Welcome to the weekly Infection Current Awareness Update (ICAU), produced by PHE Knowledge and Library Services. The purpose of this update is to provide you with the latest, best evidence about infection, to help you make informed decisions.

Please note: PHE KLS has set up a separate COVID-19 Daily Alert of latest research. If you would like to receive this, please email libraries@phe.gov.uk. In addition to this, a page of resources about the coronavirus is available here.

If you have any queries, please contact us at libraries@phe.gov.uk, and if you would like to request a literature search, please use the Knowledge and Library Services Enquiries Portal (PHE staff only).

Please note that not all the articles and resources referred to in this alert are freely available. Some articles may require an Athens username and password, and for PHE and NHS staff, these can be obtained here. If you do not work for PHE or the NHS, you may want to approach your local health library service to discuss how you may have access to library services.

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COVID-19 related research

COVID-19 infection

Covid-19: Breastfeeding women can have vaccine after guidance turnaround
08 Jan 2021
The UK’s Medicines and Healthcare Products Regulatory Agency (MHRA) has revised its guidance so that pregnant and breastfeeding women can receive the covid-19 vaccine. Writing in BMJ Opinion, Helen...

Infection-related guidance

British Society for Antimicrobial Chemotherapy

BSAC celebrates 50 years of saving lives by fighting infection
07 Jan 2021
The post BSAC celebrates 50 years of saving lives by fighting infection appeared first on British Society for Antimicrobial Chemotherapy.

Royal College of Physicians

Medicine 2021 plenary: COVID-19 vaccines – myths, mysteries, misinformation, myopia and miracles
08 Jan 2021
Day 2 of the RCP annual conference concluded with a plenary session on COVID-19 vaccines by Dr Greg Poland, Mary Lowell Leary emeritus professor of medicine, Mayo Clinic, Rochester, USA, and editor-in-chief of the journal Vaccine.

Medicine 2021: What have we learnt from COVID-19 research?
07 Jan 2021
Day 1 of the RCP annual conference included a plenary session focusing on what we have learnt from COVID-19 research.

Infection-related journals

American Journal of Infection Control

The impact of statewide school closures on COVID-19 infection rates
08 Jan 2021
COVID-19 has grown into a global pandemic. In the absence of known medical treatments or vaccinations, the United States turned to social distancing. As an initial response to the virus, state governors began closing schools and turning to virtual learning throughout the month of March 2020

Utilizing behavioral theories to explain hospital visitors’ observed hand hygiene behavior
08 Jan 2021
Hand hygiene is essential for infection prevention. This study aimed to find a suitable theoretical model and identify critical facilitators and barriers to explain hospital visitors’ hand hygiene practice.

**Surveillance Testing Reveals a Significant Proportion of Hospitalized Patients with SARS-CoV-2 are Asymptomatic**

08 Jan 2021

The proportion of positive patients admitted to acute-care hospitals for reasons other than coronavirus disease-19 (COVID-19) is unknown. These patients potentially put other patients and healthcare workers at risk of infection.

**Factors Associated with Environmental Service Worker Cleaning Practices in Healthcare Settings: A Systematic Review of the Literature**

08 Jan 2021

Healthcare-associated infections (HAIs), a complication of the healthcare system, are clearly linked to high morbidity, mortality, and costs.1 For many years, reducing the number and burden of HAIs has been a priority of public health agencies in the United States,2,3 and while progress has been made, a substantial burden from HAIs, including surgical site infection, and central-line and


04 Jan 2021

Antimicrobial resistance is a continued global threat to public health. In recognition of this threat, the executive branch of the United States government consolidated guidelines through the President’s Council of Advisors on Science and Technology (PCAST) and Executive Order 13676.

**Clinical Infectious Diseases - Advance Access**

**Evaluating antimicrobial effectiveness in environmental microbiology**

10 Jan 2021

**Erratum**

09 Jan 2021

In this article [Dunaway SB, Maxwell CL, Tantalo LC, et al. Neurosyphilis Treatment Outcomes After Intravenous Penicillin G versus Intramuscular Procaine Penicillin Plus Oral Probenecid. Clin Infect Dis 2020; 71(2):267–273. doi: 10.1093/cid/ciz795], there is an error in Figure 1

**Epidemiology of Invasive Escherichia coli Infection and Antibiotic Resistance Status among Patients Treated in U.S. Hospitals: 2009–2016**

09 Jan 2021

AbstractBackgroundPublished data is limited on the prevalence and risk of recurrence of extraintestinal invasive E. coli infections (IEIs) in the United States.MethodsAll inpatient and hospital-based outpatient visits occurring between 2009–2016 at hospitals with continuous microbiology data submission to the Premier Healthcare Database for 90 days prior to the admission/visit and 12 months

**Confirmed Reinfection with SARS-CoV-2 Variant VOC-202012/01**

09 Jan 2021

**Emergence and Transmission of Daptomycin and Vancomycin-Resistant Enterococci Between Patients and Hospital Rooms**

09 Jan 2021

AbstractBackgroundVancomycin-resistant enterococci (VRE) are a major cause of morbidity and mortality in immunocompromised patients. Tracking the dissemination of VRE strains is crucial to understand the dynamics of emergence and spread of VRE in the hospital setting
Improving the prediction of relapse after nucleos(t)ide analogue discontinuation in patients with chronic hepatitis B

08 Jan 2021

Abstract
Background Current guidelines recommend rules for stopping nucleos(t)ide analogues (NAs) in chronic hepatitis B (CHB) patients, but off-therapy relapse is still high. This study aimed to identify predictors of off-therapy relapse and improve existing stopping rules.

Methods This retrospective study included 488 CHB patients (262 HBeAg-positive and 226 HBeAg-negative) who discontinued NAs.

Lack of SARS-CoV2 neutralization by antibodies to seasonal coronaviruses: making sense of the COVID-19 pandemic

08 Jan 2021

The duration of protection from azithromycin against malaria, acute respiratory, gastro-intestinal and skin infections when given alongside seasonal malaria chemoprevention: secondary analyses of data from a clinical trial in Houndé, Burkina Faso and Bougouni, Mali

08 Jan 2021

Abstract
Background Mass drug administration (MDA) with azithromycin (AZ) is being considered as a strategy to promote child survival in sub-Saharan Africa, but the mechanism by which AZ reduces mortality is unclear.

Rates of Aspergillus Co-infection in COVID patients in ICU not as high as previously reported

08 Jan 2021

Association Between Chronic Use of Immunosuppressive Drugs and Clinical Outcomes From Coronavirus Disease 2019 (COVID-19) Hospitalization: A Retrospective Cohort Study in a Large US Health System

07 Jan 2021

Abstract
It is unclear whether chronic use of immunosuppressive drugs worsens or improves the severity of coronavirus disease 2019 (COVID-19), with plausible mechanisms for both.

Methods Retrospective cohort study in 2121 consecutive adults with acute inpatient hospital admission between 4 March and 29 August 2020 with confirmed or suspected COVID-19 in a large academic health system, with

Evolution of Cefiderocol Non-Susceptibility in Pseudomonas aeruginosa in a Patient Without Previous Exposure to the Antibiotic

07 Jan 2021

Abstract
We report the emergence of non-susceptibility to cefiderocol from a subpopulation of Pseudomonas aeruginosa recovered from a patient without history of cefiderocol exposure. Whole genome sequencing identified mutations in major iron transport pathways previously associated with cefiderocol uptake. Susceptibility testing should be performed before therapy with siderophore cephalosporins.

Ten years of population-level genomic Escherichia coli and Klebsiella pneumoniae serotype surveillance informs vaccine development for invasive infections

07 Jan 2021

Abstract
The incidence of bloodstream infections (BSIs) caused by Escherichia coli and Klebsiella pneumoniae is increasing, with substantial associated morbidity, mortality and antimicrobial resistance. Unbiased serotyping studies to guide vaccine target selection are limited.

Methods
We conducted unselected, population-level genomic surveillance of bloodstream E

Letter to the Editor

07 Jan 2021

Does partner treatment impact on BV cure?

07 Jan 2021

Use of an electronic medical record alert
A novel bedside rule-in test for tuberculous meningitis in HIV-infected adults

Tuberculous meningitis
Diagnostics
Lipoarabinomannan
Tuberculosis

Changing disparities in COVID-19 burden in the ethnically homogeneous population of Hong Kong through pandemic waves: an observational study

Disparities were marked in previous pandemics, usually with higher attack rates reported for those in lower socioeconomic positions and for ethnic minorities. Methods We examined characteristics of laboratory-confirmed COVID-19 cases in Hong Kong, assessed associations between incidence and population-level characteristics at the level of small geographic areas, and evaluated.

The duration, dynamics and determinants of SARS-CoV-2 antibody responses in individual healthcare workers

SARS-CoV-2 IgG antibody measurements can be used to estimate the proportion of a population exposed or infected and may be informative about the risk of future infection. Previous estimates of the duration of antibody responses vary. Methods We present 6 months of data from a longitudinal seroprevalence study of 3276 UK healthcare workers (HCWs).

Diarrheal Pathogens Associated with Growth and Neurodevelopment

Diarrheal pathogens have been associated with linear growth deficits. The effect of diarrheal pathogens on growth is likely due to inflammation which also adversely affects neurodevelopment. We hypothesized that diarrheagenic pathogens would be negatively associated with both growth and neurodevelopment.

Adjuvanted influenza vaccine and influenza outbreaks in U.S. nursing homes: Results from a pragmatic cluster-randomized clinical trial

Influenza outbreaks in nursing homes pose a threat to frail residents and occur even in vaccinated populations. We conducted a pragmatic cluster-randomized trial comparing adjuvanted trivalent influenza vaccine (aTIV) versus trivalent influenza vaccine (TIV). Here, we report an exploratory analysis to compare the effect of aTIV versus TIV on facility-reported influenza outbreaks.

Relative Effectiveness of the Cell-Derived Inactivated Quadrivalent Influenza Vaccine Versus Egg-Derived Inactivated Quadrivalent Influenza Vaccines in Preventing Influenza-Related Medical Encounters During the 2018-2019 Influenza Season in the United States

The cell-propagated inactivated quadrivalent influenza vaccine (cclIV4) may offer improved protection in seasons where egg-derived influenza viruses undergo mutations that affect antigenicity.

Microelimination or not? The changing epidemiology of HIV-HCV coinfection in France 2012-2018

The arrival of highly effective, well tolerated direct-acting antiviral agents (DAA) led to a dramatic decrease in HCV prevalence. HIV-HCV coinfected patients are deemed a priority population for HCV elimination, while a rise of recently acquired HCV infections in MSM has been described. We describe the variations in HIV-HCV epidemiology in the French Da’AIDS cohort.

Venous thromboembolism and major bleeding in patients with COVID-19: A nationwide population-based cohort study
Venous thromboembolism (VTE) is a potentially fatal complication of SARS-CoV-2 infection and thromboprophylaxis should be balanced against risk of bleeding. This study aimed to examine risks of VTE and major bleeding in hospitalized and community-managed SARS-CoV-2 patients compared with control populations.

Tenofovir Alafenamide to Prevent Perinatal Hepatitis B Transmission: A Multicenter, Prospective, Observational Study

Abstract Background

Few safety and effectiveness results have been published regarding the administration of tenofovir alafenamide fumarate (TAF) during pregnancy for the prevention of mother-to-child transmission (MTCT) of hepatitis B virus (HBV).

Erratum to: Epidemiology of Nontuberculous Mycobacteria Infection in Children and Young People With Cystic Fibrosis: Analysis of UK Cystic Fibrosis Registry

Abstract Background


SARS-CoV-2 encephalitis is a cytokine release syndrome: evidences from cerebrospinal fluid analyses

Abstract Background

Recent findings indicated that SARS-CoV-2 related neurological manifestations involve cytokine release syndrome along with endothelial activation, blood brain barrier dysfunction, and immune-mediated mechanisms. Very few studies have fully investigated the CSF correlates of SARS-CoV-2 encephalitis.

Genomic Epidemiology of MRSA During Incarceration at a Large Inner-City Jail

Abstract Background

Congregate settings, such as jails, may be a location where colonized detainees transmit MRSA. We examined MRSA acquisition during incarceration and characterized the genomic epidemiology of MRSA entering the jail and isolated during incarceration.

Accurate malaria diagnosis: not only essential for malaria case management, but prerequisite for managing febrile disease in the tropics

When Epidemics Collide: Why People with HIV May Have Worse COVID-19 Outcomes and Implications for Vaccination

Fujifilm SILVAMP TB LAM assay on cerebrospinal fluid for the detection of tuberculous meningitis in HIV-infected adults

Abstract Background

Tuberculous meningitis (TBM) has a high fatality rate with inadequate diagnostic tests being a major contributor. The rollout of Xpert MTB/Rif and Xpert MTB/Rif Ultra (Xpert Ultra) have improved time-to-diagnosis with sensitivities similar to culture, yet test availability and sensitivity are inadequate.
Distinct disease severity between children and older adults with COVID-19: Impacts of ACE2 expression, distribution, and lung progenitor cells

Abstract
Background Children and older adults with coronavirus disease 2019 (COVID-19) display a distinct spectrum of disease severity yet the risk factors aren't well understood. We sought to examine the expression pattern of angiotensin-converting enzyme 2 (ACE2), the cell-entry receptor for severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), and the role of lung progenitor cells in survival.

Serological Responses to Toxoplasma gondii and Matrix Antigen 1 Predict the Risk of Subsequent Toxoplasmic Encephalitis in People Living with HIV

Abstract
Background Clinically useful predictors for fatal toxoplasmosis are lacking. We investigated the value of serological assays for antibodies to whole Toxoplasma antigens and to peptide antigens of the Toxoplasma cyst protein MAG1, for predicting incident toxoplasmic encephalitis (TE) in people living with HIV (PLWH).

Effectiveness of Influenza Vaccine for Preventing Laboratory-Confirmed Influenza Hospitalizations in Immunocompromised Adults

Abstract
Background Yearly influenza immunization is recommended for immunocompromised (IC) individuals, although immune responses are lower than that for the non-immunocompromised and the data on vaccine effectiveness (VE) in the IC is scarce. We evaluated VE against influenza-associated hospitalization among IC adults.

Incident Non-AIDS Comorbidity Burden among Women with or at-risk for HIV in the U.S

Abstract
Background HIV infection may accelerate development of aging-related non-AIDS comorbidities (NACM). The incidence of NACM is poorly characterized among women living with HIV (WLWH). Methods WLWH and HIV-seronegative participants followed in the Women’s Interagency HIV Study (WIHS) through ≥2009 (when >80% of WLWH used antiretroviral therapy) were included, with outcomes measured through

Latent Tuberculosis Infection and Subclinical Coronary Atherosclerosis in Peru and Uganda

Abstract
Background Tuberculosis has been linked to an increased risk of atherosclerotic cardiovascular disease (ASCVD). We assessed whether latent tuberculosis infection (LTBI) is associated with subclinical coronary atherosclerosis in two TB-prevalent areas. Methods We analyzed cross-sectional data from studies conducted in Lima, Peru, and Kampala, Uganda. Individuals ≥40 years old were included.

Prospective Longitudinal Serosurvey of Health Care Workers in the First Wave of the SARS-CoV-2 Pandemic in a Quaternary Care Hospital in Munich, Germany

Abstract
Background High infection rates among health care personnel in an uncontained pandemic can paralyze health systems due to staff shortages. Risk constellations and rates of seroconversion for health care workers during the first wave of the SARS-CoV-2 pandemic are still largely unclear.

Cost-benefit analysis comparing trough, two-level AUC, and Bayesian AUC dosing for vancomycin' by V. Lee et al
COVID-19 case fatality rates can be highly misleading in resource poor and fragile nations: the case of Yemen

Outbreak of Candida auris infection in a COVID-19 hospital in Mexico

Investigating infection management and antimicrobial stewardship in surgery: a qualitative study from India and South Africa

Abandoned trials in infection diseases and clinical microbiology. A call for action

Systematic review on estimated rates of nephrotoxicity and neurotoxicity in patients treated with polymyxins

Household acquisition and transmission of ESBL-producing Enterobacteriaceae after hospital discharge of ESBL-positive index patients

Long-term persistence of olfactory and gustatory disorders in COVID-19 patients

Self-reported symptoms in healthy young adults to predict potential COVID-19 disease
Patient pathway analysis of tuberculosis diagnostic delay: a multicentre retrospective cohort study in China
06 Jan 2021
Publication date: Available online 6 January 2021Source: Clinical Microbiology and InfectionAuthor(s): Lu Zhang, Tao-Ping Weng, Hong-Yu Wang, Feng Sun, Yuan-Yuan Liu, Ke Lin, Zhe Zhou, Yuan-Yuan Chen, Yong-Guo Li, Ji-Wang Chen, Li-Jun Han, Hui-Mei Liu, Fu-Li Huang, Cui Cai, Hong-Ying Yu, Wei Tang, Zheng-Hui Huang, Long-Zhi Wang, Lei Bao, Peng-Fei Ren

‘Effects of 13-valent pneumococcal conjugate vaccination of adults on lower respiratory tract infections and antibiotic use in primary care’ – Author’s reply
06 Jan 2021
Publication date: Available online 6 January 2021Source: Clinical Microbiology and InfectionAuthor(s): Cornelis H. van Werkhoven, Marieke Bolkenbaas, Susanne M. Huijts, Theo J.M. Verheij, Marc J.M. Bonten

Has the mortality from pulmonary mucormycosis changed over time? A systematic review and meta-analysis
06 Jan 2021
Publication date: Available online 5 January 2021Source: Clinical Microbiology and InfectionAuthor(s): Valliappan Muthu, Ritesh Agarwal, Sahajal Dhooria, Inderpreet Singh Sehgal, Kuruswamy Thurai Prasad, Ashutosh N. Aggarwal, Arunaloke Chakrabarti

The role of the computerized tomography scanner in the cross-transmission of carbapenem-resistant Acinetobacter baumannii between hospitalized patients
06 Jan 2021
Publication date: Available online 6 January 2021Source: Clinical Microbiology and InfectionAuthor(s): Ziv Dadon, Eli Ben-Chetrit, Ofer Benjaminov, Louay Taha, Yonit Wiener-Well, Daniel Belman, Phillip D. Levin

HtrA-family proteases of bacterial pathogens: pros and cons for their therapeutic use
06 Jan 2021
Publication date: Available online 5 January 2021Source: Clinical Microbiology and InfectionAuthor(s): Ruo-Yi Xue, Chang Liu, Qing-Tao Xiao, Si Sun, Quan-Ming Zou, Hai-Bo Li

How do I manage nocardiosis?
06 Jan 2021
Publication date: Available online 5 January 2021Source: Clinical Microbiology and InfectionAuthor(s): Ili Margalit, David Lebeaux, Ori Tishler, Elad Goldberg, Jihad Bishara, Dafna Yahav, Julien Coussement

Detection of Mycobacterium tuberculosis complex in pulmonary and extrapulmonary samples with the FluoroType MTBDR assay
06 Jan 2021
Publication date: Available online 6 January 2021Source: Clinical Microbiology and InfectionAuthor(s): Erik Svensson, Dorte Bek Folkvardsen, Erik Michael Rasmussen, Troels Lillebaek

Evaluation of a rapid antigen test (Panbio™ COVID-19 Ag rapid test device) for SARS-CoV-2 detection in asymptomatic close contacts of COVID-19 patients
06 Jan 2021
Publication date: Available online 6 January 2021Source: Clinical Microbiology and InfectionAuthor(s): Ignacio Torres, Sandrine Poujois, Eliseo Albert, Javier Colomina, David Navarro

Gender disparities in COVID-19 clinical trial leadership
06 Jan 2021
Seroprevalence of SARS-CoV-2 antibodies in 2115 blood donors from Romania
06 Jan 2021

The importance of anosmia, ageusia and age in community presentation of symptomatic and asymptomatic SARS-CoV-2 infection in Louisiana, USA; a cross-sectional prevalence study
06 Jan 2021

Testing SARS-CoV-2 vaccine efficacy through deliberate natural viral exposure
06 Jan 2021

Re: 'Effects of 13-valent pneumococcal conjugate vaccination of adults on lower respiratory tract infections and antibiotic use in primary care' by van Werkhoven et al
05 Jan 2021

Antibiotic prescribing in patients with COVID-19: rapid review and meta-analysis
05 Jan 2021

Diagnostic Microbiology and Infectious Disease

Clinical and operational factors associated with treatment duration for cellulitis in outpatient parenteral antimicrobial therapy (OPAT)
07 Jan 2021

Diagnostic accuracy of Xpert MTB/RIF Ultra for tuberculous meningitis in a clinical practice setting of China
07 Jan 2021

Evaluation of the Cue Health Point-of-Care COVID-19 (SARS-CoV-2 Nucleic Acid Amplification) Test at a Community Drive Through Collection Center
06 Jan 2021
Emerging Infectious Diseases Journal - ahead of print

The Rules of Contagion: Why Things Spread—and Why They Stop
08 Jan 2021
V. J. Morley

SARS-CoV-2 Infection and Mitigation Efforts among Office Workers, Washington, DC, USA
08 Jan 2021
S. Sami et al.

Etymologia: Falciparum
08 Jan 2021
A. Tiwari and A. Singh

Plasmodium falciparum Histidine-Rich Protein 2 and 3 Gene Deletions in Strains from Nigeria, Sudan, and South Sudan
07 Jan 2021
C. Prosser et al.

Protective Immunity and Persistent Lung Sequelae in Domestic Cats after SARS-CoV-2 Infection
07 Jan 2021
S. Chiba et al.

Shuni Virus in Cases of Neurologic Disease in Humans, South Africa
06 Jan 2021
T. P. Motlou and M. Venter

Role of Burkholderia pseudomallei–Specific IgG2 in Adults with Acute Melioidosis, Thailand
06 Jan 2021
P. Chaichana et al.

Evidence of Zika Virus Infection in Pigs and Mosquitoes, Mexico
06 Jan 2021
D. Nunez-Avellaneda et al.

06 Jan 2021
G. J. Tyrrell et al.

Novel Arterivirus Associated with Outbreak of Fatal Encephalitis in European Hedgehogs, England, 2019
06 Jan 2021
A. Dastjerdi et al.

Genomic Evidence of In-Flight Transmission of SARS-CoV-2 Despite Predeparture Testing
05 Jan 2021
T. Swadi et al.

Murine Typhus in Canary Islands, Spain, 1999–2015
05 Jan 2021
J. Robaina-Bordón et al.

Symptom Profiles and Progression in Hospitalized and Nonhospitalized Patients with Coronavirus Disease, Colorado, USA, 2020
05 Jan 2021
G. M. Vahey et al.
Plasma MicroRNA Profiling of Plasmodium falciparum Biomass and Association with Severity of Malaria Disease
05 Jan 2021
H. Gupta et al.

Excess Deaths during Influenza and Coronavirus Disease and Infection-Fatality Rate for Severe Acute Respiratory Syndrome Coronavirus 2, the Netherlands
04 Jan 2021
L. van Asten et al.

Universal Admission Screening for SARS-CoV-2 Infections among Hospitalized Patients, Switzerland, 2020
04 Jan 2021
T. Scheier et al.

Addressing COVID-19 Misinformation on Social Media Preemptively and Responsively
04 Jan 2021
E. K. Vraga and L. Bode

Rapid Transmission of Severe Acute Respiratory Syndrome Coronavirus 2 in Detention Facility, Louisiana, USA, May–June, 2020
04 Jan 2021
M. Wallace et al.

European Journal of Clinical Microbiology & Infectious Diseases

Impact of viral load at admission on the development of respiratory failure in hospitalized patients with SARS-CoV-2 infection
07 Jan 2021
Abstract The aim of our study was to elucidate if SARS-CoV-2 viral load on admission, measured by real-time reverse transcriptase–polymerase chain reaction (rRT-PCR) cycle threshold (Ct) value on nasopharyngeal samples, was a marker of disease severity

Serodiagnosis of Lyme borreliosis—is IgM in serum more harmful than helpful?
07 Jan 2021
Abstract Interpretation of serological findings in suspected Lyme borreliosis (LB) may be challenging and IgM reactivities in serum are often unspecific (false positive). There is a risk for overdiagnosis of LB, inadequate use of antibiotics, and potential delay of proper diagnosis

Acquisition of multidrug-resistant bacteria and encoding genes among French pilgrims during the 2017 and 2018 Hajj
07 Jan 2021
Abstract The objective of this study is to determine the acquisition of multidrug-resistant (MDR) bacteria and antibiotic resistance-encoding genes by French Hajj pilgrims and associated risk factors. Pilgrims traveling during the 2017 and 2018 Hajj were recruited. All pilgrims underwent two successive systematic nasopharyngeal and rectal swabs, pre- and post-Hajj

Performance of VITEK 2, E-test, Kirby–Bauer disk diffusion, and modified Kirby–Bauer disk diffusion compared to reference broth microdilution for testing tigecycline susceptibility of carbapenem-resistant K. pneumoniae and A. baumannii in a multicenter study in China
07 Jan 2021
Abstract Tigecycline is an alternative antibiotic for managing carbapenem-resistant Gram-negative bacterial infections. However, disk diffusion and automated testing often show false-
intermediate or false-resistant results in tigecycline susceptibility, misleading clinical antimicrobial therapy

**Brucellosis screening and follow-up of seropositive asymptomatic subjects among household members of shepherds in China**

*07 Jan 2021*

Abstract To measure the seroprevalence of high-exposure populations in brucellosis endemic areas and report the outcome and duration of seropositive asymptomatic subjects, we screened 595 family members of shepherds in Jilin Province, China and then followed up 15 seropositive asymptomatic subjects for 18 months. We found that the seropositive rate of 15.5%

**Characteristics and outcome according to underlying disease in non-AIDS patients with acute respiratory failure due to Pneumocystis pneumonia**

*07 Jan 2021*

Abstract In the non-AIDS group, several underlying conditions and immune defects could lead to different PCP presentations. This study compared PCP presentation and outcome according to the underlying disease. A secondary analysis of a previously published prospective observational study including 544 PCP patients was done. Only non-AIDS patients were included

**Epidemiological, molecular, and clinical features of rotavirus infections among pediatrics in Qatar**

*07 Jan 2021*

Abstract Acute gastroenteritis (AGE) remains a major cause of diarrhea in developing and developed countries. Rotavirus (RV) is a leading cause of severe pediatric diarrhea worldwide. Here we report on the prevalence of circulating genotypes in association with demographics and clinical manifestations outcomes in Qatar

**Diagnosis of SARS-CoV-2 in children: accuracy of nasopharyngeal swab compared to nasopharyngeal aspirate**

*07 Jan 2021*

Abstract The tests currently used for the identification of SARS-CoV-2 include specimens taken from the upper and lower respiratory tract. Although recommendations from the World Health Organization prioritise the usage of a nasopharyngeal swab (NS), nasopharyngeal aspirates (NPA) are thought to be superior in identifying SARS-CoV-2 in children

**Impact of surgical timing on survival in patients with infective endocarditis: a time-dependent analysis**

*07 Jan 2021*

Abstract The purpose of this study was to evaluate the impact of surgical timing on survival in patients with left-sided infective endocarditis (IE). This was a retrospective study including 313 patients with left-sided IE between 2009 and 2017. Surgery was defined as urgent (US) or early (ES) if performed within 7 or 28 days, respectively

**A novel approach to managing COVID-19 patients; results of lopinavir plus doxycycline cohort**

*07 Jan 2021*

Abstract The purpose of this study is to characterize adverse events (AEs) of clinical interest reported with ceftolozane-tazobactam and ceftazidime-avibactam, as an aid in monitoring patients affected by severe multidrug-resistant Gram-negative infections

**Inference of SARS-CoV-2 spike-binding neutralizing antibody titers in sera from hospitalized COVID-19 patients by using commercial enzyme and chemiluminescent immunoassays**

*06 Jan 2021*
Abstract: Whether antibody levels measured by commercially available enzyme or chemiluminescent immunoassays targeting the SARS-CoV-2 spike (S) protein can act as a proxy for serum neutralizing activity remains to be established for many of these assays.

Secular trends in the epidemiology and clinical characteristics of Enterococcus faecalis infective endocarditis at a referral center (2007–2018)

06 Jan 2021

Abstract: The aim of the study was to analyze the epidemiological and clinical changes in EFIE. All definite IE episodes treated at a referral center between 2007 and 2018 were registered prospectively, and a trend test was used to study etiologies over time. EFIE cases were divided into three periods, and clinical differences between them were analyzed. All episodes of EFIE were analyzed.

Deep learning model for prediction of extended-spectrum beta-lactamase (ESBL) production in community-onset Enterobacteriaceae bacteraemia from a high ESBL prevalence multi-centre cohort

05 Jan 2021

Abstract: Adequate empirical antimicrobial coverage is instrumental in clinical management of community-onset Enterobacteriaceae bacteraemia in areas with high ESBL prevalence, while balancing the risk of carbapenem overuse and emergence of carbapenem-resistant organisms.

Tigecycline antibacterial activity, clinical effectiveness, and mechanisms and epidemiology of resistance: narrative review

05 Jan 2021

Abstract: Tigecycline is unique glycylcycline class of semisynthetic antimicrobial agents developed for the treatment of polymicrobial infections caused by multidrug-resistant Gram-positive and Gram-negative pathogens.

Antibiotic susceptibility and molecular analysis of invasive Neisseria meningitidis recovered in the Republic of Ireland, 1996 to 2016

05 Jan 2021

Abstract: This study examined the antimicrobial susceptibility of invasive meningococcal disease (IMD)—associated Neisseria meningitidis recovered in the Republic of Ireland between 1996 and 2016. In total, 1359 isolates representing over one-third of all laboratory-confirmed cases of IMD diagnosed each epidemiological year (EY; July 1–June 30) were analysed.

Quantitative real-time PCR in Borrelia persica tick-borne relapsing fever demonstrates correlation with the Jarisch-Herxheimer reaction

04 Jan 2021

Abstract: The purpose of this study is to explore whether a correlation exists between the bacterial load of Borrelia persica in tick-borne relapsing fever (TBRF), established by quantitative real-time PCR, and the development of Jarisch-Herxheimer reaction (JHR) after the initiation of antibiotic treatment. Forty-two blood samples were included in our study.

Combined throat/nasal swab sampling for SARS-CoV-2 is equivalent to nasopharyngeal sampling

01 Jan 2021

Abstract: Purpose: PCR on a nasopharyngeal sample is the reference method for the detection of SARS-nCoV-2. However, combined throat/nasal sampling as a testing method has several advantages. We compared the combined throat/nasal sampling with nasopharyngeal sampling for detection of SARS-CoV-2 in healthcare workers suspected of COVID-19.

Correction to: Factors affecting the discharge of patients from hospital with seasonal influenza—the role of the Rapid Influenza testing in hospital discharges

01 Jan 2021

A Correction to this paper has been published: https://doi.org/10.1007/s10096-020-04105-1
TDM-guided medication of polymyxin B in a patient with CRKP-induced bloodstream infection: a case report
01 Jan 2021
Abstract The narrow therapeutic window of polymyxin B constrains its clinical use against the multidrug-resistant organisms (MDRO). A 45-year-old patient was suffering with bloodstream infection with high fever and received a combined treatment with polymyxin B and tigecycline. Therapeutic drug monitoring (TDM) was applied to polymyxin B to develop a personalized medication against MDRO

Bordetella pertussis DNA detected in a tracheostomized child blood before seroconversion
01 Jan 2021

A mobile DNA laboratory for forensic science adapted to coronavirus SARS-CoV-2 diagnosis
01 Jan 2021
Abstract The Forensic Science Institute of the French “Gendarmerie Nationale” (IRCGN™) developed in 2015 an ISO 17025 certified mobile DNA laboratory for genetic analyses. This Mobil’DNA laboratory is a fully autonomous and adaptable mobile laboratory to perform genetic analyses in the context of crime scenes, terrorism attacks or disasters

Persistence of group B Streptococcus vaginal colonization and prevalence of hypervirulent CC-17 clone correlate with the country of birth: a prospective 3-month follow-up cohort study
01 Jan 2021
Abstract To identify factors associated with vaginal colonization and persistence by group B Streptococcus (GBS) and by the hypervirulent neonatal CC-17 clone in late pregnancy and after delivery, a multicentre prospective observational cohort with 3-month follow-up was established in two university hospitals, Paris area, France

Eurosurveillance latest updates

Minimal transmission of SARS-CoV-2 from paediatric COVID-19 cases in primary schools, Norway, August to November 2020
07 Jan 2021
An intense debate on school closures to control the COVID-19 pandemic is ongoing in Europe. We prospectively examined transmission of SARS-CoV-2 from confirmed paediatric cases in Norwegian primary schools between August and November 2020. All in-school contacts were systematically tested twice during their quarantine period

Control of a COVID-19 outbreak in a nursing home by general screening and cohort isolation in Germany, March to May 2020
07 Jan 2021
Elderly care facilities have become a major focus of coronavirus disease (COVID-19) control. Here, we describe an outbreak of COVID-19 in a nursing home in Germany from 8 March to 4 May 2020 (58 days), and the effect of an intervention of general screening and cohort isolation

Job vacancies at the European Centre for Disease Prevention and Control (ECDC)
07 Jan 2021

Impact of mass testing during an epidemic rebound of SARS-CoV-2: a modelling study using the example of France
07 Jan 2021
We used a mathematical model to evaluate the impact of mass testing in the control of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). Under optimistic assumptions, one round of mass testing may reduce daily infections by up to 20–30%. Consequently, very frequent testing would be required to control a quickly growing epidemic if other control measures were to be relaxed
Early transmissibility assessment of the N501Y mutant strains of SARS-CoV-2 in the United Kingdom, October to November 2020
07 Jan 2021
Two new SARS-CoV-2 lineages with the N501Y mutation in the receptor-binding domain of the spike protein spread rapidly in the United Kingdom. We estimated that the earlier 501Y lineage without amino acid deletion Δ69/Δ70, circulating mainly between early September and mid-November, was 10% (6–13%) more transmissible than the 501N lineage, and the 501Y lineage with amino acid deletion Δ69/Δ70,

Hepatology
Eradication of chronic HCV infection: improvement of dysbiosis only in patients without liver cirrhosis
07 Jan 2021
Hepatology, Accepted Article.

Infection
Real-life experience with fidaxomicin in Clostridioides difficile infection: a multicentre cohort study on 244 episodes
08 Jan 2021
Abstract The high cost of fidaxomicin has restricted its use despite the benefit of a lower Clostridioides difficile infection (CDI) recurrence rate at 4 weeks of follow-up. This short follow-up represents the main limitation of pivotal clinical trials of fidaxomicin, and some recent studies question its benefits over vancomycin

Association between high vancomycin minimum inhibitory concentration and clinical outcomes in patients with methicillin-resistant Staphylococcus aureus bacteremia: a meta-analysis
04 Jan 2021
Abstract Purpose To assess the relationship between high vancomycin minimum inhibitory concentrations (MIC), in patients with methicillin-resistant Staphylococcus aureus bacteremia (MRSAB), and both mortality and complicated bacteremia. Methods Embase, Medline, EBM, Scopus and Web of Science were searched for studies published from January 1st 2014 to February 29th 2020

International Journal of Medical Microbiology
Modulation of inflammatory responses by gastrointestinal Prevotella spp. – from associations to functional studies
10 Jan 2021
Publication date: Available online 8 January 2021Source: International Journal of Medical MicrobiologyAuthor(s): Aida Iljazovic, Lena Amend, Eric J.C. Galvez, Romulo de Oliveira, Till Strowig

A Novel Mutation of walK Confers Vancomycin-Intermediate Resistance in Methicillin-Susceptible Staphylococcus aureus
07 Jan 2021
Publication date: Available online 6 January 2021Source: International Journal of Medical MicrobiologyAuthor(s): Jiade Zhu, Banghui Liu, Xueqin Shu, Baolin Sun
Infection Control & Hospital Epidemiology - FirstView Article

Point prevalence survey to evaluate the seropositivity for coronavirus disease 2019 (COVID-19) among high-risk healthcare workers
15 Dec 2020
Published online by Cambridge University Press:

International Journal of Infectious Diseases

10 Jan 2021
Publication date: February 2021
Source: International Journal of Infectious Diseases, Volume 103
Author(s): Yuping Li, Keqing Shi, Feng Qi, Zhijie Yu, Chengshui Chen, Jingye Pan, Gaojun Wu, Yanfang Chen, Ji Li, Yongping Chen, Tieli Zhou, Xiaokun Li, Jinglin Xia

A Comprehensive Systematic Review of CSF analysis that defines Neurological Manifestations of COVID-19
10 Jan 2021
Publication date: Available online 9 January 2021
Source: International Journal of Infectious Diseases
Author(s): Medha Tandon, Saurabh Kataria, Jenil Patel, Tejas R. Mehta, Maha Daimee, Viral Patel, Apoorv Prasad, Anisa Anila Chowdhary, Shrutj Jaiswal, Shitz Sriwastava

Time to first viral load testing among pregnant women living with HIV initiated on option B+ at 5 government clinics in Kampala city, Uganda — Retrospective cohort study
10 Jan 2021
Publication date: Available online 9 January 2021
Source: International Journal of Infectious Diseases
Author(s): Patience Atuhaire, Flavia Matovu, Rita Nakalega, Hajira Kataike, Martin Nabwana, Zubair Lukyamuzi, David Guwattude

Gap to End-TB targets in eastern China: a joinpoint analysis from population-based notification data in Zhejiang Province, China, 2005-2018
10 Jan 2021
Publication date: Available online 9 January 2021
Source: International Journal of Infectious Diseases
Author(s): Wenlong Zhu, Yesheng Wang, Tao Li, Wei Chen, Weibing Wang

Undetected infectives in the Covid-19 pandemic
10 Jan 2021
Publication date: Available online 9 January 2021
Source: International Journal of Infectious Diseases
Author(s): Maurizio Melis, Roberto Littera

Development of a quantitative one-step multiplex RT-qPCR assay for the detection of SARS-CoV-2 in a biological matrix
10 Jan 2021
Publication date: Available online 9 January 2021
Source: International Journal of Infectious Diseases
Author(s): Jackson Alves da Silva Queiroz, Rita de Cásio Pontello Rampazzo, Edivá Basílio da Silva Filho, Gabriella Sgorlon Oliveira, Suyane da Costa Oliveira, Luan Felipe Botelho Souza, Soraya dos Santos Pereira, Moreno Magalhães de Souza Rodrigues, Adriana Cristina Salvador Maia, Cicleia

Fast-breathing vs chest-indrawing childhood pneumonia: Baseline characteristics
10 Jan 2021
Publication date: Available online 10 January 2021
Source: International Journal of Infectious Diseases
Author(s): Amy Sarah Ginsburg, Susanne May
Efficacy Evaluation of Intravenous Immunoglobulin in Non-severe Patients with COVID-19: A Retrospective Cohort Study Based on Propensity Score Matching

10 Jan 2021
Publication date: Available online 9 January 2021
Source: International Journal of Infectious Diseases
Author(s): Chenlu Huang, Ling Fei, Weixia Li, Wei Xu, Xudong Xie, Qiang Li, Liang Chen

Low Clinical Performance of "Isopollo COVID19 detection kit" (Monitor, South Korea) for RT-LAMP SARS-CoV-2 diagnosis: a call for action against low quality products for developing countries

10 Jan 2021
Publication date: Available online 9 January 2021
Source: International Journal of Infectious Diseases
Author(s): Byron Freire-Paspuel, Miguel Angel Garcia-Bereguiain

Morbidity and mortality of respiratory syncytial virus infection in hospitalized adults: Comparison with seasonal influenza

10 Jan 2021
Publication date: February 2021
Source: International Journal of Infectious Diseases, Volume 103
Author(s): Alaa Atamna, Tanya Babich, Dafi Froimovici, Dafna Yahav, Nadav Sorek, Haim Ben-Zvi, Leonard Leibovici, Jihad Bishara, Tomer Avni

Candida parapsilosis Neutropenic Enterocolitis

10 Jan 2021
Publication date: Available online 9 January 2021
Source: International Journal of Infectious Diseases
Author(s): Shuku Sato, Yotaro Tamai

No clinical benefit in mortality associated with hydroxychloroquine treatment in patients with COVID-19

10 Jan 2021
Publication date: Available online 1 January 2021
Source: International Journal of Infectious Diseases
Author(s): Kenneth Sands, Richard Wenzel, Laura McLean, Kimberly Korwek, Jonathon Roach, Karla Miller, Russell E. Poland, L. Hayley Burgess, Edmund Jackson, Jonathan B. Perlin

Stability of antimicrobial agents in an elastomeric infusion pump used for outpatient parenteral antimicrobial therapy

08 Jan 2021
Publication date: February 2021
Source: International Journal of Infectious Diseases, Volume 103
Author(s): Mutsumi Akahane, Yuki Enoki, Reika Saiki, Yukitaka Hayashi, Kana Hiraoka, Kyoka Honma, Marina Itagaki, Mai Gotoda, Kozue Shinoda, Satomi Hanyu, Yuna Hamamura, Taichi Miyajima, Chihiro Ito, Kazuaki Taguchi, Shunsuke Uno, Yoshifumi Uwamino, Osamu Iketani, Naoki Hasegawa, Kazuaki Matsumoto

Cerebral alterations in West African HIV and non-HIV adults aged ≥50: An MRI study

08 Jan 2021
Publication date: February 2021
Source: International Journal of Infectious Diseases, Volume 103


08 Jan 2021
Publication date: February 2021
Source: International Journal of Infectious Diseases, Volume 103
Author(s): Jessica L. Fraser, Athman Mwatondo, Yewande H. Alimi, Jay K. Varma, Victor J. Del Rio Vilas

Oxygen metabolism markers as predictors of mortality in severe COVID-19

08 Jan 2021
Publication date: February 2021
Source: International Journal of Infectious Diseases, Volume 103
Author(s): Oleksandr V. Oliynyk, Marta Rorat, Wojciech Barg
Comparing COVID-19 vaccine allocation strategies in India: A mathematical modelling study
07 Jan 2021
Publication date: February 2021Source: International Journal of Infectious Diseases, Volume 103Author(s): Brody H. Foy, Brian Wahl, Kayur Mehta, Anita Shet, Gautam I. Menon, Carl Britto

Evaluation of INSTAND e.V.’s External Proficiency Testing Program for Tetanus and Diphtheria Antitoxin Detection: Lessons for Assessing Levels of Immunoprotection
07 Jan 2021
Publication date: Available online 6 January 2021Source: International Journal of Infectious DiseasesAuthor(s): Nathalie Wojtalewicz, Laura Vierbaum, Ingo Schellenberg, Klaus-Peter Hunfeld

A dramatic rise in serum ACE2 activity in a critically ill COVID-19 patient
06 Jan 2021
Publication date: February 2021Source: International Journal of Infectious Diseases, Volume 103Author(s): Béla Nagy, Zsolt Fejes, Zoltán Szentkereszty, Renáta Sútó, István Várkonyi, Éva Ajzner, János Kappelmayer, Zoltán Papp, Attila Tóth, Miklós Fagyas

Retrospective study identifies infection related risk factors in close contacts during COVID-19 epidemic
06 Jan 2021
Publication date: February 2021Source: International Journal of Infectious Diseases, Volume 103Author(s): Peipei Hu, Mengmeng Ma, Qinlong Jing, Yu Ma, Lin Gan, Yan Chen, Jundi Liu, Dahu Wang, Zhoubin Zhang, Dingmei Zhang

Role of the complement system in antibody-dependent enhancement of flavivirus infections
06 Jan 2021
Publication date: February 2021Source: International Journal of Infectious Diseases, Volume 103Author(s): Alana B. Byrne, Laura B. Talarico

Nerve conduction study and electromyography findings in patients recovering from Covid-19 – Case report
06 Jan 2021
Publication date: February 2021Source: International Journal of Infectious Diseases, Volume 103Author(s): Cristina Daia, Cristian Scheau, Geanina Neagu, Ioana Andone, Aura Spanu, Cristina Popescu, Simona Isabelle Stoica, Madalina Codruta Verenca, Gelu Onose

Hypoxic preconditioning — A nonpharmacological approach in COVID-19 prevention
06 Jan 2021
Publication date: February 2021Source: International Journal of Infectious Diseases, Volume 103Author(s): Radu Gabriel Hertzog, Nicoleta Simona Bicheru, Diana Mihaela Popescu, Octavian Câlborean, Ana-Maria Catrina

Evolution and genetic diversity of SARS-CoV-2 in Africa using whole genome sequences
05 Jan 2021
Publication date: February 2021Source: International Journal of Infectious Diseases, Volume 103Author(s): Babatunde Olarenwaju Motayo, Olukunle Oluwapamilerin Oluwasemowo, Babatunde Adebiyi Olusola, Paul Akiniyi Akindutu, Olamide T. Årego, Yemisi Dorcas Obafemi, Adeayo Omotayo Faneye, Patrick Omoregie Isibor, Oluwadurotimi Samuel Aworunse, Solomon Uche Oranusi

SARS-CoV-2 in migrant worker dormitories: Geospatial epidemiology supporting outbreak management
05 Jan 2021
Publication date: February 2021Source: International Journal of Infectious Diseases, Volume 103Author(s): Alexander W. Gorny, Natasha Bagdasarian, Azriel Hong Kiat Koh, Yong Chin
An unexpected giant problem — Giant condyloma (Buschke–Lowenstein tumor)
05 Jan 2021
Publication date: February 2021Source: International Journal of Infectious Diseases, Volume 103Author(s): Alicja Rydzewska-Rosólska, Katarzyna Kakareko, Martyna Kowalik, Konrad Zaręba, Edyta Zbroch, Tomasz Hryszko

Secondary hemophagocytic lymphohistiocytosis and severe liver injury induced by hepatic SARS-CoV-2 infection unmasking Wilson’s disease: balancing immunosuppression
05 Jan 2021
Publication date: Available online 4 January 2021Source: International Journal of Infectious DiseasesAuthor(s): Matthias Lubnow, Barbara Schmidt, Martin Fleck, Bernd Salzberger, Thomas Müller, Georg Peschel, Roland Schneckenpointner, Tobias Lange, Florian Hitzenbichler, Martin Kieninger, Dirk Lunz, Bernhard Graf, Christoph Brochhausen, Florian Weber, Florian Lüke, David Peterhoff, Philipp

Early T cell reconstitution and cytokine profile may help to guide a personalized management of human cytomegalovirus infection after allogeneic hematopoietic stem cell transplantation
10 Jan 2021

Healthcare resource use in hospitalised patients with carbapenem resistant Gram-negative infections
08 Jan 2021
antimicrobial resistance (AMR) is a threat to global public health. Infections with resistant organisms are more challenging to treat, often delay patient recovery and can increase morbidity and mortality. Healthcare costs associated with treating patients with AMR organisms are poorly described

Initial impact of a national programme to contain the spread of carbapenemase-producing Enterobacterales (CPE) in Ireland
08 Jan 2021
Background; Carbapenemase-producing Enterobacterales (CPE) are an emerging cause of healthcare-associated infection (HAI). In October 2017, a National Public Health Emergency on CPE was declared in Ireland resulting in improved CPE surveillance, implementation of performance monitoring and reporting, and a CPE national expert advisory group.

Cross Sectional Prevalence of SARS-CoV-2 antibodies in Health Care Workers in Paediatric Facilities in Eight Countries
07 Jan 2021
Healthcare workers (HCWs) have been disproportionately affected by COVID-19 which may in part be driven by nosocomial exposure. If HCW exposure is predominantly nosocomial, HCWs in paediatric facilities, where few patients are admitted with COVID-19, may lack antibodies to SARS-CoV-2 and be at increased risk during the current resurgence.

The ‘innocuous’ nasopharyngeal temperature probe: a call to action
07 Jan 2021
It is considered an international standard to monitor temperature in patients receiving anaesthesia. The American Society of Anaesthesiologists recommendation for temperature
monitoring states "every patient receiving anaesthesia shall have temperature monitored when clinically significant changes in body temperature are intended, anticipated or suspected.

Urgency of surgery as an indicator for the occurrence of surgical site infections: data from over 100,000 surgical procedures

07 Jan 2021

The risk for surgical site infections (SSIs) is influenced by patient- and procedure-related factors. Urgent surgery represents a challenge in operative medicine and is frequently linked to a variety of complications, including SSIs.

Nosocomial influenza in southwestern Swiss hospitals during two seasonal epidemics: an observational study

07 Jan 2021

This study was conducted during two seasonal influenza epidemics from 2016 to 2018 in 27 acute-care public hospitals in South-western Switzerland. It aimed at describing nosocomial cases of seasonal influenza. During these 2 time-periods, every patient hospitalized for >72 hours that was positively screened by RT-PCR or antigen detection for influenza was included in the survey.

Whole genome sequencing analysis reveals the spread of a vanB carrying transposon among different vancomycin-resistant Enterococcus faecium clinical isolates in a non-endemic setting

04 Jan 2021

Vancomycin-resistant enterococci (VRE), in particular Enterococcus faecium (VREfm), can cause serious nosocomial infections, and have been responsible for healthcare-associated outbreaks. Spreading of VREfm can occur both clonally and by the dissemination of mobile genetic elements.

Decontamination of common healthcare facility surfaces contaminated with SARS-CoV-2 using peracetic acid dry fogging

04 Jan 2021

The SARS-CoV-2 pandemic has highlighted the urgent need for safe and effective surface decontamination methods, particularly in healthcare settings.

Journal of Infection

INCIDENCE, RISK FACTORS, AND THROMBOTIC LOAD OF PULMONARY EMBOLISM IN PATIENTS HOSPITALIZED FOR COVID-19 INFECTION

10 Jan 2021

To determine the incidence, characteristics, and risk factors of pulmonary embolism (PE) among patients hospitalized for COVID-19.

Quality of life after COVID-19 without hospitalisation: good overall, but reduced in some dimensions

09 Jan 2021

Dear editor,

Detection of group B streptococcus colonisation in pregnant women: comparison of two different culture methods and study of antimicrobial resistance patterns

08 Jan 2021

We read with interest the recent article by Collins et al.1 regarding under-identification of hospital clusters of Group B Streptococcus (GBS) disease outbreaks.

Analytical and Clinical Performance of the Panbio COVID-19 Antigen-Detecting Rapid Diagnostic Test

06 Jan 2021
Recent articles in this Journal have suggested the potential of antigen-based rapid diagnostic tests (Ag-RDT) as low-cost and ease-of-use tools for massive screening and epidemiological surveillance of SARS-CoV-2 spread

**Endogenous Candida Endophthalmitis: Who is Really at Risk?**
04 Jan 2021

Candida species are the fourth most common cause of bloodstream infections and are the leading cause of invasive fungal infections among hospitalized patients in the United States.1 Candidemia is often associated with high rates of morbidity and mortality. 30-day-all-cause mortality in patients with candidemia is estimated to be 30%

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**Journal of Microbiology, Immunology and Infection**

**Eosinopenia <100/μL as a marker of active COVID-19: an observational prospective study**
08 Jan 2021

Publication date: Available online 8 January 2021Source: Journal of Microbiology, Immunology and InfectionAuthor(s): Roderau Outh, Caroline Boutin, Philippe Gueudet, Marcelino Suzuki, Matthieu Saada, Hugues Aumâtre

**Huge brain abscess caused by Actinomyces israelii associated with chronic sinusitis: A rare case report**
07 Jan 2021

Publication date: Available online 7 January 2021Source: Journal of Microbiology, Immunology and InfectionAuthor(s): Lien-Hsuan Chou, Ying-Shih Su, Fu-Lun Chen, Wen-Sen Lee, Wei-Hao Li

**A rare patient with primary endogenous Aspergillus endophthalmitis.**
07 Jan 2021

Publication date: Available online 6 January 2021Source: Journal of Microbiology, Immunology and InfectionAuthor(s): Yu-Yao Chiu, Yen-Hsu Chen, Hui-Hua Hsiao, Jeng-Shiun Du

**An Outbreak Of Ralstonia Pickettii Bloodstream Infection Among Pediatric Leukemia Patients**
06 Jan 2021

Publication date: Available online 6 January 2021Source: Journal of Microbiology, Immunology and InfectionAuthor(s): Tugba Bedir Demirdag, Aslinur Ozkaya-Parlakay, Fatma Bayrakdar, Belgin Gulhan, Salihà Kanik Yuksek, Serap Suzuk Yildiz, İpek Mumcuoglu, Bedia Dinc, Nese Yarali

**Seventeen Years after First Implementation of Traffic Control Bundling**
06 Jan 2021

Publication date: Available online 6 January 2021Source: Journal of Microbiology, Immunology and InfectionAuthor(s): Muḥ-Yong Yen, Jonathan Schwartz, Chung-Liang Shih

**Manganese superoxide dismutase induced by lipoteichoic acid isolated from Staphylococcus aureus regulates cytokine production in THP-1 cells**
06 Jan 2021

Publication date: Available online 6 January 2021Source: Journal of Microbiology, Immunology and InfectionAuthor(s): Hangeun Kim, Hyeoung-Eun Kim, Dae Kyun Chung

**The dynamic change of antibody index against Covid-19 is a powerful diagnostic tool for the early phase of the infection and salvage PCR assay errors**
06 Jan 2021

Publication date: Available online 5 January 2021Source: Journal of Microbiology, Immunology and InfectionAuthor(s): Masao Omata, Yosuke Hirotsu, Hiroki Sugiuira, Makoto Maejima, Yuki Nagakubo, Kenji Amemiya, Miyoko Hayakawa, Toshiharu Tsutsui, Yumiko Kakizaki, Hitoshi Mochizuki, Yoshihiro Miyashita
Can hydroxychloroquine be protective against COVID-19-associated thrombotic events?
05 Jan 2021
Publication date: Available online 5 January 2021
Source: Journal of Microbiology, Immunology and Infection
Author(s): Christian A. Devaux, Laurence Camoin-Jau, Jean-Louis Mege, Didier Raoult

Secondary Syphilis with Alopecia and Ocular Manifestation
05 Jan 2021
Publication date: Available online 5 January 2021
Source: Journal of Microbiology, Immunology and Infection
Author(s): Kai-Ming Chang, Lemar Nadi, Frances Wallach

Journal of Virology: Articles Published Ahead of Print

COVID-19 vaccine candidates based on modified vaccinia virus Ankara expressing the SARS-CoV-2 spike induce robust T- and B-cell immune responses and full efficacy in mice [Vaccines and Antiviral Agents]
07 Jan 2021
Vaccines against SARS-CoV-2, the causative agent of the COVID-19 pandemic, are urgently needed. We developed two COVID-19 vaccines based on modified vaccinia virus Ankara (MVA) vectors expressing the entire SARS-CoV-2 spike (S) protein (MVA-CoV2-S); their immunogenicity was evaluated in mice using DNA/MVA or MVA/MVA prime/boost immunizations.

Insight into vaccine development for Alpha-coronaviruses based on structural and immunological analyses of spike proteins [Vaccines and Antiviral Agents]
07 Jan 2021
Coronaviruses that infect humans belong to the Alpha-coronavirus (including HCoV-229E) and Beta-coronavirus (including SARS-CoV and SARS-CoV-2) genera. In particular, SARS-CoV-2 is currently a major threat to public health worldwide. The spike (S) homotrimers bind to their receptors via the receptor-binding domain (RBD), which is a major target to block viral entry.

Neurovirulence of avian influenza virus is dependent on the interaction of viral NP protein with host factor FMRP in the murine brain [Pathogenesis and Immunity]
06 Jan 2021
Avian influenza viruses (AIVs) are zoonotic viruses that exhibit a range infectivity and severity in the human host. Severe human cases of AIVs infection are often accompanied by neurological symptoms, however, the factors involved in the infection of the central nervous system (CNS) are not well known.

Human parainfluenza virus type 2 V protein modulates iron homeostasis. [Virus-Cell Interactions]
06 Jan 2021
Intracellular iron concentration is tightly controlled for cell viability. It is known to affect the growth of several viruses, but the molecular mechanisms are not well understood. We found that iron chelators inhibit growth of human parainfluenza virus type 2 (hPIV-2).

Transcriptional analysis of lymphoid tissues from infected nonhuman primates reveals the basis for attenuation and immunogenicity of an Ebola virus encoding a mutant VP35 protein [Pathogenesis and Immunity]
06 Jan 2021
Infection with Zaire ebolavirus (EBOV), a member of the Filoviridae family, causes a disease characterized by high levels of viremia, aberrant inflammation, coagulopathy, and
lymphopenia. EBOV initially replicates in lymphoid tissues and disseminates via dendritic cells (DCs) and monocytes to liver, spleen, adrenal gland and other secondary organs. Increased proviral DNA in circulating cells correlates with plasma viral rebound in SIV-infected rhesus macaques after antiretroviral therapy interruption [Genome Replication and Regulation of Viral Gene Expression]

The HIV reservoir is responsible for persistent viral infection, and a small number of mosaic latent cellular reservoirs promote viral rebound upon antiretroviral therapy interruption, which is the major obstacle to a cure. However, markers that determine effective therapy and viral rebound post-treatment interruption remain unclear.

Tetramerization of Phosphoprotein is Essential for Respiratory Syncytial Virus Budding while its N Terminal Region Mediates Direct Interactions with the Matrix Protein. [Structure and Assembly]

It was shown previously that the Matrix (M), Phosphoprotein (P), and the Fusion (F) proteins of Respiratory syncytial virus (RSV) are sufficient to produce virus-like particles (VLPs) that resemble the RSV infection-induced virions. However, the exact mechanism and interactions among the three proteins are not known.

Roles of Cholesterol in Early and Late Steps of the Nipah Virus Membrane Fusion Cascade [Virus-Cell Interactions]

Cholesterol has been implicated in various viral life cycle steps for different enveloped viruses, including viral entry into host cells, cell-cell fusion, and viral budding from infected cells. Enveloped viruses acquire their membranes from their host cells.

Mucosal delivery of recombinant VSV vectors expressing envelope proteins of RSV induces protective immunity in cotton rats [Vaccines and Antiviral Agents]

Respiratory syncytial virus (RSV) is a major cause of lower respiratory tract infections with increased severity in high-risk human populations, such as infants, immunocompromised and the elderly. Though the virus was identified more than 60 years ago, there is still no licensed vaccine available. Over the years, several vaccine delivery strategies have been evaluated.

Phosphorylation of influenza A virus NS1 at serine 205 mediates its viral polymerase-enhancing function [Virus-Cell Interactions]

Influenza A virus (IAV) non-structural protein 1 (NS1) is a protein with multiple functions that are regulated by phosphorylation. Phospho-proteomic screening of H1N1-infected cells identified NS1 to be phosphorylated at serine 205 in intermediate stages of the viral life cycle.

Efficacy of Coxsackievirus A5 Vaccine Candidates in an Actively Immunized Mouse Model [Vaccines and Antiviral Agents]

Coxsackievirus A5 (CV-A5) has recently emerged as a main hand, foot and mouth disease (HFMD) pathogen. Following a large-scale vaccination campaign against enterovirus 71 (EV-71) in China, the number of HFMD-associated cases with EV-71 was reduced, especially severe and fatal cases. However, the total number of HFMD cases remains high, as HFMD is also caused by other enterovirus serotypes.

Inducible Guanylate-Binding Protein 7 Facilitates Influenza A Virus Replication by Suppressing Innate Immunity via NF-{kappa}B and JAK-STAT Signaling Pathways [Virus-Cell Interactions]

Guanylate-binding protein 7 (GBP7) belongs to the GBP family, which plays key roles in mediating innate immune responses to intracellular pathogens. Thus far, GBP7 has been reported to be a critical cellular factor against bacterial infection. However, the relationship between GBP7 and influenza A virus (IAV) replication is unknown.
A polyQ membrane protein of Vibrio cholerae acts as the receptor for phage infection [Virus-Cell Interactions]

Bacteriophage VP1 is a typing phage used for the phage subtyping of Vibrio cholerae O1 biotype El Tor, but the molecular mechanisms of its receptor recognition and the resistance of its host to infection are mostly unknown. In this study, we aimed to identify the host receptor and its role in resistance in natural VP1-resistant strains.


Human papillomavirus (HPV) infects squamous epithelium and is a major cause of cervical cancer (CC) and a subset of head and neck cancer (HNC). Virus-induced tumourigenesis, molecular alterations, and related prognostic markers are expected to be similar between the two cancers, but they remain poorly understood.

Morbidity and Mortality Weekly Report (MMWR)

EARLY RELEASE: Candida auris Outbreak in a COVID-19 Specialty Care Unit - Florida, July-August 2020

This report describes a Candida auris outbreak in patients with coronavirus disease 2019 (COVID-19) who received care in the same dedicated COVID-19 unit of an acute care hospital.

EARLY RELEASE: Rates of COVID-19 Among Residents and Staff Members in Nursing Homes - United States, May 25-November 22, 2020

This report describes the increase in rates of COVID-19 among nursing home residents and staff members during June and July 2020, and again in November.

Predicted Heart Age Among Cancer Survivors - United States, 2013-2017

This report describes cardiovascular health and predicted heart age among cancer survivors.

Assessment of Day-7 Postexposure Testing of Asymptomatic Contacts of COVID-19 Patients to Evaluate Early Release from Quarantine - Vermont, May-November 2020

This report describes day-7 postexposure testing of asymptomatic persons who came in contact with COVID-19 patients.

Participation in Fraternity and Sorority Activities and the Spread of COVID-19 Among Residential University Communities - Arkansas, August 21-September 5, 2020

This report describes incidence of COVID-19 spread related to fraternity and sorority activities.

QuickStats: Percentage of Adults Aged ≥20 Years Who Had Taken Any Dietary Supplement in the Past 30 Days, by Sex and Family Income - National Health and Nutrition Examination Survey, United States, 2017-2018
This report describes the percentage of adults taking dietary supplements by sex and income.

Time from Start of Quarantine to SARS-CoV-2 Positive Test Among Quarantined College and University Athletes - 17 States, June-October 2020
07 Jan 2021
This report describes the time from college athletes' start of quarantine to a positive SARS-CoV-2 test.

Opening of Large Institutions of Higher Education and County-Level COVID-19 Incidence - United States, July 6-September 17, 2020
07 Jan 2021
This report describes the effectiveness of large colleges or universities instructional format on COVID-19 incidence.

Erratum: Vol. 69, No. 49
07 Jan 2021
MMWR erratum volume 69, issue 49

Recommendations and Reports: Use of Ebola Vaccine: Recommendations of the Advisory Committee on Immunization Practices, United States, 2020
07 Jan 2021
Summary of the Advisory Committee on Immunization Practices' recommendations for use of Ebola vaccine in the United States.

06 Jan 2021
This report describes cases of anaphylaxis after administration of first doses of the Pfizer-BioNTech COVID-19 vaccine during December 14-23, 2020.

Nature Reviews Microbiology - Current Issue
An ancestral Matryoshka doll
08 Jan 2021
Nature Reviews Microbiology, Published online: 08 January 2021; doi:10.1038/s41579-021-00509-8 This month’s Genome Watch highlights the genomic traits underlying the ancestral association between endobacteria, which live inside arbuscular mycorrhizal fungi, which reside within plants.

New England Journal of Medicine - Current Issue
Early High-Titer Plasma Therapy to Prevent Severe Covid-19 in Older Adults
06 Jan 2021
New England Journal of Medicine, Ahead of Print.

Scandinavian Journal of Infectious Diseases: Table of Contents
Clinical characteristics of 100 cases of coronavirus disease 2019 in Dongguan, China
07 Jan 2021
Prevalence of hepatitis B and C at a major tuberculosis centre in Denmark
07 Jan 2021

Sexually Transmitted Infection Online First

Factors associated with syphilis seroprevalence in women with and at-risk for HIV infection in the Women's Interagency HIV Study (1994-2015)
06 Jan 2021
Objective
Syphilis rates among women in the USA more than doubled between 2014 and 2018. We sought to identify correlates of syphilis among women enrolled in the Women's Interagency HIV Study (WIHS) to inform targeted interventions.

Sexually transmitted infections (STI) and antenatal care (ANC) clinics in Malawi: effective platforms for improving engagement of men at high HIV risk with voluntary medical male circumcision services
04 Jan 2021
Introduction
Voluntary medical male circumcision (VMMC), an effective HIV prevention programme for men, is implemented in East and Southern Africa. Approximately 50% of VMMC clients are aged below 15 years. More targeted interventions to reach older men and others at higher short-term HIV risk are needed.

Online self-sampling kits to screen multipartner MSM for HIV and other STIs: participant characteristics and factors associated with kit use in the first 3 months of the MemoDepistages programme, France, 2018
04 Jan 2021
Objectives
In 2017, to reduce the proportion of men who have sex with men (MSM) in the undiagnosed HIV population in France (38%), HIV screening is advised each 3 months and STI screening is advised each year in multipartner MSM. Despite the range of testing solutions, over 40% of MSM were not tested for HIV and over 50% for STIs in the past year.

HIV non-occupational postexposure prophylaxis (nPEP) usage among five key populations in China
04 Jan 2021
Objectives
To examine the feasibility of non-occupational postexposure prophylaxis (nPEP) as a national strategy for HIV prevention in China, we investigated nPEP usage and related sociodemographic and behavioural factors among five key populations at high risk of contracting HIV.

COVID-19, fear and sexual behaviour: a survey in a tertiary STI clinic in Lisbon
04 Jan 2021
COVID-19 lockdowns impose constraints on sexual health services and related medical activities. Our STI clinic favoured telemedicine as advised by specialist societies, illustrating the feasibility of maintaining STI care provision during a state of emergency. Recommendations regarding changes to sexual behaviour were also provided.

COVID-19-related nationwide lockdown did not reduce the reported diagnoses of Chlamydia trachomatis and Neisseria gonorrhoeae in Finland
04 Jan 2021
There has been interest in exploring the impact of COVID-19-related lockdowns on sexual and reproductive health, with studies reporting a decrease in the self-reported number of new sexual partners and frequency of intercourse. The importance of information on the incidence of STIs has also been highlighted.
Elevated risk of invasive group A streptococcal disease and host genetic variation in the human leucocyte antigen locus.

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Dose-dependent response to infection with SARS-CoV-2 in the ferret model and evidence of protective immunity.

Population-Level Antimicrobial Consumption Is Associated With Decreased Antimicrobial Susceptibility in Neisseria gonorrhoeae in 24 European Countries: An Ecological Analysis.

Cloth Lanyards as a Source of Intermittent Transmission of Candida auris on an ICU.