievirus B and influenzavirus) have shown that selenium or vitamin E deficiency in mice increases disease severity and results in stable genomic changes in the virus that increase virulence. Changes in H3N2 influenzavirus were predominantly in the ordinarily stable Ml matrix protein. Whether this represents selection of already-existing variants or direct effects on viral RNA is unclear. Related questions include whether undernutrition in persons who acquire infection with influenzavirus H5N1 could promote genomic changes during infection that result in greater virulence and higher case-fatality rates, and whether undernutrition could help create the multiple mutations needed to instigate human-to-human transmission. These possibilities emphasize the importance of alleviating world poverty and malnutrition. In addition, these findings suggest that the neglected area of undernutrition affecting invading microorganisms merits intensive investigation in humans and experimental models.

Code(s) de classement : 002B05; 002B22C

Descripteur(s) anglais
Descripteur(s) : Malnutrition; Infection
Desc. génériques : Infectious diseases; Medical sciences; Metabolic diseases; Medical sciences; Nutrition disorder
Descripteur(s) français
Descripteur(s) : Malnutrition; Infection
Desc. génériques : Maladies infectieuses; Sciences medicales; Maladies metaboliques; Sciences medicales; Trouble de la nutrition

Localisation : INIST, Shelf number 18407, INIST No. 354000197581440080
Origine de la notice : INIST

080331839
PASCAL

The novel adjuvant IC31<Registered> strongly improves influenza vaccine-specific cellular and humoral immune responses in young adult and aged mice

Titre : The novel adjuvant IC31<Registered> strongly improves influenza vaccine-specific cellular and humoral immune responses in young adult and aged mice

Auteur(s) : RIEDL Karin; RIEDL Rosemarie; VON GABAIN Alexander; NAGY Eszter; LINGNAU Karen
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Source : Vaccine . 2008; 26 (27-28) : 3461-3468
ISSN : 0264-410X
CODEN : VACCDE
Date de publication : 2008
Pays de publication : United Kingdom
Langue(s) : English
Type de document : Serial
Nombre de références : 46 ref.

Résumé : The compromised immune responses in the elderly as well as the threat of pandemic influenza necessitate the development of improved influenza vaccines. This study provides evidence that IC31<Registered>, a two-component synthetic adjuvant signalling through TLR-9, augments humoral and cellular immune responses to seasonal influenza vaccines. Experiments performed in young adult mice showed increased HI titres and higher levels of lgG2a antibodies that were accompanied by the induction of IFN-<gamma> producing CD4<sup>+ T cells after single vaccination with reduced doses of vaccine antigens, even 200 days after single immunisation. Importantly, similar effects were seen in aged mice, although most pronounced upon booster immunisation. Thus, IC31<Registered> fulfils important criteria of novel influenza vaccine adjuvants.

Code(s) de classement : 002A05F04

Descripteur(s) anglais
Descripteur(s) : Mouse; Immunological adjuvant; Vaccine; Cellular immunity; Humoral immunity; Young adult; Immune response; Influenza
Desc. génériques : Immunology; Pharmacology; Applied microbiology; Microbiology; Biological sciences; Rodentia; Mammalia; Vertebrata; Human; Viral disease; Infection
Descripteur(s) français
Descripteur(s) : Souris; Adjuvant immunologique; Vaccin; Immunite cellulaire; Immunite humorale; Adulte jeune; Reponse immune; Grippe
Desc. génériques : Immunologie; Pharmacologie; Microbiologie appliquee; Microbiologie; Sciences biologiques; Rodentia; Mammalia; Vertebrata; Homme; Virose; Infection

Localisation : INIST, Shelf number 20289, INIST No. 354000196216230170
Origine de la notice : INIST

080328749
PASCAL

Impact of SARS on avian influenza preparedness in healthcare workers; Impact du SRAS sur l' etat de preparation du personnel soignant vis-a-vis de la grippe aviaire

Titre : Impact of SARS on avian influenza preparedness in healthcare workers; Impact du SRAS sur l' etat de preparation du personnel soignant vis-a-vis de la grippe aviaire

Auteur(s) : TAM DKP; LEE S; LEE SS
Source : INFECTION . 2007-10; 35 (5) : 320-325
ISSN : 0300-8126
Date de publication : 2007
Pays de publication : Germany
Langue(s) : English
Type de document : Serial
Nombre de références : 16 ref.

Résumé : BACKGROUND : SARS was an unprecedented outbreak which brought about 1,755 infections and 302 deaths in Hong Kong. The similarity of SARS and avian influenza prompted us to examine the relationship between SARS experience and preparedness on a potential avian influenza outbreak. METHODS : A self-administered questionnaire was delivered to nurses in Hong Kong to assess their attitude towards avian influenza; risk perception, and their relationships with previous level of exposure to SARS patients. RESULTS : Nine hundred and ninety-nine respondents were included in data analysis. About half of them perceived there would be an avian influenza outbreak in Hong Kong. The majority accepted a personal risk of infection in the course of their work (72.7%), and prepared to take care of patients infected with avian influenza (84.0%). Respondents were classified into two groups : high exposure (44.1%) and low exposure (55.9%) as defined by having worked in SARS ward or hospitals. High exposure nurses were less likely to avoid patients, less inclined to change their job if they were required to take care of infected patients, and had therefore a more positive attitude towards an impending avian influenza epidemic. About half of the nurses had frequent involuntary recalls of incidents relating to SARS, the frequency of which was positively correlated with knowing a person suffering from long-term complications of SARS. CONCLUSION : Healthcare workers who had been actively involved in SARS work were more "positive" in responding to the impending avian influenza epidemic. Whether the level of preparedness can be sustained would need to be further explored. (R.A.)

Code(s) de classement : 002B30A11

Descripteur(s) anglais
Descripteur(s) : Epidemic; Influenza; Personnel; Questionnaire; Occupational environment; Risk; Data analysis; Nosocomial infection; Hygiene; Hospital
Desc. génériques : Public health; Medical sciences; Viral disease; Infection
Descripteur(s) français
Descripteur(s) : Epidemie; Grippe; Personnel; Questionnaire; Milieu professionnel; Risque; Analyse donnee; Infection nosocomiale; Hygiene; Hopital
Desc. génériques : Sante publique; Sciences medicales; Virose; Infection

Localisation : BDSP/NOSOBASE, Shelf number 19549
Origine de la notice : BDSP

080328162
PASCAL

Risques alimentaires et catastrophes sanitaires. L' Agence francaise de securite sanitaire des aliments, de la vache folle a la grippe aviaire

Titre : Risques alimentaires et catastrophes sanitaires. L' Agence francaise de securite sanitaire des aliments, de la vache folle a la grippe aviaire

Auteur(s) : KECK Frederic
Source : ESPRIT . 2008-03/2008-04; (3-4) : 36-50
ISSN : 0014-0759
Date de publication : 2008
Pays de publication : France
Langue(s) : French
Type de document : Serial
Nombre de références : dissem.

Résumé : Depuis la crise de la "vache folle", la securite alimentaire fait partie des priorites de la sante publique. Cette analyse de l' action publique et des debats des experts montre les conflits qui organisent ce domaine et plaide pour une approche anthropologique de notre rapport a l' alimentation

Code(s) de classement : 002B30A01

Descripteur(s) anglais
Descripteur(s) : Spongiform encephalopathy; Meat; Food intake; Risk; Trophic chain; Check; Anthropology; Philosophy; France
Desc. génériques : Public health; Medical sciences; Prion disease; Infection; Europe
Descripteur(s) français
Descripteur(s) : Agence francaise de securite sanitaire des aliments; Encephalopathie spongiforme; Viande; Consommation alimentaire; Risque; Chaine alimentaire; Controle; Anthropologie; Philosophie; France
Desc. génériques : Sante publique; Sciences medicales; Maladie a prions; Infection; Europe

Localisation : BDSP/EHESP, Shelf number 165426
Origine de la notice : BDSP

080328161
PASCAL

La grippe aviaire entre soin et politique. Une catastrophe annoncee ?

Titre : La grippe aviaire entre soin et politique. Une catastrophe annoncee ?

Auteur(s) : WORMS Frederic
Source : ESPRIT . 2008-03/2008-04; (3-4) : 20-35
ISSN : 0014-0759
Date de publication : 2008
Pays de publication : France
Langue(s) : French
Type de document : Serial
Nombre de références : dissem.

Résumé : La menace d' une pandemie d' origine aviaire au niveau mondial nous confronte a un phenomene qu' on ne peut caracteriser simplement comme un risque sanitaire. Par sa nature et son ampleur, elle nous oblige a reflechir a la distribution des soins, au maintien des relations vitales, aux regles les plus fondamentales de la vie sociale

Code(s) de classement : 002B30A01

Descripteur(s) anglais
Descripteur(s) : Epidemic; Influenza; Prevention; Risk; Anticipation; Care; Responsibility; Physician; Occupational responsibility; Social interaction; Policy; International cooperation; France
Desc. génériques : Public health; Medical sciences; Viral disease; Infection; Europe
Descripteur(s) français
Descripteur(s) : Epidemie; Grippe; Prevention; Risque; Anticipation; Soin; Responsabilite; Medecin; Responsabilite professionnelle; Interaction sociale; Politique; Cooperation internationale; France
Desc. génériques : Sante publique; Sciences medicales; Virose; Infection; Europe

Localisation : BDSP/EHESP, Shelf number 165425
Origine de la notice : BDSP

080323099
PASCAL

Comparative Efficacy of Neutralizing Antibodies Elicited by Recombinant Hemagglutinin Proteins from Avian H5N1 Influenza Virus

Titre : Comparative Efficacy of Neutralizing Antibodies Elicited by Recombinant Hemagglutinin Proteins from Avian H5N1 Influenza Virus

Auteur(s) : WEI Chih Jen; LING XU; KONG Wing Pui; WEI SHI; CANIS Kevin; STEVENS James; YANG Zhi Yong; DELL Anne; HASLAM Stuart M; WILSON Ian A; NABEL Gary J
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Source : Journal of virology. 2008; 82 (13) : 6200-6208
ISSN : 0022-538X
Date de publication : 2008
Pays de publication : United States
Langue(s) : English
Type de document : Serial
Nombre de références : 24 ref.

Résumé : Although the human transmission of avian H5N1 virus remains low, the prevalence of this highly pathogenic infection in avian species underscores the need for a preventive vaccine that can be made without eggs. Here, we systematically analyze various forms of recombinant hemagglutinin (HA) protein for their potential efficacy as vaccines. Monomeric, trimeric, and oligomeric H5N1 HA proteins were expressed and purified from either insect or mammalian cells. The immunogenicity of different recombinant HA proteins was evaluated by measuring the neutralizing antibody response. Neutralizing antibodies to H5N1 HA were readily generated in mice immunized with the recombinant HA proteins, but they varied in potency depending on their multimeric nature and cell source. Among the HA proteins, a high-molecular-weight oligomer elicited the strongest antibody response, followed by the trimer; the monomer showed minimal efficacy. The coexpression of another viral surface protein, neuraminidase, did not affect the immunogenicity of the HA oligomer, as expected from the immunogenicity of trimers produced from insect cells. As anticipated, HA expressed in mammalian cells without NA retained the terminal sialic acid residues and failed to bind a2,3-linked sialic acid receptors. Taken together, these results suggest that recombinant HA proteins as individual or oligomeric trimers can elicit potent neutralizing antibody responses to avian H5N1 influenza viruses.

Code(s) de classement : 002A05C10

Descripteur(s) anglais
Descripteur(s) : Avian influenzavirus; Efficiency; Neutralizing antibody; Recombinant protein; Hemagglutinin; Virology; Influenzavirus AH5N1
Desc. génériques : Virology; Microbiology; Biological sciences; Influenzavirus A; Orthomyxoviridae; Virus
Descripteur(s) français
Descripteur(s) : Influenzavirus aviaire; Efficacite; Anticorps neutralisant; Proteine recombinante; Hemagglutinine; Virologie; Influenzavirus AH5N1
Desc. génériques : Virologie; Microbiologie; Sciences biologiques; Influenzavirus A; Orthomyxoviridae; Virus

Localisation : INIST, Shelf number 13592, INIST No. 354000198063720110
Origine de la notice : INIST

080322968
PASCAL

Molecular detection and typing of influenza viruses : Are we ready for an influenza pandemic?

Titre : Molecular detection and typing of influenza viruses : Are we ready for an influenza pandemic?

Auteur(s) : MACKAY W G; VAN LOON A M; NIEDRIG M; MEIJER A; LINA B; NIESTERS H G M
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Source : Journal of clinical virology. 2008; 42 (2) : 194-197
ISSN : 1386-6532
Date de publication : 2008
Pays de publication : Netherlands
Langue(s) : English
Type de document : Serial
Type de document : short-communication
Nombre de références : 1/4 p.

Résumé : Background: We cannot predict when an influenza pandemic will occur or which variant of the virus will cause it. Little information is currently available on the ability of laboratories to detect and subtype influenza viruses including the avian influenza viruses. Objectives: To assess the ability of laboratories to detect and subtype influenza viruses. Study design: In 2006 QCMD distributed an External Quality Assessment panel for the molecular detection and haemagglutinin subtyping of influenza viruses to 87 laboratories in 34 countries Worldwide, which were given 6 weeks to return results. These data were analysed to assess laboratory performance. Results: Influenza virus positive panel samples were correctly identified by 35-98% of laboratories. The correct haemagglutinin subtype was reported by 32-87% of laboratories that detected the virus: incorrect subtyping results included the reporting of avian influenza viruses as human strains and vice versa. Twelve laboratories reported false positives with some avian influenza viruses reported. Conclusions: These data suggest that improvements are needed in the molecular detection of influenza viruses and influenza virus A haemagglutinin subtyping. Only rapid and accurate identification of circulating pandemic influenza virus will ensure that the maximum time is available for intervention.

Code(s) de classement : 002A05C10; 002B05C02J; 002A05C06

Descripteur(s) anglais
Descripteur(s) : Influenzavirus; Molecular epidemiology; Genotype; Detection; Microbiology; Virology; 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; Epidemiologie moleculaire; Genotype; Detection; Microbiologie; Virologie; 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 26272, INIST No. 354000197837120160
Origine de la notice : INIST