# Sero Prevalence Of Newcastle Disease In Humans And

Avulavirus Infections—Advances in Research and Treatment: 2012 Edition is a ScholarlyBrief<sup>™</sup> that delivers timely, authoritative, comprehensive, and specialized information about Avulavirus Infections in a concise format. The editors have built Avulavirus Infections—Advances in Research and Treatment: 2012 Edition on the vast information databases of ScholarlyNews.™ You can expect the information about Avulavirus Infections in this eBook to be deeper than what you can access anywhere else, as well as consistently reliable, authoritative, informed, and relevant. The content of Avulavirus Infections—Advances in Research and Treatment: 2012 Edition has been produced by the world's leading scientists, engineers, analysts, research institutions, and companies. All of the content is from peer-reviewed sources, and all of it is written, assembled, and edited by the editors at ScholarlyEditions™ and available exclusively from us. You now have a source you can cite with authority, confidence, and credibility. More information is available at http://www.ScholarlyEditions.com/.

Fenner's Veterinary, Virology, Fourth Edition, is the long awaited new edition of Veterinary Virology, 3e, which was published in 1999. Fully revised and updated by the new author team, part I presents the fundamental principles of virology

related to animal infection and disease, and part II addresses the clinical features, pathogenesis, diagnosis, epidemiology and prevention of individual diseases. New to this Edition New author team - one main author to ensure that the book reads like an authored book but with the benefit of using experts to contribute to specific topics Text has been refocused - part I has been condensed and where appropriate incorporated into part II to make it more user friendly The number of figures have been increased and are now in full color Fully revised and updated to include the latest information in the field of veterinary virology Beautifully illustrated color figures throughout Organized and current information provided by an expert team of authors

In developing countries in Africa, Asia and Central and South America, the keeping of village poultry is a constant backdrop to village life. This publication is a record of the papers presented at the workshop in Maputo, Mozambique 6-9 March, 2000 on Newcastle disease in village chickens.

Connecting minds with knowledge. With its acclaimed authors, cutting-edge content, emphasis on medical relevance, and coverage based on landmark research, A Physician's Guide to Ebola has earned an impeccable reputation as an authoritative and exciting curated research journal and learning aid, perfect for students, medical professionals and other sophisticated readers. Hundreds of

hours were spent compiling and editing this volume such that its readers are conveniently brought up-to-speed on the subject, presenting many of the latest and most important developments in the field. This volume presents 20 cuttingedge research papers on ebola, curated by our experts for maximal significance. Articles include: Transmission dynamics and control of Ebola virus disease (EVD): a review; Ebola, epidemics, and ethics - what we have learned; Outbreaks of Ebola virus disease in Africa: the beginnings of a tragic saga; Need of surveillance response systems to combat Ebola outbreaks and other emerging infectious diseases in African countries; Recombinant lentogenic Newcastle disease virus expressing Ebola virus GP infects cells independently of exogenous trypsin and uses macropinocytosis as the major pathway for cell entry; Impact on nurses of ebola outbreak; Guidance for contact tracing of cases of Lassa fever, Ebola or Marburg haemorrhagic fever on an airplane: results of a European expert consultation; "A time of fear": local, national, and international responses to a large Ebola outbreak in Uganda; Prediction and identification of mouse cytotoxic T lymphocyte epitopes in Ebola virus glycoproteins; Induction of ebolavirus cross-species immunity using retrovirus-like particles bearing the Ebola virus glycoprotein lacking the mucin-like domain; Ebola haemorrhagic fever outbreak in Masindi District, Uganda: outbreak description and lessons learned;

Tackling Ebola: new insights into prophylactic and therapeutic intervention

strategies; Full-length Ebola glycoprotein accumulates in the endoplasmic reticulum; A bioengineering approach for rational vaccine design towards the Ebola Virus; Large serological survey showing cocirculation of Ebola and Marburg viruses in Gabonese bat populations, and a high seroprevalence of both viruses in Rousettus aegyptiacus; Effect of Ebola virus proteins GP, NP and VP35 on VP40 VLP morphology; Packaging of actin into Ebola virus VLPs; and Ebola virus infection inversely correlates with the overall expression levels of promyelocytic leukaemia (PML) protein in cultured cells. Avian Influenza (AI) and Newcastle Disease (ND) are two devastating diseases of poultry, which cause losses to the poultry industry and influence the liveability of rural communities worldwide. Following the H5N1 epidemic they appear to be endemic at least in Asia, Eastern Europe, The Middle East and Africa. Particularly in case of AI outbreaks it is essential that infection is diagnosed promptly and that isolates are made available to the international scientific community. Currently, several organisations including OIE, FAO and the EC have organised training courses in affected areas. However, often these courses do not cover all aspects of Al/ND diagnosis but only certain aspects. This results in fragmented areas of knowledge and in the application of different diagnostic

protocols in different parts of the world. The objective of this book is to provide a comprehensive approach to Al diagnosis ranging from the clinical elements that should trigger a suspicion in the field, to the post mortem technique, collection of samples, processing/ shipment of specimens, virological, serological and molecular diagnosis and guidelines for notification.

The specific objectives of this study were to determine the Newcastle disease virus (NDV) antibody titres from the chicken sera collected from various districts and provinces of Zambia and to determine the seroprevalence of ND in Zambian backyard chickens. Results showed that 73.9 % of the birds sampled tested positive for Newcastle disease (ND) antibodies. The seroprevalence of Newcastle disease virus (NDV) in Zambian backyard chicken flocks varied among the five provinces sampled, ranging from 82.6 % in Eastern Province to 48.3 % in Luapula Province. The seroprevalence of the virus also varied among the 11 districts sampled, ranging from 91.3 % in Monze District of Southern Province to 22.8 % in Mufulira District of the Copperbelt Province. The results indicated that the seroprevalence of ND in Zambia has increased since the last survey conducted in 1994. The data generated is expected to contribute towards a more clear understanding of the epidemiology of NDV that would ultimately contribute towards an improved ND control programme to benefit all stakeholders

in Zambia. An improved ND control programme is expected to enhance flock numbers and ultimately improve the dietary requirements and income needs of many poor households in the country.

Connecting minds with knowledge. With its acclaimed authors, cutting-edge content, emphasis on medical relevance, and coverage based on landmark research, Ebola in a Nutshell has earned an impeccable reputation as an authoritative and exciting curated research journal and learning aid, perfect for students, medical professionals and other sophisticated readers. Hundreds of hours were spent compiling and editing this volume such that its readers are conveniently brought up-to-speed on the subject, presenting many of the latest and most important developments in the field. This volume presents 20 cutting-edge research papers on ebola, curated by our experts for maximal significance. Articles include: Transmission dynamics and control of Ebola virus disease (EVD): a review; Ebola, epidemics, and ethics - what we have learned; Outbreaks of Ebola virus disease in Africa: the beginnings of a tragic saga; Need of surveillance response systems to combat Ebola outbreaks and other emerging infectious diseases in African countries; Recombinant lentogenic Newcastle disease virus expressing Ebola virus GP infects cells independently of exogenous trypsin and uses macropinocytosis as the major pathway for cell entry; Impact on nurses of ebola outbreak; Guidance for contact tracing of cases of Lassa fever, Ebola or Marburg haemorrhagic fever on an airplane: results of a European expert consultation; "A time of fear": local, national, and

international responses to a large Ebola outbreak in Uganda; Prediction and identification of mouse cytotoxic T lymphocyte epitopes in Ebola virus glycoproteins; Induction of ebolavirus cross-species immunity using retrovirus-like particles bearing the Ebola virus glycoprotein lacking the mucin-like domain; Ebola haemorrhagic fever outbreak in Masindi District, Uganda: outbreak description and lessons learned; Tackling Ebola: new insights into prophylactic and therapeutic intervention strategies; Full-length Ebola glycoprotein accumulates in the endoplasmic reticulum; A bioengineering approach for rational vaccine design towards the Ebola Virus; Large serological survey showing cocirculation of Ebola and Marburg viruses in Gabonese bat populations, and a high seroprevalence of both viruses in Rousettus aegyptiacus; Effect of Ebola virus proteins GP, NP and VP35 on VP40 VLP morphology; Packaging of actin into Ebola virus VLPs; and Ebola virus infection inversely correlates with the overall expression levels of promyelocytic leukaemia (PML) protein in cultured cells. Completely rewritten, this edition has expanded coverage of zoonotic viruses and the diseases they cause, and viruses and viral diseases of laboratory animals, poultry, fish, and wildlife. The concept of new emerging and reemerging viral diseases reflects the new perspective this concept has brought to veterinary and zoonotic virology and related fields. Part I presents fundamental principles of virology related to animal infection and disease. Part II details the properties and clinical features of the viruses that afflict animals and describes their treatment and control. Key Features \*

Comprehensive coverage of animal viruses, viral diseases, and viral zoonoses \* Covers veterinary and zoonotic virology from the perspective of pathogenesis of viral infections, as well as from the perspective of disease prevention and control Connecting minds with knowledge. With its acclaimed authors, cutting-edge content, emphasis on medical relevance, and coverage based on landmark research, Ebola Virus Disease: A Guide for Corporations and Large Institutions has earned an impeccable reputation as an authoritative and exciting curated research journal and learning aid, perfect for students, medical professionals and other sophisticated readers. Hundreds of hours were spent compiling and editing this volume such that its readers are conveniently brought up-to-speed on the subject, presenting many of the latest and most important developments in the field. This volume presents 20 cuttingedge research papers on ebola, curated by our experts for maximal significance. Articles include: Transmission dynamics and control of Ebola virus disease (EVD): a review; Ebola, epidemics, and ethics - what we have learned; Outbreaks of Ebola virus disease in Africa: the beginnings of a tragic saga; Need of surveillance response systems to combat Ebola outbreaks and other emerging infectious diseases in African countries; Recombinant lentogenic Newcastle disease virus expressing Ebola virus GP infects cells independently of exogenous trypsin and uses macropinocytosis as the major pathway for cell entry; Impact on nurses of ebola outbreak; Guidance for contact tracing of cases of Lassa fever, Ebola or Marburg haemorrhagic fever on an airplane:

results of a European expert consultation; "A time of fear": local, national, and international responses to a large Ebola outbreak in Uganda; Prediction and identification of mouse cytotoxic T lymphocyte epitopes in Ebola virus glycoproteins; Induction of ebolavirus cross-species immunity using retrovirus-like particles bearing the Ebola virus glycoprotein lacking the mucin-like domain; Ebola haemorrhagic fever outbreak in Masindi District, Uganda: outbreak description and lessons learned; Tackling Ebola: new insights into prophylactic and therapeutic intervention strategies; Full-length Ebola glycoprotein accumulates in the endoplasmic reticulum; A bioengineering approach for rational vaccine design towards the Ebola Virus; Large serological survey showing cocirculation of Ebola and Marburg viruses in Gabonese bat populations, and a high seroprevalence of both viruses in Rousettus aegyptiacus; Effect of Ebola virus proteins GP, NP and VP35 on VP40 VLP morphology; Packaging of actin into Ebola virus VLPs; and Ebola virus infection inversely correlates with the overall expression levels of promyelocytic leukaemia (PML) protein in cultured cells. This book primarily focuses on the African Sahel region, shedding new light on the epidemiology, socio-economics, clinical manifestations and control approaches of transboundary animal diseases (TADs) in this specific region. In addition to the description of TADs in Sahelian Africa and connected regions, several issues regarding the burden of TADs, the role of national/regional/international veterinary organizations in the surveillance process, animal mobility, one health and TADs in the dromedary are

discussed. The book contains 22 chapters and is structured in three parts, i- general features and commonalities, ii- viral diseases, iii- bacterial diseases. Each chapter was written by a group of experts specialized in the topic. This work will be of general interest to researchers, veterinarians, veterinary public health officers, and students engaged in the surveillance and control of animal infectious diseases, included those of zoonotic nature and that are prevalent in the Sahel.

The Third Edition of this definitive reference provides comprehensive guidelines on the diagnosis, treatment, and prevention of every infectious disease seen in current clinical practice. More than 300 world-class practitioners detail the full range of clinical infections, microorganisms, diagnostic tests, and antimicrobial therapies. Coverage includes chapters on surgical infections written by preeminent surgeons and up-to-theminute information on HIV infection. A comprehensive antimicrobial drugs section includes tables that provide at-a-glance prescribing information. New Third Edition chapters cover bioterrorism, hospital infections, emerging infections, human herpesvirus-8, West Nile virus, food safety, linezolid and quinupristin/dalfopristin, molecular diagnostics, and diagnostic significance of nonspecific laboratory abnormalities.

Advances in Paramyxovirinae Research and Application: 2013 Edition is a ScholarlyPaper™ that delivers timely, authoritative, and intensively focused information about ZZZAdditional Research in a compact format. The editors have built Advances in

Paramyxovirinae Research and Application: 2013 Edition on the vast information databases of ScholarlyNews.™ You can expect the information about ZZZAdditional Research in this book to be deeper than what you can access anywhere else, as well as consistently reliable, authoritative, informed, and relevant. The content of Advances in Paramyxovirinae Research and Application: 2013 Edition has been produced by the world's leading scientists, engineers, analysts, research institutions, and companies. All of the content is from peer-reviewed sources, and all of it is written, assembled, and edited by the editors at ScholarlyEditions™ and available exclusively from us. You now have a source you can cite with authority, confidence, and credibility. More information is available at http://www.ScholarlyEditions.com/.

Connecting minds with knowledge. With its acclaimed authors, cutting-edge content, emphasis on medical relevance, and coverage based on landmark research, Contemporary Ebola Research has earned an impeccable reputation as an authoritative and exciting curated research journal and learning aid, perfect for students, medical professionals, and other sophisticated readers. Hundreds of hours were spent compiling and editing this volume such that its readers are conveniently brought up-to-speed on the subject, presenting many of the latest and most important developments in the field. This volume presents 20 cutting-edge research papers on ebola, curated by our experts for maximal significance. Articles include: Transmission dynamics and control of Ebola virus disease (EVD): a review; Ebola, epidemics, and

ethics - what we have learned: Outbreaks of Ebola virus disease in Africa: the beginnings of a tragic saga; Need of surveillance response systems to combat Ebola outbreaks and other emerging infectious diseases in African countries; Recombinant lentogenic Newcastle disease virus expressing Ebola virus GP infects cells independently of exogenous trypsin and uses macropinocytosis as the major pathway for cell entry; Impact on nurses of ebola outbreak; Guidance for contact tracing of cases of Lassa fever, Ebola or Marburg haemorrhagic fever on an airplane: results of a European expert consultation; "A time of fear": local, national, and international responses to a large Ebola outbreak in Uganda; Prediction and identification of mouse cytotoxic T lymphocyte epitopes in Ebola virus glycoproteins; Induction of ebolavirus cross-species immunity using retrovirus-like particles bearing the Ebola virus glycoprotein lacking the mucin-like domain; Ebola haemorrhagic fever outbreak in Masindi District, Uganda: outbreak description and lessons learned; Tackling Ebola: new insights into prophylactic and therapeutic intervention strategies; Full-length Ebola glycoprotein accumulates in the endoplasmic reticulum; A bioengineering approach for rational vaccine design towards the Ebola Virus; Large serological survey showing cocirculation of Ebola and Marburg viruses in Gabonese bat populations, and a high seroprevalence of both viruses in Rousettus aegyptiacus; Effect of Ebola virus proteins GP, NP and VP35 on VP40 VLP morphology; Packaging of actin into Ebola virus VLPs; and Ebola virus infection inversely correlates with the overall expression levels of

promyelocytic leukaemia (PML) protein in cultured cells.

Seroprevalence of Newcastle Disease Virus (avian Paramyxovirus Type 1) in Zambian Backyard Chicken Flocks

Connecting minds with knowledge. With its acclaimed authors, cutting-edge content, emphasis on medical relevance, and coverage based on landmark research, Ebola Virus Disease: A Guide for Federal, State and Local Governments has earned an impeccable reputation as an authoritative and exciting curated research journal and learning aid, perfect for students, medical professionals and other sophisticated readers. Hundreds of hours were spent compiling and editing this volume such that its readers are conveniently brought up-to-speed on the subject, presenting many of the latest and most important developments in the field. This volume presents 20 cuttingedge research papers on ebola, curated by our experts for maximal significance. Articles include: Transmission dynamics and control of Ebola virus disease (EVD): a review; Ebola, epidemics, and ethics - what we have learned; Outbreaks of Ebola virus disease in Africa: the beginnings of a tragic saga; Need of surveillance response systems to combat Ebola outbreaks and other emerging infectious diseases in African countries; Recombinant lentogenic Newcastle disease virus expressing Ebola virus GP infects cells independently of exogenous trypsin and uses macropinocytosis as the major pathway for cell entry; Impact on nurses of ebola outbreak; Guidance for contact tracing of cases of Lassa fever, Ebola or Marburg haemorrhagic fever on an airplane:

results of a European expert consultation; "A time of fear": local, national, and international responses to a large Ebola outbreak in Uganda; Prediction and identification of mouse cytotoxic T lymphocyte epitopes in Ebola virus glycoproteins; Induction of ebolavirus cross-species immunity using retrovirus-like particles bearing the Ebola virus glycoprotein lacking the mucin-like domain; Ebola haemorrhagic fever outbreak in Masindi District, Uganda: outbreak description and lessons learned; Tackling Ebola: new insights into prophylactic and therapeutic intervention strategies; Full-length Ebola glycoprotein accumulates in the endoplasmic reticulum; A bioengineering approach for rational vaccine design towards the Ebola Virus; Large serological survey showing cocirculation of Ebola and Marburg viruses in Gabonese bat populations, and a high seroprevalence of both viruses in Rousettus aegyptiacus; Effect of Ebola virus proteins GP, NP and VP35 on VP40 VLP morphology; Packaging of actin into Ebola virus VLPs; and Ebola virus infection inversely correlates with the overall expression levels of promyelocytic leukaemia (PML) protein in cultured cells. Raising backyard chickens is an ever-growing hobby in the United States. These flocks can be a substrate for respiratory disease amplification and transmission to commercial facilities. Five hundred fifty-four chickens from 41 backyard flocks were sampled for serology and ELISA kits were used to detect antibodies against avian influenza (AI), infectious laryngotracheitis (ILT), Newcastle disease (ND), infectious bronchitis (IB), Ornithobacterium rhinotracheale (ORT), Mycoplasma gallisepticum (MG), and

Mycoplasma synoviae (MS). All visited flock owners answered a questionnaire that assessed biosecurity measures and the distance to the nearest commercial poultry facility was mapped. ORT, ND, IB, MS, MG and ILT were the most seroprevalent in backyard poultry flocks with 97% (41/42), 77.5% (31/40), 75% (30/40), 73% (31/42), 69% (29/42), and 45% (19/42), respectively. Only one flock had a clear vaccination history against ND and IB and was not considered in these calculations. The questionnaire revealed that backyard poultry owners rarely use simple biosecurity measures such as use of dedicated shoes, their chicken sources are unreliable and few of them benefit from veterinary oversight. When examining the distance between backvard flocks and the nearest commercial poultry facility ND and MG were significantly more likely to be found in backyard flocks close (4 miles) while ORT was significantly more likely in backyard chickens located far (4 miles) from commercial poultry facilities. Birds purchased directly from NPIP hatcheries showed a reduced ND, MG, and MS antibody prevalence. Wearing dedicated shoes decreased MS antibody positive birds. Finally, history of wild bird contact had a clear effect on an increased seroprevalence of NDV and MG. This research shows the continued need to examine backyard poultry flocks and educate owners on practical management and biosecurity. Serological results suggest that backyard poultry flocks have the potential to serve as a reservoir or amplifier for poultry respiratory diseases.

Connecting minds with knowledge. With its acclaimed authors, cutting-edge content,

emphasis on medical relevance, and coverage based on landmark research, The Science of Ebola has earned an impeccable reputation as an authoritative and exciting curated research journal and learning aid, perfect for students, medical professionals and other sophisticated readers. Hundreds of hours were spent compiling and editing this volume such that its readers are conveniently brought up-to-speed on the subject, presenting many of the latest and most important developments in the field. This volume presents 20 cutting-edge research papers on ebola, curated by our experts for maximal significance. Articles include: Transmission dynamics and control of Ebola virus disease (EVD): a review; Ebola, epidemics, and ethics - what we have learned; Outbreaks of Ebola virus disease in Africa: the beginnings of a tragic saga; Need of surveillance response systems to combat Ebola outbreaks and other emerging infectious diseases in African countries; Recombinant lentogenic Newcastle disease virus expressing Ebola virus GP infects cells independently of exogenous trypsin and uses macropinocytosis as the major pathway for cell entry; Impact on nurses of ebola outbreak; Guidance for contact tracing of cases of Lassa fever, Ebola or Marburg haemorrhagic fever on an airplane: results of a European expert consultation; "A time of fear": local, national, and international responses to a large Ebola outbreak in Uganda; Prediction and identification of mouse cytotoxic T lymphocyte epitopes in Ebola virus glycoproteins; Induction of ebolavirus cross-species immunity using retrovirus-like particles bearing the Ebola virus glycoprotein lacking the mucin-like

domain; Ebola haemorrhagic fever outbreak in Masindi District, Uganda: outbreak description and lessons learned; Tackling Ebola: new insights into prophylactic and therapeutic intervention strategies; Full-length Ebola glycoprotein accumulates in the endoplasmic reticulum; A bioengineering approach for rational vaccine design towards the Ebola Virus; Large serological survey showing cocirculation of Ebola and Marburg viruses in Gabonese bat populations, and a high seroprevalence of both viruses in Rousettus aegyptiacus; Effect of Ebola virus proteins GP, NP and VP35 on VP40 VLP morphology; Packaging of actin into Ebola virus VLPs; and Ebola virus infection inversely correlates with the overall expression levels of promyelocytic leukaemia (PML) protein in cultured cells.

Connecting minds with knowledge. With its acclaimed authors, cutting-edge content, emphasis on medical relevance, and coverage based on landmark research, A Student's Guide to Ebola has earned an impeccable reputation as an authoritative and exciting curated research journal and learning aid, perfect for students, medical professionals and other sophisticated readers. Hundreds of hours were spent compiling and editing this volume such that its readers are conveniently brought up-to-speed on the subject, presenting many of the latest and most important developments in the field. This volume presents 20 cutting-edge research papers on ebola, curated by our experts for maximal significance. Articles include: Transmission dynamics and control of Ebola virus disease (EVD): a review; Ebola, epidemics, and ethics - what we have learned;

Outbreaks of Ebola virus disease in Africa: the beginnings of a tragic saga; Need of surveillance response systems to combat Ebola outbreaks and other emerging infectious diseases in African countries; Recombinant lentogenic Newcastle disease virus expressing Ebola virus GP infects cells independently of exogenous trypsin and uses macropinocytosis as the major pathway for cell entry; Impact on nurses of ebola outbreak; Guidance for contact tracing of cases of Lassa fever, Ebola or Marburg haemorrhagic fever on an airplane: results of a European expert consultation; "A time of fear": local, national, and international responses to a large Ebola outbreak in Uganda; Prediction and identification of mouse cytotoxic T lymphocyte epitopes in Ebola virus glycoproteins; Induction of ebolavirus cross-species immunity using retrovirus-like particles bearing the Ebola virus glycoprotein lacking the mucin-like domain; Ebola haemorrhagic fever outbreak in Masindi District, Uganda: outbreak description and lessons learned; Tackling Ebola: new insights into prophylactic and therapeutic intervention strategies; Full-length Ebola glycoprotein accumulates in the endoplasmic reticulum; A bioengineering approach for rational vaccine design towards the Ebola Virus; Large serological survey showing cocirculation of Ebola and Marburg viruses in Gabonese bat populations, and a high seroprevalence of both viruses in Rousettus aegyptiacus; Effect of Ebola virus proteins GP, NP and VP35 on VP40 VLP morphology; Packaging of actin into Ebola virus VLPs; and Ebola virus infection inversely correlates with the overall expression levels of promyelocytic leukaemia

(PML) protein in cultured cells.

El presente libro recoge los frutos presentados en el Segundo Encuentro Institucional de Semilleros de Investigación de la Universidad de La Salle, realizado el 27 de marzo de 2014 en el campus de Chapinero. De esta manera se da continuidad a una iniciativa planeada desde la Vicerrectoría de Investigación y Transferencia (VRIT) en el 2013, tendiente a generar un espacio académico para que nuestros jóvenes investigadores socialicen sus propuestas, los proyectos en curso y los resultados alcanzados, como frutos de su trabajo cooperativo dentro de los cincuenta semilleros constituidos en las diferentes unidades académicas. La realización de estos encuentros es un ejercicio que busca reconocer que, desde la investigación formativa, se construyen competencias relativas al acto de indagación y búsqueda del conocimiento que debe tener todo proceso de investigación y que, por ello, tiene prioridad como estrategia pedagógica asociada con nuestros planes de estudio.

Village chickens contribute considerably to the economy and to the nutritional requirements and livelihood of many rural farmers in developing countries across the globe. The spread of highly pathogenic avian influenza H5N1 into Africa during 2005/6 drew attention to the neglect of avian disease surveillance and research in countries such as Ethiopia, in which predominantly village chickens are reared. Several infectious and non-infectious diseases have limited the productivity of village chickens in Ethiopia, among which Newcastle disease (ND), caused by avian paramyxovirus serotype 1

(APMV-1), is the most important. Newcastle disease virus (NDV) causes subclinical to severe disease depending on the virus strain. To better understand the epidemiology of the disease, a study was performed in the mid-Rift Valley area of Oromia region, Ethiopia, to estimate seroprevalence and incidence of NDV exposure, identify risk factors, evaluate market trade movements and characterize circulating NDV strains. Repeated serological surveys in live bird markets revealed that village chickens were concurrently seropositive for several important infectious diseases, particularly during the wet season. The seroprevalence of ND, Pasteurella multocida infection, Mycoplasma gallisepticum infection and infectious bursal disease virus infection were 5.9%, 66.2%, 57.7% and 91.9%, respectively, during the dry season, and 6.0%, 63.4%, 78.7% and 96.3%, respectively, during the wet season. This underlines the need for a holistic approach to control of infectious disease in village chickens, and further studies are warranted to better understand the circulating strains, their interactions and their economic effect on village poultry production. A cross-sectional study using a multistage random sampling design with repeated sampling periods was done in households, along with a structured questionnaire. The prevalence of household flocks with at least one seropositive chicken was higher during the dry season (27.4%) than during the wet season (17.4%) (P = 0.003) while the proportion of flocks in which viral genome was detected was 24.2% and 14.2 %, respectively. The prevalence of NDV genome detection in individual birds at markets varied from 4.9 % to 38.2, depending

on the period of sampling and the reverse transcriptase polymerase chain reaction (RT-PCR) technique employed. Multilevel mixed-effect logistic regression models were used to identify risk factors for NDV seropositivity and for incidence of NDV exposure. Reduced frequency of cleaning of poultry waste, larger flock size and use of an open water source (pond or river) for poultry were associated with increased risk of NDV exposure or seropositivity, while maintaining a closed flock and the use of a grain supplement was associated with lower odds of seropositivity or a lower risk of NDV exposure. Molecular characterization and phylogenetic analysis, based on complete F and HN gene sequencing, was done on NDV isolates obtained at markets and villages. The circulating viruses had amino acid motifs characteristic of virulent strains, indicating endemic circulation of virulent virus in village chickens which poses a threat to improvement of village chicken production and emerging small-scale commercial poultry production. The strains clustered in genotype VI, branching with viruses from subgenotype VIb that commonly affect pigeons, although clustering apart on pairwise distance analysis. The apparent poor biosecurity in village chickens and history of isolation of pigeon variant viruses from domestic chickens in Ethiopia suggest that pigeons could play a role in the epidemiology of ND in village chickens. Further surveillance and virus characterization is required to shed more light on this. Bayesian methods were used to evaluate the performance of two commercial enzyme-linked immunosorbent assay (ELISA) kits (a blocking and an indirect ELISA) and

haemagglutination inhibition (HI), in the absence of a gold standard, for their ability to detect antibodies to NDV in chicken serum from villages and live bird markets. The blocking ELISA had the highest sensitivity (Se) of 96.3% (95% posterior credible interval (PCI): 88.1; 99.8%), and specificity (Sp) of 98.9% (95% PCI: 97.8; 99.9%), while the HI had Se of 81.6% (95% PCI: 71.8, 91.9%), and Sp of 96.1% (95% PCI: 95.1; 96.6%). The indirect ELISA also had high Se (95.2%; 95% PCI: 88.5; 99.0%) but had very low Sp (8.9%; 95% PCI: 6.4, 11.8%). There is therefore a need for evaluation of commercial kits before their wider use in village chickens under field conditions. Market trade movement patterns for live chickens were described, using social network analysis, for two different periods during the year 2010, representing high (period one) and low (period two) seasons for poultry trade. The study revealed that the networks exhibited scale-free characteristics with weak connectivity of the markets and low density of the networks. The density for the two periods was not difference (P = 0.29), although a somewhat higher number of markets and links were observed during period one than period two. The low density of the networks indicates that in the event of infectious disease outbreaks in surroundings of the respective markets, the risk of its spread to many others would likely be fairly low. Nevertheless, the close similarity of NDV isolates from distant markets in the study area suggests that markets could play a role in the spread of infectious poultry diseases. A few markets were more central in the networks, in terms of their betweenness and out-degree; these markets could be

considered for targeted surveillance, while those markets with high in-degree, mainly situated in the larger urban centres, can be considered for surveillance that involves regular poultry traders.

Connecting minds with knowledge. With its acclaimed authors, cutting-edge content, emphasis on medical relevance, and coverage based on landmark research, A Nurse's Guide to Ebola has earned an impeccable reputation as an authoritative and exciting curated research journal and learning aid, perfect for students, medical professionals and other sophisticated readers. Hundreds of hours were spent compiling and editing this volume such that its readers are conveniently brought up-to-speed on the subject, presenting many of the latest and most important developments in the field. This volume presents 20 cutting-edge research papers on ebola, curated by our experts for maximal significance. Articles include: Transmission dynamics and control of Ebola virus disease (EVD): a review; Ebola, epidemics, and ethics - what we have learned; Outbreaks of Ebola virus disease in Africa: the beginnings of a tragic saga; Need of surveillance response systems to combat Ebola outbreaks and other emerging infectious diseases in African countries; Recombinant lentogenic Newcastle disease virus expressing Ebola virus GP infects cells independently of exogenous trypsin and uses macropinocytosis as the major pathway for cell entry; Impact on nurses of ebola outbreak; Guidance for contact tracing of cases of Lassa fever, Ebola or Marburg haemorrhagic fever on an airplane: results of a European expert consultation; "A time

of fear": local, national, and international responses to a large Ebola outbreak in Uganda; Prediction and identification of mouse cytotoxic T lymphocyte epitopes in Ebola virus alycoproteins: Induction of ebolavirus cross-species immunity using retrovirus-like particles bearing the Ebola virus glycoprotein lacking the mucin-like domain; Ebola haemorrhagic fever outbreak in Masindi District, Uganda: outbreak description and lessons learned; Tackling Ebola: new insights into prophylactic and therapeutic intervention strategies; Full-length Ebola glycoprotein accumulates in the endoplasmic reticulum; A bioengineering approach for rational vaccine design towards the Ebola Virus; Large serological survey showing cocirculation of Ebola and Marburg viruses in Gabonese bat populations, and a high seroprevalence of both viruses in Rousettus aegyptiacus; Effect of Ebola virus proteins GP, NP and VP35 on VP40 VLP morphology; Packaging of actin into Ebola virus VLPs; and Ebola virus infection inversely correlates with the overall expression levels of promyelocytic leukaemia (PML) protein in cultured cells.

This technical guide promotes sustainable small-scale, family-based poultry production. It gives a comprehensive review of all aspects of small-scale poultry production in developing countries and includes sections on feeding and nutrition, housing, general husbandry and flocks health. Regional differences in health practices are also described. The guide provides the technical and scientific "building blocks" needed to develop sustainable programs for small-scale poultry production. It will be of practical

value to those keeping or planning to keep poultry and as a valuable technical reference for poultry specialists, researchers, students and those interested in broader rural development issues.--Publisher's description.

An exhaustive reference on epidemiological aspects of viral infections in humans, with section on concepts and methods, acute viral infections, viral infections and malignant diseases, and chronic diseases. Chapters on specific viruses offer a common framework of material on methods of epidemiologic

Connecting minds with knowledge. With its acclaimed authors, cutting-edge content, emphasis on medical relevance, and coverage based on landmark research, Ebola: Science, Research and Self-Study Guide has earned an impeccable reputation as an authoritative and exciting curated research journal and learning aid, perfect for students, medical professionals and other sophisticated readers. Hundreds of hours were spent compiling and editing this volume such that its readers are conveniently brought up-to-speed on the subject, presenting many of the latest and most important developments in the field. This volume presents 20 cutting-edge research papers on ebola, curated by our experts for maximal significance. Articles include: Transmission dynamics and control of Ebola virus disease (EVD): a review; Ebola, epidemics, and ethics - what we have learned; Outbreaks of Ebola virus disease in Africa: the beginnings of a tragic saga; Need of surveillance response systems to combat Ebola outbreaks and other emerging infectious diseases in African countries; Recombinant

lentogenic Newcastle disease virus expressing Ebola virus GP infects cells independently of exogenous trypsin and uses macropinocytosis as the major pathway for cell entry; Impact on nurses of ebola outbreak; Guidance for contact tracing of cases of Lassa fever, Ebola or Marburg haemorrhagic fever on an airplane: results of a European expert consultation; "A time of fear": local, national, and international responses to a large Ebola outbreak in Uganda; Prediction and identification of mouse cytotoxic T lymphocyte epitopes in Ebola virus glycoproteins; Induction of ebolavirus cross-species immunity using retrovirus-like particles bearing the Ebola virus glycoprotein lacking the mucin-like domain; Ebola haemorrhagic fever outbreak in Masindi District, Uganda: outbreak description and lessons learned; Tackling Ebola: new insights into prophylactic and therapeutic intervention strategies; Full-length Ebola glycoprotein accumulates in the endoplasmic reticulum; A bioengineering approach for rational vaccine design towards the Ebola Virus; Large serological survey showing cocirculation of Ebola and Marburg viruses in Gabonese bat populations, and a high seroprevalence of both viruses in Rousettus aegyptiacus; Effect of Ebola virus proteins GP, NP and VP35 on VP40 VLP morphology; Packaging of actin into Ebola virus VLPs; and Ebola virus infection inversely correlates with the overall expression levels of promyelocytic leukaemia (PML) protein in cultured cells.

Connecting minds with knowledge. With its acclaimed authors, cutting-edge content, emphasis on medical relevance, and coverage based on landmark research, Ebola for Medical

Professionals has earned an impeccable reputation as an authoritative and exciting curated research journal and learning aid, perfect for students, medical professionals and other sophisticated readers. Hundreds of hours were spent compiling and editing this volume such that its readers are conveniently brought up-to-speed on the subject, presenting many of the latest and most important developments in the field. This volume presents 20 cutting-edge research papers on ebola, curated by our experts for maximal significance. Articles include: Transmission dynamics and control of Ebola virus disease (EVD): a review; Ebola, epidemics, and ethics - what we have learned; Outbreaks of Ebola virus disease in Africa: the beginnings of a tragic saga; Need of surveillance response systems to combat Ebola outbreaks and other emerging infectious diseases in African countries; Recombinant lentogenic Newcastle disease virus expressing Ebola virus GP infects cells independently of exogenous trypsin and uses macropinocytosis as the major pathway for cell entry; Impact on nurses of ebola outbreak; Guidance for contact tracing of cases of Lassa fever, Ebola or Marburg haemorrhagic fever on an airplane: results of a European expert consultation; "A time of fear": local, national, and international responses to a large Ebola outbreak in Uganda; Prediction and identification of mouse cytotoxic T lymphocyte epitopes in Ebola virus glycoproteins; Induction of ebolavirus cross-species immunity using retrovirus-like particles bearing the Ebola virus glycoprotein lacking the mucin-like domain; Ebola haemorrhagic fever outbreak in Masindi District, Uganda: outbreak description and lessons learned; Tackling Ebola: new insights into prophylactic and therapeutic intervention strategies; Full-length Ebola glycoprotein accumulates in the endoplasmic reticulum; A bioengineering approach for rational vaccine design towards the Ebola Virus; Large serological survey showing cocirculation of Ebola and Marburg viruses in Page 27/28

Gabonese bat populations, and a high seroprevalence of both viruses in Rousettus aegyptiacus; Effect of Ebola virus proteins GP, NP and VP35 on VP40 VLP morphology; Packaging of actin into Ebola virus VLPs; and Ebola virus infection inversely correlates with the overall expression levels of promyelocytic leukaemia (PML) protein in cultured cells. This book discusses the prominence and implication of the viral diseases that are a major threat to animals around the globe. A number of these diseases have also shown links with human populations, which has implications for public health. This book offers detailed and upto-date information on viral diseases in livestock and poultry that were and/or are still a problem. Including cutting-edge developments, it also highlights several landmark contributions in the field of virology from India. Additionally, the book features tables and figures showing important clinical data and recommendations, with references for further information. It also explores the economic impact of viral diseases for farmers and the livestock industry, providing several examples. Further, it presents the latest information on viral diseases in global context, with a focus on state-of-art, molecular tools for the development of diagnostics, prophylactics and therapeutics. Lastly, the book also describes the challenges posed by the emerging and transboundary viral infections and our preparedness to counter them.

Copyright: 78ac16995fbcbf8968c2763ee997d2f2