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Novembre 2006

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LISTE DES TITRES

060407266
PASCAL

Pandemic influenza preparedness in the Asia-Pacific region

Titre : Pandemic influenza preparedness in the Asia-Pacific region

Auteur(s) : COKER Richard; MOUNIER JACK Sandra
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Source : Lancet British edition. 2006; 368 (9538) : 886-889
ISSN : 0140-6736
CODEN : LANCAO
Date de publication : 2006
Pays de publication : United Kingdom
Langue(s) : English
Type de document : Serial
Nombre de références : 24 ref.

Résumé : Concerns are mounting that the threat of another influenza pandemic will become a reality and that the epicentre of the outbreak could be the Asia-Pacific region. We assessed the documents that some Asia-Pacific countries have published as part of preparedness planning for an outbreak of influenza in people. Regional approaches were polarised. Thailand, China, and Vietnam had set out a strategic vision to strengthen future capacity in preparedness planning. By contrast, Hong Kong, Australia, and New Zealand took a strategic approach aimed mainly at harnessing available resources or preparing for the deployment of resources such as stockpiled antiviral agents and vaccines. The plans of Hong Kong, Australia, and New Zealand compared favourably with the best European plans. The plans of resource-poor countries addressed some issues that were largely neglected by most European plans. Other countries (including those that do not yet have plans) could benefit from analysis of the strengths and weaknesses of the plans drawn up by countries in the region and in Europe.

Code(s) de classement : 002B01

Descripteur(s) anglais
Descripteur(s) : Preparation; Dragging; Teaching; Asia; Region; Medicine
Desc. génériques : Medical sciences
Descripteur(s) français
Descripteur(s) : Preparation; Entrainement; Enseignement; Asie; Region; Medecine; Pandemie; Grippe pandemique; Etat de preparation
Desc. génériques : Sciences medicales
Localisation : INIST, Shelf number 5004, INIST No. 354000133368970190

Origine de la notice : INIST

060405846
PASCAL

Planning for avian influenza

Titre : Planning for avian influenza

Auteur(s) : BARTLETT John G
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Source : Annals of internal medicine. 2006; 145 (2) : 141-144
ISSN : 0003-4819
CODEN : AIMEAS
Date de publication : 2006
Pays de publication : United States
Langue(s) : English
Type de document : Serial
Nombre de références : 24 ref.

Résumé : Avian influenza, or influenza A (H5N1), has 3 of the 4 properties necessary to cause a serious pandemic: It can infect people, nearly all people are immunologically naive, and it is highly lethal. The Achilles heel of the virus is the lack of sustained human-human transmission. Fortunately, among the 124 cases reported through 30 May 2006, nearly all were acquired by direct contact with poultry. Unfortunately, the capability for efficient human-human transmission requires only a single mutation by a virus that is notoriously genetically unstable, hence the need for a new vaccine each year for seasonal influenza. Influenza A (H5N1) is being compared to another avian strain, the agent of the "Spanish flu" of 1918-1919, which traversed the world in 3 months and caused an estimated 50 million deaths. The question is, are we ready for this type of pandemic? The answer is probably no. The main problems are the lack of an effective vaccine, very poor surge capacity, a health care system that could not accommodate even a modest pandemic, and erratic regional planning. It's time to get ready, and in the process be ready for bioterrorism, natural disasters, and epidemics of other infectious diseases.

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

Descripteur(s) anglais
Descripteur(s) : Planning; Medicine; Influenza; Health policy; United States; Avian influenza
Desc. génériques : Public health; Medical sciences; Virology; Infectious diseases; Medical sciences; Viral disease; Infection; North America; America
Descripteur(s) français
Descripteur(s) : Planification; Medecine; Grippe; Politique sanitaire; Etats Unis; Plan pandemie; Grippe aviaire
Desc. génériques : Sante publique; Sciences medicales; Virologie; Maladies infectieuses; Sciences medicales; Virose; Infection; Amerique du Nord; Amerique
Localisation : INIST, Shelf number 2014, INIST No. 354000138972600090

Origine de la notice : INIST

060405844
PASCAL

The health care response to pandemic influenza

Titre : The health care response to pandemic influenza

Auteur(s) : American College of Physicians, United States
Source : Annals of internal medicine. 2006; 145 (2) : 135-137
ISSN : 0003-4819
CODEN : AIMEAS
Date de publication : 2006
Pays de publication : United States
Langue(s) : English
Type de document : Serial
Nombre de références : 6 ref.

Résumé : The threat of an H5N1 influenza virus (avian flu) pandemic is substantial. The success of the current U.S. influenza pandemic response plan depends on effective coordination among state and local public health authorities and individual health care providers. This article is a summary of a public policy paper developed by the American College of Physicians to address issues in the U.S. Department of Health and Human Services Pandemic Influenza Plan that involve physicians. The College's positions call for the following: 1) development of local public health task forces that include physicians representing all specialties and practice settings; 2) physician access to 2-way communication with public health authorities and to information technology tools for diagnosis and syndrome surveillance; 3) clear identification and authorization of agencies to process licensing and registration of volunteer physicians; 4) clear guidelines for overriding standard procedures for confidentiality and consent in the interest of the public's health; 5) clear and fair infection control measures that do not create barriers to care; 6) analysis of and solutions to current problems with seasonal influenza vaccination programs as a way of developing a maximally efficient pandemic flu vaccine program; 7) federal funding to provide pandemic flu vaccine for the entire U.S. population and antiviral drugs for 25% of the population; and 8) planning for health care in alternative, nonhospital settings to prevent a surge in demand for hospital care that exceeds supply.

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

Descripteur(s) anglais
Descripteur(s) : Public health; Care; Influenza; Medicine; United States; Preparation; Recommendation; Learned society; Health policy; Avian influenza
Desc. génériques : Public health; Medical sciences; Virology; Infectious diseases; Medical sciences; Viral disease; Infection; North America; America
Descripteur(s) français
Descripteur(s) : Sante publique; Soin; Grippe; Medecine; Etats Unis; Preparation; Recommandation; Societe savante; Politique sanitaire; Pandemie; Plan pandemie; Grippe pandemique; Virus H5N1; Grippe aviaire
Desc. génériques : Sante publique; Sciences medicales; Virologie; Maladies infectieuses; Sciences medicales; Virose; Infection; Amerique du Nord; Amerique
Localisation : INIST, Shelf number 2014, INIST No. 354000138972600070

Origine de la notice : INIST

060404158
PASCAL

Experimental evaluation of the fluchip diagnostic microarray for influenza virus surveillance

Titre : Experimental evaluation of the fluchip diagnostic microarray for influenza virus surveillance

Auteur(s) : TOWNSEND Michael B; DAWSON Erica D; MEHLMANN Martin; SMAGALA James A; DANKBAR Daniela M; MOORE Chad L; SMITH Catherine B; COX Nancy J; KUCHTA Robert D; ROWLEN Kathy L
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Source : Journal of clinical microbiology Print. 2006; 44 (8) : 2863-2871
ISSN : 0095-1137
CODEN : JCMIDW
Date de publication : 2006
Pays de publication : United States
Langue(s) : English
Type de document : Serial
Nombre de références : 39 ref.

Résumé : Global surveillance of influenza is critical for improvements in disease management and is especially important for early detection, rapid intervention, and a possible reduction of the impact of an influenza pandemic. Enhanced surveillance requires rapid, robust, and inexpensive analytical techniques capable of providing a detailed analysis of influenza virus strains. Low-density oligonucleotide microarrays with highly multiplexed "signatures" for influenza viruses offer many of the desired characteristics. However, the high mutability of the influenza virus represents a design challenge. In order for an influenza virus microarray to be of utility, it must provide information for a wide range of viral strains and lineages. The design and characterization of an influenza microarray, the FluChip-55 microarray, for the relatively rapid identification of influenza A virus subtypes H1N1, H3N2, and H5N1 are described here. In this work, a small set of sequences was carefully selected to exhibit broad coverage for the influenza A and B viruses currently circulating in the human population as well as the avian A/H5N1 virus that has become enzootic in poultry in Southeast Asia and that has recently spread to Europe. A complete assay involving extraction and amplification of the viral RNA was developed and tested. In a blind study of 72 influenza virus isolates, RNA from a wide range of influenza A and B viruses was amplified, hybridized, labeled with a fluorophore, and imaged. The entire analysis time was less than 12 h. The combined results for two assays provided the absolutely correct types and subtypes for an average of 72% of the isolates, the correct type and partially correct subtype information for 13% of the isolates, the correct type only for 10% of the isolates, false-negative signals for 4% of the isolates, and false-positive signals for 1% of the isolates. In the overwhelming majority of cases in which incomplete subtyping was observed, the failure was due to the nucleic acid amplification step rather than limitations in the microarray.

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

Descripteur(s) anglais
Descripteur(s) : Influenzavirus; Microbiology
Desc. génériques : Virology; Microbiology; Biological sciences; Infectious diseases; Medical sciences; Orthomyxoviridae; Virus
Descripteur(s) français
Descripteur(s) : Influenzavirus; Microbiologie
Desc. génériques : Virologie; Microbiologie; Sciences biologiques; Maladies infectieuses; Sciences medicales; Orthomyxoviridae; Virus
Localisation : INIST, Shelf number 17088, INIST No. 354000133476880280

Origine de la notice : INIST

060401228
PASCAL

Two clusters of human infection with influenza A/H5N1 virus in the Republic of Azerbaijan, February-March 2006

Titre : Two clusters of human infection with influenza A/H5N1 virus in the Republic of Azerbaijan, February-March 2006

Auteur(s) : GILSDORF A; BOXALL N; GASIMOV V; AGAYEV I; MAMMADZADE F; URSU P; GASIMOV E; BROWN C; MARDEL S; JANKOVIC D; PIMENTEL G; AMIR AYOUB I; MAHER LABIB ELASSAL E; SALVI C; LEGROS D; PESSOA DA SILVA C; HAY A; ANDRAGHETTI R; RODIER G; GANTER B
Affiliation(s) : Robert Koch Institute, Berlin, Germany; Field Epidemiology Training Program (FETP), Unknown; National Institute of Public Health, Prague, Czech Republic; European Programme for Intervention Epidemiology Training (EPIET), Unknown; Ministry of Health of the Republic of Azerbaijan, Baku, Azerbaijani Republic; National Anti-Plague Station, Baku, Azerbaijani Republic; World Health Organization, Azerbaijani Republic; World Health Organization Regional Office for Europe, Copenhagen, Denmark; United States Naval Medical Research Unit 3, Cairo, Egypt; World Health Organization, Geneva, Switzerland; National Institute for Medical Research, Mill Hill, United Kingdom

Source : Euro surveillance. 2006; 11 (4-6) : 122-126
ISSN : 1025-496X
Date de publication : 2006
Pays de publication : France
Langue(s) : English
Type de document : Serial
Nombre de références : 12 ref.

Code(s) de classement : 002B05C02C

Descripteur(s) anglais
Descripteur(s) : Influenza A; Azerbaijan; Public health; Human; Sanitary surveillance
Desc. génériques : Virology; Infectious diseases; Medical sciences; Viral disease; Infection; Asia
Descripteur(s) français
Descripteur(s) : Grippe A; Azerbaidjan; Sante publique; Homme; Surveillance sanitaire
Desc. génériques : Virologie; Maladies infectieuses; Sciences medicales; Virose; Infection; Asie
Localisation : INIST, Shelf number 26438, INIST No. 354000156989480130

Origine de la notice : INIST

060400653
PASCAL

A national survey of the infectious diseases society of america emerging infections network concerning neuraminidase inhibitor prescription practices and pandemic influenza preparations

Titre : A national survey of the infectious diseases society of america emerging infections network concerning neuraminidase inhibitor prescription practices and pandemic influenza preparations

Auteur(s) : ORTIZ Justin R; SHAY David K; LIEDTKE Laura A; BRESEE Joseph S; STRAUSBAUGH Larry J
Affiliation(s) : Epidemic Intelligence Service, Office of Workforce and Career Development, Centers for Disease Control and Prevention, Atlanta, Georgia, United States; Influenza Branch, Centers for Disease Control and Prevention, Atlanta, Georgia, United States; Research Service, Veterans Affairs Medical Center, Portland, Oreoon, United States

Source : Clinical infectious diseases. 2006; 43 (4) : 494-497
ISSN : 1058-4838
CODEN : CIDIEL
Date de publication : 2006
Pays de publication : United States
Langue(s) : English
Type de document : Serial
Type de document : short-communication
Nombre de références : 12 ref.

Résumé : This report summarizes the findings of a national survey of infectious diseases consultants regarding their use of neuraminidase inhibitors and the status of their planning for an influenza pandemic. The respondents indicated that government stockpiles should be increased, that many have received requests for antiviral medications, and that additional recommendations regarding the appropriate use of antiviral medications would be helpful.

Code(s) de classement : 002B05C02C

Descripteur(s) anglais
Descripteur(s) : Infection; Emerging disease; Influenza; Survey; America; Network; Exo <alpha> sialidase; Medical prescription
Desc. génériques : Virology; Infectious diseases; Medical sciences; Viral disease; O Glycosidases; Glycosidases; Hydrolases; Enzyme
Descripteur(s) français
Descripteur(s) : Infection; Maladie emergente; Grippe; Enquete; Amerique; Reseau; Exo <alpha> sialidase; Prescription medicale
Desc. génériques : Virologie; Maladies infectieuses; Sciences medicales; Virose; O Glycosidases; Glycosidases; Hydrolases; Enzyme
Localisation : INIST, Shelf number 18407, INIST No. 354000133435130130

Origine de la notice : INIST

060398608
PASCAL

Combination chemotherapy, a potential strategy for reducing the emergence of drug-resistant influenza A variants

Titre : Combination chemotherapy, a potential strategy for reducing the emergence of drug-resistant influenza A variants

Auteur(s) : ILYUSHINA Natalia A; BOVIN Nicolai V; WEBSTER Robert G; GOVORKOVA Elena A
Affiliation(s) : Department of Infectious Diseases, St. Jude Children's Research Hospital, 332 N. Lauderdale, Memphis, TN 38105-2794, United States; The D.I. Ivanovsky Institute of Virology, Gamaleya 16, Moscow 123098, Russia; Shemyakin Institute of Bioorganic Chemistry, 16/10 Miklukho-Maklaya, Moscow 117997, Russia; Department of Pathology, University of Tennessee, Memphis, TN 38105, United States

Source : Antiviral research. 2006; 70 (3) : 121-131
ISSN : 0166-3542
CODEN : ARSRDR
Date de publication : 2006
Pays de publication : Netherlands
Langue(s) : English
Type de document : Serial
Nombre de références : 1 p.1/4

Résumé : Rapid development of resistant influenza variants after amantadine treatment is one of the main drawbacks of M2 blockers. On the other hand, the emergence of variants with low susceptibility to the neuraminidase (NA) inhibitors is limited. In the present study we examined whether combination therapy with two classes of anti-influenza drugs can affect the emergence of resistant variants in vitro. We observed that virus yields of human A/Nanchang/1/99 (H1N1), A/Panama/2007/99 (H3N2), and A/Hong Kong/156/97 (H5N1) viruses in MDCK cells were significantly reduced (P < 0.005) when the cells were treated with the combination of amantadine and low doses of oseltamivir carboxylate (<=1 <mu>M). After five sequential passages in MDCK cells, the M2 protein of viruses cultivated with amantadine alone mutated at positions V27A and S31N/I. Viruses cultivated with oseltamivir carboxylate (>=0.001 <mu>M) possessed mutations in the hemagglutinin (HA) protein. These variants showed reduced efficiency of binding to sialic acid receptors and decreased sensitivity to NA inhibitor in plaque reduction assay. Importantly, no mutations in the HA, NA, and M2 proteins were detected when the drugs were used in combination. Our results suggest that combination chemotherapy with M2 blocker and NA inhibitor reduced the emergence of drug-resistant influenza variants in vitro. This strategy could be an option for the control of influenza virus infection, and combinations with other novel drugs should be explored.

Code(s) de classement : 002B02S05

Descripteur(s) anglais
Descripteur(s) : Combined treatment; Strategy; Treatment resistance; Influenza A; Influenza A virus; Oseltamivir; Genetic variant; Antiviral
Desc. génériques : Virology; Infectious diseases; Pharmacology; Medical sciences; Viral disease; Infection; Influenzavirus A; Orthomyxoviridae; Virus; Amantadine derivatives; Exo <alpha> sialidase; O Glycosidases; Glycosidases; Hydrolases; Enzyme; Enzyme inhibitor; Neuraminidase inhibitor; Agonist; Antagonist; Dopamine receptor; Glutamate receptor; NMDA receptor; Dopamine agonist
Descripteur(s) français
Descripteur(s) : Traitement associe; Strategie; Resistance traitement; Grippe A; Virus grippal A; Oseltamivir; Variant genetique; Antiviral
Desc. génériques : Virologie; Maladies infectieuses; Pharmacologie; Sciences medicales; Virose; Infection; Influenzavirus A; Orthomyxoviridae; Virus; Amantadine derive; Exo <alpha> sialidase; O Glycosidases; Glycosidases; Hydrolases; Enzyme; Inhibiteur enzyme; Inhibiteur neuraminidase; Agoniste; Antagoniste; Recepteur dopaminergique; Recepteur glutamate; Recepteur NMDA; Stimulant dopaminergique

060394917
PASCAL

Oligonucleotide-based antiviral strategies. RNA towards medicine

Titre : Oligonucleotide-based antiviral strategies. RNA towards medicine

Auteur(s) : SCHUBERT S; KURRECK J; ERDMANN Volker A, ed; BROSIUS Jurgen, ed; BARCISZEWSKI Jan, ed
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Source : Handbook of experimental pharmacology. 2006; 173 : 261-287
ISSN : 0171-2004
Date de publication : 2006
Pays de publication : Germany
Langue(s) : English
Type de document : Serial
Nombre de références : 5 p.

Résumé : In the age of extensive global traffic systems, the close neighborhood of man and livestock in some regions of the world, as well as inadequate prevention measures and medical care in poorer countries, greatly facilitates the emergence and dissemination of new virus strains. The appearance of avian influenza viruses that can infect humans, the spread of the severe acute respiratory syndrome (SARS) virus, and the unprecedented raging of human immunodeficiency virus (HIV) illustrate the threat of a global virus pandemic. In addition, viruses like hepatitis B and C claim more than one million lives every year for want of efficient therapy. Thus, new approaches to prevent virus propagation are urgently needed. Antisense strategies are considered a very attractive means of inhibiting viral replication, as oligonucleotides can be designed to interact with any viral RNA, provided its sequence is known. The ensuing targeted destruction of viral RNA should interfere with viral replication without entailing negative effects on ongoing cellular processes. In this review, we will give some examples of the employment of antisense oligonucleotides, ribozymes, and RNA interference strategies for antiviral purposes. Currently, in spite of encouraging results in preclinical studies, only a few antisense oligonucleotides and ribozymes have turned out to be efficient antiviral compounds in clinical trials. The advent of RNA interference now seems to be refueling hopes for decisive progress in the field of therapeutic employment of antisense strategies.

Code(s) de classement : 002B02S05

Descripteur(s) anglais
Descripteur(s) : Antisense oligonucleotide; Antiviral; Ribozyme; Gene silencing; Review; RNA interference; RNA interference
Desc. génériques : Virology; Infectious diseases; Pharmacology; Medical sciences
Descripteur(s) français
Descripteur(s) : Oligonucleotide antisens; Antiviral; RNA catalytique; Silence expression genique; Article synthese; ARN interference; Interference ARN
Desc. génériques : Virologie; Maladies infectieuses; Pharmacologie; Sciences medicales
Localisation : INIST, Shelf number 21230, INIST No. 354000142685600130

Origine de la notice : INIST

060393638
PASCAL

L' influenza aviaire hautement pathogene ou peste aviaire. Cas particulier de la panzootie due au virus H5N1 asiatique

Titre : L' influenza aviaire hautement pathogene ou peste aviaire. Cas particulier de la panzootie due au virus H5N1 asiatique

Auteur(s) : BRUGERE PICOUX Jeanne
Affiliation(s) : Ecole nationale veterinaire d'Alfort Membre de l'Academie nationale de medecine et de l'Academie veterinaire de France, France

Source : Sciences 1969. 2006; (1) : 3-10
ISSN : 0151-0304
Date de publication : 2006
Pays de publication : France
Langue(s) : French
Type de document : Serial
Nombre de références : 22 ref.

Code(s) de classement : 002B05C02C

Descripteur(s) anglais
Descripteur(s) : Animal; Aves; Review; Epidemiology; Symptomatology; Diagnosis; Avian influenza
Desc. génériques : Virology; Infectious diseases; Medical sciences; Vertebrata
Descripteur(s) français
Descripteur(s) : Animal; Aves; Article synthese; Epidemiologie; Symptomatologie; Diagnostic; Virus H5N1; Grippe aviaire
Desc. génériques : Virologie; Maladies infectieuses; Sciences medicales; Vertebrata
Localisation : INIST, Shelf number 14454, INIST No. 354000153233800010

Origine de la notice : INIST

060391971
PASCAL

Infection of human airway epithelium by human and avian strains of influenza A virus

Titre : Infection of human airway epithelium by human and avian strains of influenza A virus

Auteur(s) : THOMPSON Catherine I; BARCLAY Wendy S; ZAMBON Maria C; PICKLES Raymond J
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Source : Journal of virology. 2006; 80 (16) : 8060-8068
ISSN : 0022-538X
Date de publication : 2006
Pays de publication : United States
Langue(s) : English
Type de document : Serial
Nombre de références : 44 ref.

Résumé : We describe the characterization of influenza A virus infection of an established in vitro model of human pseudostratified mucociliary airway epithelium (HAE). Sialic acid receptors for both human and avian viruses, <alpha>-2,6- and <alpha>-2,3-linked sialic acids, respectively, were detected on the HAE cell surface, and their distribution accurately reflected that in human tracheobronchial tissue. Nonciliated cells present a higher proportion of <alpha>-2,6-linked sialic acid, while ciliated cells possess both sialic acid linkages. Although we found that human influenza viruses infected both ciliated and nonciliated cell types in the first round of infection, recent human H3N2 viruses infected a higher proportion of nonciliated cells in HAE than a 1968 pandemic-era human virus, which infected proportionally more ciliated cells. In contrast, avian influenza viruses exclusively infected ciliated cells. Although a broad-range neuraminidase abolished infection of HAE by human parainfluenza virus type 3, this treatment did not significantly affect infection by influenza viruses. All human viruses replicated efficiently in HAE, leading to accumulation of nascent virus released from the apical surface between 6 and 24 h postinfection with a low multiplicity of infection. Avian influenza A viruses also infected HAE, but spread was limited compared to that of human viruses. The nonciliated cell tropism of recent human H3N2 viruses reflects a preference for the sialic acid linkages displayed on these cell types and suggests a drift in the receptor binding phenotype of the H3 hemagglutinin protein as it evolves in humans away from its avian virus precursor.

Code(s) de classement : 002A05C10

Descripteur(s) anglais
Descripteur(s) : Human; Avian influenzavirus; Influenza A virus; Respiratory tract; Epithelium; Strain; Microbiology; Virology
Desc. génériques : Virology; Microbiology; Biological sciences; Influenzavirus A; Orthomyxoviridae; Virus; Respiratory system
Descripteur(s) français
Descripteur(s) : Homme; Influenzavirus aviaire; Virus grippal A; Voie respiratoire; Epithelium; Souche; Microbiologie; Virologie
Desc. génériques : Virologie; Microbiologie; Sciences biologiques; Influenzavirus A; Orthomyxoviridae; Virus; Appareil respiratoire
Localisation : INIST, Shelf number 13592, INIST No. 354000133387600270

Origine de la notice : INIST

060391963
PASCAL

Influenza a virus PB1-F2 protein contributes to viral pathogenesis in mice

Titre : Influenza a virus PB1-F2 protein contributes to viral pathogenesis in mice

Auteur(s) : ZAMARIN Dmitriy; ORTIGOZA Mila B; PALESE Peter
Affiliation(s) : Department of Microbiology, Mount Sinai School of Medicine, New York, New York 10029, United States

Source : Journal of virology. 2006; 80 (16) : 7976-7983
ISSN : 0022-538X
Date de publication : 2006
Pays de publication : United States
Langue(s) : English
Type de document : Serial
Nombre de références : 28 ref.

Résumé : The influenza virus PB1-F2 protein is a novel protein previously shown to be involved in induction of cell death. Here we characterize the expression and the function of the protein within the context of influenza viral infection in tissue culture and a mouse model. We show that the C-terminal region of the protein can be expressed from a downstream initiation codon and is capable of interaction with the full-length protein. Using this knowledge, we generated influenza viruses knocked out for the expression of PB1-F2 protein and its downstream truncation products. Knocking out the PB1-F2 protein had no effect on viral replication in tissue culture but diminished virus pathogenicity and mortality in mice. The viruses replicated to similar levels in mouse lungs by day 3 postinfection, suggesting that the knockout did not impair viral replication. However, while the PB1-F2 knockout viruses were cleared after day 5, the wild-type viruses were detectable in mouse lungs until day 7, implying that expression of PB1-F2 resulted in delayed clearance of the viruses by the host immune system. Based on our findings and on the fact that the PB1 genomic segment was always newly introduced into some pandemic influenza viruses of the last century, we speculate that the PB1-F2 protein plays an important role in pathogenesis of influenza virus infection and may be an important contributor to pathogenicity of pandemic influenza viruses.

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

Descripteur(s) anglais
Descripteur(s) : Influenza A virus; Mouse; Protein; Pathogenesis; Microbiology; Virology
Desc. génériques : Virology; Microbiology; Biological sciences; Virology; Microbiology; Biological sciences; Influenzavirus A; Orthomyxoviridae; Virus; Rodentia; Mammalia; Vertebrata
Descripteur(s) français
Descripteur(s) : Virus grippal A; Souris; Proteine; Pathogenie; Microbiologie; Virologie
Desc. génériques : Virologie; Microbiologie; Sciences biologiques; Virologie; Microbiologie; Sciences biologiques; Influenzavirus A; Orthomyxoviridae; Virus; Rodentia; Mammalia; Vertebrata
Localisation : INIST, Shelf number 13592, INIST No. 354000133387600190

Origine de la notice : INIST

060382023
PASCAL

Insights into the interaction between influenza virus and pneumococcus

Titre : Insights into the interaction between influenza virus and pneumococcus

Auteur(s) : MCCULLERS Jonathan A
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Source : Clinical microbiology reviews Print. 2006; 19 (3) : 448, 571-582 [13 p.]
ISSN : 0893-8512
CODEN : CMIREX
Date de publication : 2006
Pays de publication : United States
Langue(s) : English
Type de document : Serial
Nombre de références : 170 ref.

Résumé : Bacterial infections following influenza are an important cause of morbidity and mortality worldwide. Based on the historical importance of pneumonia as a cause of death during pandemic influenza, the increasingly likely possibility that highly pathogenic avian influenza viruses will trigger the next worldwide pandemic underscores the need to understand the multiple mechanisms underlying the interaction between influenza virus and bacterial pathogens such as Streptococcus pneumoniae. There is ample evidence to support the historical view that influenza virus alters the lungs in a way that predisposes to adherence, invasion, and induction of disease by pneumococcus. Access to receptors is a key factor and may be facilitated by the virus through epithelial damage, by exposure or up-regulation of receptors, or by provoking the epithelial regeneration response to cytotoxic damage. More recent data indicate that alteration of the immune response by diminishing the ability of the host to clear pneumococcus or by amplification of the inflammatory cascade is another key factor. Identification and exploration of the underlying mechanisms responsible for this synergism will provide targets for prevention and treatment using drugs and vaccines.

Code(s) de classement : 002A05C10; 002B05; 002A05B15

Descripteur(s) anglais
Descripteur(s) : Influenzavirus; Streptococcus pneumoniae; Review
Desc. génériques : Virology; Microbiology; Biological sciences; Infectious diseases; Medical sciences; Bacteriology; Microbiology; Biological sciences; Orthomyxoviridae; Virus; Streptococcaceae; Micrococcales; Bacteria
Descripteur(s) français
Descripteur(s) : Influenzavirus; Streptococcus pneumoniae; Article synthese
Desc. génériques : Virologie; Microbiologie; Sciences biologiques; Maladies infectieuses; Sciences medicales; Bacteriologie; Microbiologie; Sciences biologiques; Orthomyxoviridae; Virus; Streptococcaceae; Micrococcales; Bacterie
Localisation : INIST, Shelf number 21815, INIST No. 354000139027300070

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PASCAL

Detection of Hong Kong 97-like H5N1 influenza viruses from eggs of Vietnamese waterfowl

Titre : Detection of Hong Kong 97-like H5N1 influenza viruses from eggs of Vietnamese waterfowl

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Date de publication : 2006
Pays de publication : Austria
Langue(s) : English
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Nombre de références : 26 ref.

Résumé : Three H5N1 influenza viruses were isolated from shell washes of duck and goose eggs confiscated from travelers coming from Vietnam. All eight gene segments of these viruses share high sequence identity with the H5N1 avian influenza viruses that caused outbreaks in poultry and humans in Hong Kong in 1997. Animal studies indicate that these isolated viruses are able to replicate in mouse lung and could be found in the organs of ducks without causing any clinical signs or death. However, the viruses are highly pathogenic for chickens. Although the source of these recently isolated Hong Kong 97-like H5N1 viruses is undetermined, their detection in the egg shell of duck and goose suggests that this particular genotype of H5N1 virus may have re-emerged in nature or may have been circulating continuously.

Code(s) de classement : 002A05C10

Descripteur(s) anglais
Descripteur(s) : Detection; Hong Kong; Avian influenza
Desc. génériques : Virology; Microbiology; Biological sciences; China; Asia
Descripteur(s) français
Descripteur(s) : Detection; Hong Kong; Grippe aviaire
Desc. génériques : Virologie; Microbiologie; Sciences biologiques; Chine; Asie
Localisation : INIST, Shelf number 6355, INIST No. 354000133376970100

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Emerging microbiological food safety issues related to meat. 52nd International congress of meat science and technology (52nd ICoMST), 13-18 August 2006, Dublin

Titre : Emerging microbiological food safety issues related to meat. 52nd International congress of meat science and technology (52nd ICoMST), 13-18 August 2006, Dublin

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Informations congrès : *ICoMST 2006 : International congress of meat science and technology, *52, *Dublin Ireland, *2006-08-13
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Pays de publication : United Kingdom
Langue(s) : English
Type de document : Serial; *Conference-Meeting
Nombre de références : 2 p.3/4

Résumé : Avian influenza viruses and antibiotic-resistant pathogens have become topics of current public health interest. This paper will focus on the significance of these pathogens to the meat industry as well as other emerging microbiological food safety topics likely to impact the meat industry. These include surveillance of foodborne pathogens, microbial source tracking, risk assessment, and human populations at increased risk of infection by foodborne microbes. These emerging issues will likely lead to even greater challenges to producing microbiologically safe meat products than the industry has ever experienced. However, accompanying such challenges will be innovative solutions that provide even greater public health protection to meat-containing foods.

Code(s) de classement : 002A35B05; 002A35A04

Descripteur(s) anglais
Descripteur(s) : Food safety; Meat; Meat product
Desc. génériques : Agriculture; Food industry; Biological sciences; Agriculture; Food industry; Biological sciences
Descripteur(s) français
Descripteur(s) : Salubrite des aliments; Viande; Produit carne
Desc. génériques : Agriculture; Industries alimentaires; Sciences biologiques; Agriculture; Industries alimentaires; Sciences biologiques
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