Infection Current Awareness Update
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.

To contact PHE Knowledge and Library Services, click here.

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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Infection-related guidance
American Society for Microbiology

**Guideline for the Detection and Identification of Group B Streptococcus**

03 Mar 2020

Streptococcus agalactiae or Group B Streptococcus (GBS) has long been a leading cause of neonatal infection. ASM is responsible for maintaining and updating guidelines for standard laboratory practices related to detection and identification of GBS.

British Medical Association

**Unfairness laid bare – exclusive dress codes**

12 Mar 2020

The NHS has committed to changing dress codes which have left Muslim women doctors feeling harassed. Jennifer Trueland reports

European Centre for Disease Prevention and Control


12 Mar 2020

Since ECDC’s fifth update on novel coronavirus published on 2 March 2020 and as of 11 March, the number of cases and deaths reported in the EU/EEA and the UK has been rising, mirroring the trends seen in China in January-early February and in northern Italy in late February.

**Infection prevention and control for COVID-19 in healthcare settings**

12 Mar 2020

This document aims to provide guidance to EU/EEA healthcare facilities and healthcare providers on infection prevention and control measures during the management of suspected and confirmed cases of COVID-19 infection in healthcare settings, including long-term care facilities (LTCF). It also offers guidance on the management of specimens in laboratories in the EU/EEA.

**Novel coronavirus (SARS-CoV-2) - Discharge criteria for confirmed COVID-19 cases**

10 Mar 2020

This document suggests criteria to be considered when deciding whether a confirmed COVID-19 case can be safely (i.e. without being infectious) discharged from hospital or released from home isolation.

**Toolkit to support the generation of robust estimates of hepatitis C prevalence**

05 Mar 2020

European surveillance data show on-going transmission of viral hepatitis across the European Union and European Economic Area (EU/EEA). The available notification data however, do not provide a clear epidemiological picture of hepatitis C in Europe.

Infectious Diseases Society of America

Join @CDCgov’s Clinician Outreach & Communication Activity (COCA) call today @ 2PM ET for an update on #COVID19, as well as how to

13 Mar 2020

2PM ET for an update on #COVID19, as well as how to implement infection prevention & control measures.

An investigation of the intra-host diversity of COVID-19 and microbiota using bronchoalveolar lavage fluid from eight confirmed cases in Wuhan, China via @IDSAInfo DOWNLOAD:
academic.oup.com/cid/advance-ар… pic.twitter.com/4mTxLnU4yo

13 Mar 2020

TIPS: The Infection Prevention Strategy on Twitter: "An investigation of the intra-host diversity

Studies that correlate maternal #antibodies with protection from influenza A or B virus infection in young infants in areas with prolonged #influenza circulation are lacking. #InfectiousDisease @IDSAinfo
bit.ly/38wUgFm pic.twitter.com/YXe008uqbT

09 Mar 2020

influenza A or B virus infection in young infants in areas with prolonged #influenza circulation are

New in CID “Diagnosis and Management of First Case of COVID-19 in Canada” Toronto Hospital describes #InfectionPrevention and clinical course of #COVID19 Pt. Great resource for hospital preparations 1/4
doi.org/10.1093/cid/ci… pic.twitter.com/yF9A3F9XRX

09 Mar 2020

COVID-19 in Canada”Toronto Hospital describes #InfectionPrevention and clinical course of #COVID19 Pt.

Infection-related journals

American Journal of Infection Control

Evidence and extrapolation: Chlorhexidine gluconate for periurethral cleansing prior to urinary catheter insertion

13 Mar 2020

Requests to allocate institutional resources to quality improvement endeavors are rightfully confronted with the pursuit of data demonstrating improved outcomes and formal recommendations from organizations such as the Centers for Disease Control and Prevention (CDC)

Effectiveness of implementing link nurses and audits and feedback to improve nurses' compliance with standard precautions: A cluster randomized controlled trial

13 Mar 2020

Health care-associated infections (HAIs) are one of the most important threats in public health worldwide.1-3 These infections represent the most frequent adverse event in health care and are associated with patients' mortality and morbidity, longer hospital stays, increased health care costs, and psychosocial and economic burdens on the individuals involved, their families, and their communities

Aerosol disinfection of bacterial spores by peracetic acid on antibacterial surfaces and other technical materials

12 Mar 2020
The most important subjects of efficient hygiene management are suitable cleaning and disinfection procedures. In application fields, which are sensitive to biological contamination like health care and medicine or food processing, an appropriate set of measures to remain high hygienic standards is mandatory to avoid the spread of infections.

**Being candid about Candida airway colonization and clinical outcomes:**

**What can we really learn from unadjusted associations?**

12 Mar 2020

Candida spp. colonization has been reported as risk factor for the development of invasive candidiasis in critically ill patients. Candida spp. colonization is also usually found in patients with multiple comorbidities, receiving treatment for underlying diseases and/or organ support. 

It is therefore reasonable to assume confounding in the association between Candida spp. and clinical outcomes.

**Candida auris-an impending threat: A case report from home**

12 Mar 2020

Candida auris has been identified as an invasive fungal organism of outbreaks globally. Due to its striking ability to colonize the skin and readily transmit from person-to-person, it is being categorized as a public health threat.

**An update on the 2019-nCoV outbreak**

12 Mar 2020

Cases of 2019-nCoV are now being reported in different regions around the globe, concerning for a possible SARS like epidemic that infected for than 8000 people in 2002-03. Though, major health authorities are still working on understanding the virus and its transmission, here we present a brief report regarding the 2019-nCoV outbreak and what is known so far.

Clinical Infectious Diseases - Advance Access

**Clinical characteristics of refractory COVID-19 pneumonia in Wuhan, China**

16 Mar 2020

Abstract

Background Since December 2019, novel coronavirus (SARS-CoV-2)-infected pneumonia (COVID-19) occurred in Wuhan, and rapidly spread throughout China. This study aimed to clarify the characteristics of patients with refractory COVID-19.

**Enterococcal endocarditis: the Eternal Return of the Same Bug**

14 Mar 2020

**New Insights Into The Role Of Antibiotic Use In Infancy And The Upper Airway Microbiome In Childhood Asthma Development**

14 Mar 2020

Abstract

Background Early-life exposures to antibiotics may increase the risk of developing childhood asthma. However, little is known about the mechanisms linking antibiotic exposures to asthma. We hypothesized that changes in the nasal airway microbiota serve as causal mediator in the antibiotics–asthma link.

**Reply to Pericàs et al.**

14 Mar 2020

Abstract

**How Long Do We Need to Treat an Invasive Mold Disease in Hematology Patients? Factors Influencing Duration of Therapy and Future Questions**

14 Mar 2020

Abstract

Treatment duration for invasive mold disease (IMD) in patients with hematological malignancy is not standardized and is a challenging subject in antifungal stewardship.
Concerns for IMD relapse during subsequent reinduction or consolidation chemotherapy or graft versus host disease treatment in hematopoietic stem cell transplant recipients often results in prolonged or indefinite

Sources of multi-drug resistance in patients with previous isoniazid resistant tuberculosis identified using whole genome sequencing: A longitudinal cohort study
13 Mar 2020

AbstractBackgroundMeta-analysis of patients with isoniazid-resistant tuberculosis given standard first-line anti-tuberculosis treatment indicated an increased risk of multi-drug resistant tuberculosis (MDR-TB) emerging (8%), compared to drug-sensitive tuberculosis (0.3%)

The integrase inhibitors dolutegravir and raltegravir exert pro-adipogenic and profibrotic effects and induce insulin resistance in human/simian adipose tissue and human adipocytes
13 Mar 2020

AbstractBackgroundAlthough some integrase strand transfer inhibitors (INSTIs) promote peripheral and central adipose tissue/weight gain in HIV-infected individuals, the underlying mechanism has not been identified. Here, we used human and simian models to assess the impact of INSTIs on adipose tissue phenotype and function

Corrigendum
13 Mar 2020

An error appeared in the 15 May 2018 issue of the journal [Amoroso A and Limaye AP. Linear Cutaneous Erythema in a Patient With Amyotrophic Lateral Sclerosis. Clin Infect Dis 2018; 66(10):1636. doi:10.1093/cid/cix1045]. In the original publication of this article, the authors’ names (De Kyvon, Drillaud, Henique et al.) were omitted, and have since been connected to the manuscript.

A case report of neonatal COVID-19 infection in China
12 Mar 2020

AbstractIn December 2019, the 2019 novel coronavirus disease (COVID-19) caused by SARS-CoV-2 emerged in China and now has spread in many countries. Pregnant women are susceptible population of COVID-19 which are more likely to have complications and even progress to severe illness

Dysregulation of immune response in patients with COVID-19 in Wuhan, China
12 Mar 2020

AbstractIn December 2019, coronavirus disease 2019 (COVID-19) emerged in Wuhan and rapidly spread throughout China. MethodsDemographic and clinical data of all confirmed cases with COVID-19 on admission at Tongji Hospital from January 10 to February 12, 2020, were collected and analyzed

Hepatitis C and Stimulant use Disorder: Challenges and Opportunities
12 Mar 2020

Reinfection following successful direct-acting antiviral therapy for hepatitis C infection among people who inject drugs
12 Mar 2020

AbstractThe aim of this analysis was to calculate the incidence of HCV reinfection and associated factors among two clinical trials of HCV DAA treatment in people with recent injecting drug use or currently receiving OAT

Protecting Health Care Workers during the COVID-19 Coronavirus Outbreak –Lessons from Taiwan’s SARS response
12 Mar 2020

AbstractDuring major epidemic outbreaks, demand for health care workers grows even as the extreme pressures they face cause declining availability. We draw on Taiwan’s SARS experience to argue that a modified form of Traffic Control Bundling protects health care worker safety and by extension strengthens overall COVID-19 epidemic control.
It’s not them, it’s us: Hepatitis C reinfection following successful treatment among people who inject drugs
12 Mar 2020
hepatitis C infectionopioid use disorderinjection drug userreinfection

Hepatotoxicity and Liver-Related Mortality in Women of Child-Bearing Potential Living With HIV and High CD4 Counts Initiating Efavirenz-Containing Regimens
12 Mar 2020
AbstractBackgroundSevere hepatotoxicity in people with HIV receiving efavirenz (EFV) has been reported. We assessed the incidence and risk factors of hepatotoxicity in women of child-bearing age initiating EFV-containing regimens.MethodsIn the PROMISE trial, ART-naive pregnant women with HIV and CD4>350 and ALT<2

Geographic shifts in antibacterial drug clinical trial enrollment: implications for generalizability
12 Mar 2020
AbstractBackgroundAs drug development has globalized, trials have increasingly enrolled subjects from all parts of the world rather than just the United States and Western Europe. For antibacterial drug trials, understanding enrollment trends and regional differences is important for generalizability considerations

A comparative study on the clinical features of COVID-19 pneumonia to other pneumonias
12 Mar 2020
AbstractBackgroundA novel coronavirus (2019-nCoV) has raised world concern since it emerged in Wuhan Hubei China in December, 2019. The infection may result into severe pneumonia with clusters illness onsets. Its impacts on public health make it paramount to clarify the clinical features with other pneumonias

A Novel Approach for a Novel Pathogen: using a home assessment team to evaluate patients for 2019 novel coronavirus (SARS-CoV-2)
12 Mar 2020
AbstractThousands of people in the United States have required testing for SARS-CoV-2. Evaluation for a special pathogen is resource intensive. We report an innovative approach to home assessment that, in collaboration with public health, enables safe evaluation and specimen collection outside the healthcare setting, avoiding unnecessary exposures and resource utilization.

Next steps in pneumonia severity scores
11 Mar 2020
Community-acquired pneumoniaprediction scoresclinical outcomesmachine learningartificial intelligence

Diphtheria in Metro Manila, the Philippines 2006–2017: A Clinical, Molecular, and Spatial Characterization
11 Mar 2020
AbstractBackgroundDiphtheria is a vaccine-preventable disease that persists as a global health problem. An understanding of the pattern of disease is lacking in low- and middle-income countries such as the Philippines

The role of HIV asymptomatic status when starting ART on adherence and treatment outcomes and implications for test and treat: the Swiss HIV Cohort Study
11 Mar 2020
AbstractBackgroundSince the advent of universal test and treat policies, a higher share of people living with HIV (PLHIV) initiating ART are asymptomatic with a preserved immune system. We explored the potential impact of asymptomatic status on adherence and clinical outcomes.MethodsPLHIV registered in the Swiss HIV Cohort Study (SHCS) between 2003 and 2018

Doxycycline for Prevention of Spirochetal Infections—Status Report
11 Mar 2020
Abstract
Important human infections caused by spirochetal microorganisms include Lyme disease, syphilis, leptospirosis, and tick-borne relapsing fever. Doxycycline prophylactic regimens have been shown to significantly reduce the risk for developing all of these infections in potentially exposed individuals, which is highly clinically relevant since no vaccines to prevent these infections in

Administrative and Related Barriers to Covering the Costs of PrEP at a Safety-Net Clinic in Seattle, WA
10 Mar 2020
Abstract
One barrier to HIV pre-exposure prophylaxis (PrEP) is lack or perceived lack of health insurance or financial assistance. We performed a chart review at a safety-net PrEP clinic in Seattle, WA and found that barriers to obtaining financial assistance were commonly recorded in association with initiation and persistence on PrEP.

Invasive aspergillosis due to Aspergillus section Usti: a multicenter retrospective study
10 Mar 2020
Abstract
Background
Aspergillus spp. of section Usti (A. ustus) represent a rare cause of invasive aspergillosis (IA). This multicenter study describes the epidemiology and outcome of A. ustus infections.

Methods
Patients with A. ustus isolated from any clinical specimen were retrospectively identified in 22 hospitals from 8 countries.

First Case of Invasive Stachybotrys Sinusitis
10 Mar 2020
Abstract
Background
The toxigenic mold Stachybotrys has controversially been linked to idiopathic pulmonary hemorrhage and “sick building syndrome”. However, there are no previous clinical records of invasive stachybotryosis.

Impact of an antibiotic side chain-based cross-reactivity chart combined with enhanced allergy assessment processes for surgical prophylaxis antimicrobials in patients with beta-lactam allergies
10 Mar 2020
Abstract
BACKGROUND
Beta-lactam antibiotics are first line therapy for perioperative prophylaxis; however, patient-reported allergies often lead to increased prescribing of alternative antibiotics that may increase the incidence of surgical site infections.

Strongyloides stercoralis Infection in Solid Organ Transplant Patients is Associated with Eosinophil Activation and Intestinal Inflammation: A Cross-sectional Study
10 Mar 2020
Abstract
Background
Strongyloidiasis can cause devastating morbidity and death in immunosuppressed patients. Identification of reliable biomarkers for strongyloidiasis in immunosuppressed patients is critical for the prevention of severe disease.

10 Mar 2020
Abstract
Mathematical modeling of healthcare associated infections (HAIs) and multidrug resistant organisms (MDROs) improves our understanding of pathogens transmission dynamics and provides a framework for evaluating prevention strategies.

Diagnosis and Management of First Case of COVID-19 in Canada: Lessons applied from SARS
09 Mar 2020
Abstract
We report diagnosis and management of the first laboratory-confirmed case of coronavirus disease 2019 (COVID-19) hospitalized in Toronto, Canada. No healthcare-associated transmission occurred. In the face of a potential pandemic of COVID-19, we suggest sustainable and scalable control measures developed based on lessons learned from SARS.

High incidence of herpes zoster after cord blood hematopoietic cell transplant despite longer duration of antiviral prophylaxis
Abstract

Background

Cord blood transplant (CBT) recipients have a high incidence of herpes zoster (HZ) in the context of short-term peri-transplant antiviral prophylaxis. In 2009, international guidelines recommended HZ prophylaxis for at least 1 year after hematopoietic cell transplant (HCT). The impact of longer-term antiviral prophylaxis on HZ incidence after CBT is unknown.

Transmission of Cryptosporidium spp. among human and animal local contact networks in sub-Saharan Africa: a multi-country study

Abstract

Introduction

Cryptosporidiosis has been identified as one of the major causes of diarrhoea and diarrhoea-associated deaths in young children in sub-Saharan Africa. This study traces back Cryptosporidium positive children to their human and animal contacts to identify transmission networks.

The effect of renal replacement therapy and antibiotic dose on antibiotic concentrations in critically ill patients: Data from the multinational SMARTT Study

Abstract

Background

The optimal dosing of antibiotics in critically ill patients receiving renal replacement therapy (RRT) remains unclear. In this study, we describe the variability in RRT techniques and antibiotic dosing in critically ill patients receiving RRT and to relate observed trough antibiotic concentrations to optimal targets.

In Vitro Antiviral Activity and Projection of Optimized Dosing Design of Hydroxychloroquine for the Treatment of Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2)

Abstract

Background

The Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) first broke out in Wuhan (China) and subsequently spread worldwide. Chloroquine has been sporadically used in treating SARS-CoV-2 infection.

The Silent Reservoir of Cryptosporidiosis

Clinical Microbiology and Infection

The culture of follow up blood cultures

15 Mar 2020
Publication date: Available online 14 March 2020
Source: Clinical Microbiology and Infection
Author(s): J.B. Wiggers, N. Daneman

Severe underquantification of HIV-1 group O isolates by major commercial PCR-based assays

15 Mar 2020
Publication date: Available online 14 March 2020
Source: Clinical Microbiology and Infection
Author(s): Annemarie Berger, Maximilian Muenchhoff, Kai Hourfar, Marhild Kortenbusch, Ina Ambiel, Lena Stegmann, Albert Heim, Christoph Sarrazin, Robert Ehret, Volker Daniel, Mark Wasner, Jean-Christophe Plantier, Josef Eberle, Lutz Gürtler, Annette E. Haberl, Martin Stürmer, Oliver T. Keppler

Association of meteorological factors and atmospheric particulate matter with the incidence of pneumonia: an ecological study

15 Mar 2020
Publication date: Available online 14 March 2020
Source: Clinical Microbiology and Infection
Author(s): Kyungmin Huh, Jinwook Hong, Jaehun Jung

The effectiveness of nitrofurantoin, fosfomycin and trimethoprim for the treatment of cystitis in relation to renal function

10 Mar 2020
Clinical Microbiology Reviews - Current Issue

Human Melioidosis [Reviews]
11 Mar 2020
The causative agent of melioidosis, Burkholderia pseudomallei, a tier 1 select agent, is endemic in Southeast Asia and northern Australia, with increased incidence associated with high levels of rainfall. Increasing reports of this condition have occurred worldwide, with estimates of up to 165,000 cases and 89,000 deaths per year.

Imported Malaria in Countries where Malaria Is Not Endemic: a Comparison of Semi-immune and Nonimmune Travelers [Reviews]
11 Mar 2020
The continuous increase in long-distance travel and recent large migratory movements have changed the epidemiological characteristics of imported malaria in countries where malaria is not endemic (here termed non-malaria-endemic countries).

Current Opinion in Microbiology

Nucleotide second messengers in bacterial decision making
13 Mar 2020
Publication date: June 2020Source: Current Opinion in Microbiology, Volume 55Author(s): Catriona MA Thompson, Jacob G Malone
Editorial overview: The fortunate students, a tribute to the fortunate professor
12 Mar 2020
Publication date: Available online 12 March 2020Source: Current Opinion in MicrobiologyAuthor(s): Denise M Monack, Igor E Brodsky

Diagnostic Microbiology and Infectious Disease

Mean platelet volume may not be a risk factor for focal involvement in patients with brucellosis
12 Mar 2020
Publication date: Available online 12 March 2020Source: Diagnostic Microbiology and Infectious DiseaseAuthor(s): Cengiz Beyan, Esin Beyan

Expanded sequential quadriplex real-time polymerase chain reaction (PCR) for identifying pneumococcal serotypes, penicillin-susceptibility, and resistance markers
12 Mar 2020
Publication date: Available online 12 March 2020Source: Diagnostic Microbiology and Infectious DiseaseAuthor(s): Srinivasan Velusamy, Theresa Tran, Thitipong Mongkolrattanathai, Hollis Walker, Lesley McGee, Bernard Beall

Response letter to Drs. Beyan and Beyan
12 Mar 2020
Publication date: Available online 12 March 2020Source: Diagnostic Microbiology and Infectious DiseaseAuthor(s): Tuna Demirdal, Pinar Sen

Non-invasive detection of IgG antibodies from common, pathogenic virus using Oral flocked swabs
Use of Monte Carlo simulation to optimize antibiotic selection for bloodstream infections caused by Enterobacteriaceae in Shandong Province, China

Performance Characteristics of the High Sensitivity Alinity i & ARCHITECT HBsAg Next Qualitative/Confirmatory Assays

Activity of Ceftazidime-Avibactam against Escherichia coli isolates from U.S. veterans (2011) in relation to co-resistance and sequence type 131 (ST131) H30 and H30Rx status

Emerging Infectious Diseases Journal - ahead of print

Epidemiology of 2019 Novel Coronavirus Disease-19 in Gansu Province, China, 2020

Estimating Risk for Death from 2019 Novel Coronavirus Disease, China, January–February 2020

Case-Fatality Risk Estimates for COVID-19 Calculated by Using a Lag Time for Fatality


Etymologia: Trombiculiasis

Indirect Virus Transmission in Cluster of COVID-19 Cases, Wenzhou, China, 2020

Knowledge of Infectious Disease Specialists Regarding Aspergillosis Complicating Influenza, United States
Stemming the Rising Tide of Human-Biting Ticks and Tickborne Diseases, United States
11 Mar 2020
L. Eisen

Co-infection with SARS-CoV-2 and Influenza A Virus in Patient with Pneumonia, China
11 Mar 2020
X. Wu et al.

Severe Acute Respiratory Syndrome Coronavirus 2 from Patient with 2019 Novel Coronavirus Disease, United States
11 Mar 2020
J. Harcourt et al.

Crimean-Congo Hemorrhagic Fever, Mauritania
09 Mar 2020
B. Boushab et al.

Trombiculiasis in a Dog with Severe Neurologic Disorders, Spain
09 Mar 2020
P. Santibáñez et al.

Detection of Novel Coronavirus by RT-PCR in Stool Specimen from Asymptomatic Child, China
09 Mar 2020
A. Tang et al.

Rift Valley Fever Outbreak, Mayotte, France, 2018–2019
09 Mar 2020
H. Youssouf et al.

09 Mar 2020
A. Zohaib et al.

Detection of Zoonotic Bartonella Pathogens in Rabbit Fleas, Colorado, USA
09 Mar 2020
S. Sato et al.

Needlestick-Associated Rocky Mountain Spotted Fever, Brazil
09 Mar 2020
S. Vilges de Oliveira et al.

Workshop Report on Global Harmonization of Enterovirus Vaccines
09 Mar 2020
T. Weng et al.

Whole-Genome Analysis of Salmonella enterica Serovar Enteritidis Isolates in Outbreak Linked to Online Food Delivery, Shenzhen, China, 2018
09 Mar 2020
M. Jiang et al.

Serologic Detection of Middle East Respiratory Syndrome Coronavirus Functional Antibodies
09 Mar 2020
N. Okba et al.

European Journal of Clinical Microbiology & Infectious Diseases
Performance and ease of use of a molecular point-of-care test for influenza A/B and RSV in patients presenting to primary care
14 Mar 2020
Abstract Annual influenza epidemics cause substantial morbidity and mortality, and the majority of patients with influenza-like illness present to primary care. Point-of-care influenza tests could support treatment decisions. It is critical to establish analytic performance of these platforms in real-life patient samples before uptake can be considered.

The predictive value of CXCL13 in suspected Lyme neuroborreliosis: a retrospective cross-sectional study
14 Mar 2020
Abstract The role of CXCL13 as a marker of Lyme neuroborreliosis (LNB) is under investigation, and CXCL13 is not part of routine diagnostics in suspicion of LNB. Our aim was to find the optimal cut-off value of CXCL13 for LNB in a Danish population and to investigate the role of CXCL13 both in early LNB and as a discriminatory marker between LNB and other neuroinflammatory disorders.

Molecular epidemiology of invasive Haemophilus influenzae disease in Portugal: an update of the post-vaccine period, 2011–2018
14 Mar 2020
Abstract Haemophilus influenzae reference laboratory from Portugal characterized the entire collection of 260 H. influenzae invasive isolates received between 2011 and 2018, with the purpose of updating the last published data (2002–2010). Capsular serotypes and antimicrobial susceptibility patterns were determined.

High prevalence of MDR gram-negative bacteria in feces of healthy blood donors in Mexico
13 Mar 2020
Abstract During the initial stage of a study to recruit universal intestinal microbiota donors in Mexico City, we found multiple “healthy” subjects that colonized with MDRO (Multidrug-resistant organisms). We aimed to describe clinical and demographic characteristics of these individuals. This was a prospective observational study. Participants were consecutively recruited among blood donors.

Clinical characteristics and implications of mixed candida/bacterial bloodstream infections in patients with hematological diseases
13 Mar 2020
Abstract The incidence of mixed candida/bacterial bloodstream infections (BSIs) has been reported to account for 20% of all cases of candidaemia. However, its clinical characteristics and implications in patients with hematological diseases are not clear.

Eurosurveillance latest updates

Monitoring Crimean-Congo haemorrhagic fever virus RNA shedding in body secretions and serological status in hospitalised patients, Turkey, 2015
12 Mar 2020
Introduction Crimean-Congo haemorrhagic fever (CCHF) is a tick-borne disease in Africa, Asia, the Balkan peninsula, the south-east of Europe and the Middle East, with mortality rates of 3–30%. Transmission can also occur through contact with infected animals or humans.

Crimean-Congo haemorrhagic fever (CCHF) virus-specific antibody detection in blood donors, Castile-León, Spain, summer 2017 and 2018
12 Mar 2020
Background Crimean-Congo haemorrhagic fever virus (CCHFV) is considered an emerging or even a probable re-emerging pathogen in southern Europe. Presence of this virus had been reported previously in Spain in 2010. Aim We aimed to evaluate the potential circulation of CCHFV in western Spain with a serosurvey in asymptomatic adults (blood donors).
Interim 2019/20 influenza vaccine effectiveness: six European studies, September 2019 to January 2020
12 Mar 2020
Background Influenza A(H1N1)pdm09, A(H3N2) and B viruses were co-circulating in Europe between September 2019 and January 2020. Aim To provide interim 2019/20 influenza vaccine effectiveness (VE) estimates from six European studies, covering 10 countries and both primary care and hospital settings

Estimating the asymptomatic proportion of coronavirus disease 2019 (COVID-19) cases on board the Diamond Princess cruise ship, Yokohama, Japan, 2020
12 Mar 2020
On 5 February 2020, in Yokohama, Japan, a cruise ship hosting 3,711 people underwent a 2-week quarantine after a former passenger was found with COVID-19 post-disembarking. As at 20 February, 634 persons on board tested positive for the causative virus. We conducted statistical modelling to derive the delay-adjusted asymptomatic proportion of infections, along with the infections' timeline

Post-discharge surveillance and positive virus detection in two medical staff recovered from coronavirus disease 2019 (COVID-19), China, January to February 2020
12 Mar 2020
Since December 2019, 62 medical staff of Zhongnan Hospital in Wuhan, China have been hospitalised with coronavirus disease 2019. During the post-discharge surveillance after clinical recovery, swabs were positive in two asymptomatic cases (3.23%). Case 1 had presented typical clinical and radiological manifestations on admission, while manifestation in Case 2 was very mild

Retrospective analysis of the possibility of predicting the COVID-19 outbreak from Internet searches and social media data, China, 2020
12 Mar 2020
The peak of Internet searches and social media data about the coronavirus disease 2019 (COVID-19) outbreak occurred 10–14 days earlier than the peak of daily incidences in China. Internet searches and social media data had high correlation with daily incidences, with the maximum r > 0.89 in all correlations

Updated rapid risk assessment from ECDC on the novel coronavirus disease 2019 (COVID-19) pandemic: increased transmission in the EU/EEA and the UK
12 Mar 2020
Authors’ correction for Euro Surveill. 2020;25(9)
12 Mar 2020

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Infection

Respiratory tract infection-related healthcare utilisation in children with Down’s syndrome
14 Mar 2020
Abstract Purpose Children with Down’s syndrome (DS) are prone to respiratory tract infections (RTIs) due to anatomical variation, immune system immaturity and comorbidities. However, evidence on RTI-related healthcare utilisation, especially in primary care, is incomplete

Pre-engraftment infectious complications and patient outcomes after allogeneic hematopoietic cell transplantation: a single-center experience from Lebanon
13 Mar 2020
Abstract

Background Infectious complications are significant causes of morbidity and mortality after allogeneic hematopoietic cell transplantation (allo-HCT). They occur variably over different periods, with scant data reported from Lebanon and neighboring countries.

Update on the “Choosing Wisely” initiative in infectious diseases in Germany

10 Mar 2020

Abstract

Purpose The Choosing Wisely® initiative is an international campaign addressing over- and underuse of diagnostic and therapeutic measures in infectious diseases among others. Since 2016, the German Society for Infectious Diseases (DGI) has constantly designed new items in this regard. Here we report the most recent recommendations.

International Journal of Medical Microbiology

The Treponema pallidum outer membrane protein Tp92 activates endothelial cells via the chemerin/CMKLR1 pathway

10 Mar 2020

Publication date: Available online 9 March 2020
Source: International Journal of Medical Microbiology
Author(s): Rui-Li Zhang, Qian-Qiu Wang

Infection Control & Hospital Epidemiology - FirstView Article

Use of airborne infection isolation in potential cases of pulmonary tuberculosis

16 Mar 2020

Published online by Cambridge University Press:

Performance of simplified surgical site infection (SSI) surveillance case definitions for resource limited settings: Comparison to SSI cases reported to the National Healthcare Safety Network, 2013–2017

13 Mar 2020

Published online by Cambridge University Press:

An influenza A outbreak in Iranian individuals following Arba’een foot pilgrimage from October to December 2019

12 Mar 2020

Published online by Cambridge University Press:

Larger endotracheal tube size in women increase the risk for ventilator-associated events

12 Mar 2020

Published online by Cambridge University Press:

A brief discussion on environmental quality monitoring required in a central sterile supply department: Evidence from a cancer center in eastern India

10 Mar 2020

Published online by Cambridge University Press:

Influenza surveillance case definitions miss a substantial proportion of older adults hospitalized with laboratory-confirmed influenza: A report from the Canadian Immunization Research Network (CIRN) Serious Outcomes Surveillance (SOS) Network

09 Mar 2020

Published online by Cambridge University Press:
A set of environmental measures to control a Fusarium outbreak in an oncohematologic ward: An interrupted time series study
09 Mar 2020
Published online by Cambridge University Press:

Novel coronavirus and hospital infection prevention: Preparing for the impromptu speech
03 Mar 2020
Published online by Cambridge University Press:

International Journal of Infectious Diseases

Estimation of the asymptomatic ratio of novel coronavirus infections (COVID-19)
15 Mar 2020
Publication date: Available online 14 March 2020Source: International Journal of Infectious DiseasesAuthor(s): Hiroshi Nishiura, Tetsuro Kobayashi, Ayako Suzuki, Sung-Mok Jung, Katsuma Hayashi, Ryo Kinoshita, Yichi Yang, Baoyin Yuan, Andrei R. Akhmetzhanov, Natalie M. Linton, Takeshi Miyama

Evaluation of the BioFire® FilmArray® Pneumonia Panel for rapid detection of respiratory bacterial pathogens and antibiotic resistance genes in sputum and endotracheal aspirate specimens
15 Mar 2020
Publication date: Available online 14 March 2020Source: International Journal of Infectious DiseasesAuthor(s): In Young Yoo, Kyungmin Huh, Hyang Jin Shim, Sun Ae Yun, Yoo Na Chung, On Kyun Kang, Hee Jae Huh, Nam Yong Lee

Cost-effectiveness of community mobilization (Camino Verde) for dengue prevention in Nicaragua and Mexico: a cluster randomized controlled trial
15 Mar 2020
Publication date: Available online 14 March 2020Source: International Journal of Infectious DiseasesAuthor(s): Cynthia A. Tschampl, Eduardo A. Undurraga, Robert J. Ledogar, D Theol, Josefina Coloma, Jose Legorreta-Soberanis, Sergio Paredes-Solis, Jorge Arostegui, Carlos Hernández-Alvarez, Eva Harris, Neil Andersson, Donald S. Shepard

Failure of pre-exposure prophylaxis with daily TDF/FTC and the scenario of delayed HIV seroconversion
15 Mar 2020
Publication date: Available online 13 March 2020Source: International Journal of Infectious DiseasesAuthor(s): Shui-Shan Lee, Peter L Anderson, Tsz-Ho Kwan, Grace CY Lui, Denise PC Chan, Ngai-Sze Wong, Krystal CK Lee, Teddy TN Lam

Clinical features and dynamics of viral load in imported and non-imported patients with COVID-19
15 Mar 2020
Publication date: Available online 14 March 2020Source: International Journal of Infectious DiseasesAuthor(s): Tianmin Xu, Cong Chen, Zhen Zhu, Manman Cui, Chunhua Chen, Hong Dai, Yuan Xue

Patients of COVID-19 may benefit from sustained lopinavir-combined regimen and the increase of eosinophil may predict the outcome of COVID-19 progression
13 Mar 2020
Publication date: Available online 12 March 2020Source: International Journal of Infectious DiseasesAuthor(s): Fang Liu, Aifang Xu, Yan Zhang, Weiling Xuan, Tingbo Yan, Kenv Pan, Wenyan Yu, Jun Zhang
High treatment failure rate is better explained by resistant gene detection than by minimal inhibitory concentrations in patients with urogenital Chlamydia trachomatis infection
13 Mar 2020
Publication date: Available online 12 March 2020Source: International Journal of Infectious DiseasesAuthor(s): Lili Shao, Cong You, Junya Cao, Yong Jiang, Yuanjun Liu, Quanzhong Liu

Cooking copepods: the survival of cyclopoid copepods (Crustacea: Copepoda) in simulated provisioned water containers and implications for the guinea worm eradication program in Chad, Africa
13 Mar 2020
Publication date: Available online 12 March 2020Source: International Journal of Infectious DiseasesAuthor(s): Christopher A. Cleveland, Kayla B. Garrett, Erin K. Box, Zavier Eure, Ania A. Majewska, Jessica A. Wilson, Michael J. Yabsley

Applications of Google search trends for risk communication in infectious disease management: A case study of COVID-19 outbreak in Taiwan
13 Mar 2020
Publication date: Available online 12 March 2020Source: International Journal of Infectious DiseasesAuthor(s): Atina Husnayain, Anis Fuad, Emily Chia-Yu Su

Prevalence of comorbidities in the novel Wuhan coronavirus (COVID-19) infection: a systematic review and meta-analysis
13 Mar 2020
Publication date: Available online 12 March 2020Source: International Journal of Infectious DiseasesAuthor(s): Jing Yang, Ya Zheng, Xi Gou, Ke Pu, Zhaofeng Chen, Qinghong Guo, Rui Ji, Haojia Wang, Yuping Wang, Yongning Zhou

The SARS-CoV-2 outbreak: what we know
12 Mar 2020
Publication date: Available online 12 March 2020Source: International Journal of Infectious DiseasesAuthor(s): Di Wu, Tiantian Wu, Qun Liu, Zhicong Yang

Prognostic value of residual vegetation after antibiotic treatment for infective endocarditis: A retrospective cohort study
11 Mar 2020
Publication date: Available online 10 March 2020Source: International Journal of Infectious DiseasesAuthor(s): Valérie Houard, Lydie Porte, Clémence Delon, Didier Carrié, Pierre Delobel, Michel Galinier, Olivier Lairez, Yoan Lavie-Badie

Biomarkers for prediction of mortality in left-sided infective endocarditis
11 Mar 2020
Publication date: Available online 10 March 2020Source: International Journal of Infectious DiseasesAuthor(s): Rinaldo F. Siciliano, Danielle M. Gualandri, Marcio Sommer Bittencourt, Milena Paixão, Fabiana Marcondes-Braga, Alexandre de Matos Soeiro, Célia Strunz, Ana Paula Pacanaro, Christian Puelacher, Flavio Tarasoutchi, Salvatore Di Somma, Bruno Caramelli, Mucio Tavares de Oliveira Junior, [back to top]
Hospitalization costs for patients colonized with carbapenemase-producing Enterobacterales during an Australian outbreak
13 Mar 2020
Carbapenem-producing Enterobacterales are an expanding group of Gram-negative bacteria that are resistant to carbapenems and cause over 9,000 cases of hospital-associated infections in the US. Efforts to quantify the economic and societal burden to healthcare are important to inform resource planning to implement infection control programmes.

Realigning the conventional routes of transmission: an improved model for occupational exposure assessment and infection prevention
12 Mar 2020
Current recommendations for standard and transmission-based precautions in place for patients that are suspected or known to be infected or colonized with infectious agents are best suited to prevent the transfer of microorganisms to other patients—that is, to prevent the acquisition of a healthcare-associated infection (HAI), rather than to protect the healthcare worker from self-contamination.

Experience of different upper respiratory tract sampling strategies for detection of COVID-19
12 Mar 2020
COVID-19 is spreading rapidly around the world. At present, the diagnosis of COVID-19 mainly depends on real-time RT-PCR assay of throat swabs. However, the false negative rate of nucleic acid test for SARS-CoV-2 with throat swabs is high, and throat swabs are uncomfortable for patients, and may induce coughing. The lingual swab is convenient and may achieve the same effect.

Washing our hands of the problem
11 Mar 2020
The JHI has a long history of publishing on hand hygiene, with a review article as early as 1983 highlighting that hands are the most common vehicle of transmission in the hospital setting, whilst recent innovations from the past decade were highlighted by Kathryn French.

Makeshift hospitals for COVID-19 patients: where health-care workers and patients need sufficient ventilation for more protection
10 Mar 2020
As of February 19th, the Chinese government has converted 13 large-scale public places in Wuhan City, Hubei Province into makeshift hospitals for patients in the coronavirus disease 2019 (COVID-19) with mild symptoms and such conversion will continue to contain the spread of the COVID-19 (Table 1).

Contribution of usage to endoscope working channel damage and bacterial contamination
10 Mar 2020
Biofilm formation was shown to be associated with damaged areas of endoscope channels. We hypothesise that the passage of instruments and brushes through endoscope channels during procedures and cleaning contribute to the channel damage, bacterial attachment and biofilm formation.

Journal of Infection

Microbial aetiology of brain abscess in a UK cohort: prominent role of Streptococcus intermedius
13 Mar 2020
Brain abscesses are a focal infection characterised by a walled-off collection of pus within the brain parenchyma. They may arise spontaneously, or as a result of specific risk factors including intravenous drug use, congenital cardiac defects, infective endocarditis, immunosuppression predisposing to infection, or a contiguous focus of infection spreading directly to the adjacent central nervous system.
Emergence of SARS-like Coronavirus in China: An Update
13 Mar 2020
Recently, the emergence of the novel coronavirus (SARS-CoV-2) that causes coronavirus disease 2019 (COVID-19) in Wuhan, China, has raised great concern all over the world and poses serious threat to global public health, as reported earlier in this journal [1, 2]

Epidemiological characteristics and transmission model of Corona Virus Disease 2019 in China
12 Mar 2020
We read with interest the recent report by Zhang and colleagues in this Journal,1 who described the continuous evolution and dissemination of Corona Virus Disease 2019 (COVID-19). They analyzed the genomes and found the degree of diversification of 2019-nCoV was much smaller when compared with influenza A viruses

Community-acquired Group B streptococcal meningitis in adults
12 Mar 2020
We were somewhat surprised that the recent review of community-acquired Group B streptococcal meningitis in adults by van Kassel et al.1 contained no reference to recent work implicating foodborne transmission, particularly from raw or undercooked fish, as an important mode of acquisition of this condition in some parts of the world

Arbidol combined with LPV/r versus LPV/r alone against Corona Virus Disease 2019: a retrospective cohort study
11 Mar 2020
Since it was first described in December 2019, more than seventy thousand cases of Corona Virus Disease 2019 (COVID-19) have been confirmed, beyond two thousand patients of which were fatal.1–4 So far, the infection keeps spreading, and more and more exported cases were confirmed in other provinces in China, and other countries. Indicating that the disease is a serious threat to global health

Ibrutinib Suppresses Intracellular Mycobacterium Tuberculosis Growth by Inducing Macrophage Autophagy
11 Mar 2020
Tuberculosis (TB) is a chronic infectious disease caused by Mycobacterium tuberculosis (Mtb) infection. According to the latest Global Tuberculosis Report from World Health Organization (WHO) in 2018, there were more than 10 million new cases and 1.57 million deaths of TB in 2017

Clinical and CT Imaging Features of the COVID-19 Pneumonia: Focus on Pregnant Women and Children
11 Mar 2020
Atypical clinical findings of pregnant women with COVID-19 could increase the difficulty in initial identification. Consolidation was more common in the pregnant groups. The clinically-diagnosed cases were vulnerable to more pulmonary involvement

Clinical characteristics of severe acute respiratory syndrome coronavirus 2 reactivation
11 Mar 2020
A novel human coronavirus which is a new strain of RNA viruses was recognized in Wuhan, China, in Dec. 2019. The novel coronavirus is now officially named SARS-CoV-2 (Severe Acute Respiratory Syndrome Coronavirus -2) by International Committee on Taxonomy of Viruses (ICTV). The pneumonia caused by SARS-CoV-2 has been recently identified as COVID-19 (coronavirus disease 2019)

Clinical feature of COVID-19 in elderly patients: a comparison with young and middle-aged patients
11 Mar 2020
Due to the general susceptibility of new coronaviruses, the clinical characteristics and outcomes of elderly and young patients may be different.

Clinical progression of patients with COVID-19 in Shanghai, China
11 Mar 2020
In December 2019, a cluster of pneumonia cases of unknown origins occurred in Wuhan, Hubei Province, China.1 Thanks to the high-throughput sequencing technology, the
pathogen that caused this series of pneumonia was soon identified. This novel beta coronavirus is now named severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). COVID-19 Spike-host cell receptor GRP78 binding site prediction
10 Mar 2020
Understanding the novel coronavirus (COVID-19) mode of host cell recognition may help to fight the disease and save lives. The spike protein of coronaviruses is the main driving force for host cell recognition.

Journal of Infection Prevention

Diary
13 Mar 2020
Fear, explanation and action – the psychosocial response to emerging infections
13 Mar 2020

Journal of Microbiology, Immunology and Infection

Interrupting COVID-19 transmission by implementing enhanced traffic control bundling: implications for global prevention and control efforts
15 Mar 2020
Publication date: Available online 14 March 2020Source: Journal of Microbiology, Immunology and InfectionAuthor(s): Muh-Yong Yen, Jonathan Schwartz, Shey-Ying Chen, Chwan-Chuen King, Guang-Yang Yang, Po-Ren Hsueh
Internationally lost COVID-19 cases
15 Mar 2020
Publication date: Available online 14 March 2020Source: Journal of Microbiology, Immunology and InfectionAuthor(s): Hien Lau, Veria Khosrawipour, Piotr Kocbach, Agata Mikolajczyk, Hirohito Ichii, Justyna Schubert, Jacek Bania, Tanja Khosrawipour
Featuring COVID-19 cases via screening symptomatic patients with epidemiologic link during flu season in a medical center of central Taiwan
15 Mar 2020
Publication date: Available online 13 March 2020Source: Journal of Microbiology, Immunology and InfectionAuthor(s): Wen-Hsin Hsih, Meng-Yu Cheng, Mao-Wang Ho, Chia-Huei Chou, Po-Chang Lin, Chih-Yu Chi, Wei-Chih Liao, Chih-Yu Chen, Lih-Ying Leong, Ni Tien, Huan-Cheng Lai, Yi-Chyi Lai, Min-Chi Lu
Prevalence of B. pertussis infection in children with clinically suspected pertussis
15 Mar 2020
Publication date: Available online 14 March 2020Source: Journal of Microbiology, Immunology and InfectionAuthor(s): Wujun Jiang, Luyi Mao, Kun Wang, Yuqing Wang, Chuangli Hao, Xuejun Shao, Jun Xu
Clinical characteristics and relevance of coagulase-negative Staphylococci other than S. epidermidis by positive blood culture
11 Mar 2020
Publication date: Available online 11 March 2020Source: Journal of Microbiology, Immunology and InfectionAuthor(s): Nobuhiro Asai, Daisuke Sakanashi, Hiroyuki Suematsu, Hideo Kato, Mao Hagihara, Hiromi Watanabe, Arufumi Shiota, Yusuke Koizumi, Yuka Yamagishi, Hiroshige Mikamo
Composition of human-specific slow codons and slow di-codons in SARS-CoV and 2019-nCoV are lower than other coronaviruses suggesting a faster protein synthesis rate of SARS-CoV and 2019-nCoV
11 Mar 2020
Publication date: Available online 10 March 2020
Source: Journal of Microbiology, Immunology and Infection
Author(s): Chu-Wen Yang, Mei-Fang Chen

A case of COVID-19 and pneumonia returning from Macau in Taiwan: clinical course and anti-SARS-CoV-2 IgG dynamic
11 Mar 2020
Publication date: Available online 10 March 2020
Source: Journal of Microbiology, Immunology and Infection
Author(s): Nan-Yao Lee, Chia-Wen Li, Huey-Pin Tsai, Po-Lin Chen, Ling-Shan Syue, Ming-Chi Li, Chin-Shiang Tsai, Ching-Lung Lo, Po-Ren Hsueh, Wen-Chien Ko

TH17 Responses in Cytokine Storm of COVID-19: An Emerging Target of JAK2 Inhibitor Fedratinib
11 Mar 2020
Publication date: Available online 11 March 2020
Source: Journal of Microbiology, Immunology and Infection
Author(s): Dandan Wu, Xuexian O. Yang

A Patient with SARS-CoV-2 Infection during Pregnancy in Qingdao, China
10 Mar 2020
Publication date: Available online 10 March 2020
Source: Journal of Microbiology, Immunology and Infection
Author(s): Rong Wen, Peng Sun, Quan-Sheng Xing

Journal of Virology: Articles Published Ahead of Print

NF-κB and Keap1 Interaction Represses Nrf2-Mediated Antioxidant Response in Rabbit Hemorrhagic Disease Virus Infection [Pathogenesis and Immunity]
11 Mar 2020
The rabbit hemorrhagic disease virus (RHDV), which belongs to family Caliciviridae of the genus Lagovirus, causes lethal fulminant hepatitis in rabbits. RHDV decreases the activity of antioxidant enzymes regulated by Nrf2 in the liver. Antioxidants are important for the maintenance of cellular integrity and cytoprotection

Flavivirus envelope protein glycosylation: impacts on viral infection and pathogenesis [Gem]
11 Mar 2020
Flaviviruses encode one, two, or no N-linked glycosylation sites on their envelope proteins. Glycosylation can impact virus interactions with cell surface attachment factors and also may impact virion stability and virus replication

Long-Acting BMS-378806 Analogues Stabilize the State-1 Conformation of the Human Immunodeficiency Virus (HIV-1) Envelope Glycoproteins [Vaccines and Antiviral Agents]
11 Mar 2020
During human immunodeficiency virus (HIV-1) entry into cells, the viral envelope glycoprotein (Env) trimer ((gp120/gp41)3) binds receptors, CD4 and CCR5, and fuses the viral and cell membranes. CD4 binding changes Env from a pre-triggered (State-1) conformation to more "open" downstream conformations

Nup358 and transportin 1 cooperate in adenoviral genome import [Virus-Cell Interactions]
11 Mar 2020
Nuclear import of viral genomes is an important step during the life cycle of adenoviruses (AdV), requiring soluble cellular factors as well as proteins of the nuclear pore complex (NPC). We addressed the role of the cytoplasmic nucleoporin Nup358 during adenoviral genome delivery by performing depletion/reconstitution experiments and time resolved quantification of adenoviral genome import.

Loss of IKK subunits limits NF-κB signaling in reovirus infected cells [Virus-Cell Interactions]
11 Mar 2020
Viruses commonly antagonize innate immune pathways that are primarily driven by Nuclear Factor-B (NF-B), Interferon Regulatory Factor (IRF) and Signal Transducer and Activator of Transcription proteins (STAT) family of transcription factors. Such a strategy allows viruses to evade immune surveillance and maximize their replication.

R195K mutation in the PA-X protein increases the virulence and transmission of influenza A virus in mammalian hosts [Pathogenesis and Immunity]
11 Mar 2020
In the 21st century, the emergence of H7N9 and H1N1/2009 influenza viruses originating from animals and causing severe human infections has prompted investigations into the genetic alterations required for cross-species transmission. We previously found that substitution of the human-origin PA gene segment in avian influenza virus (AIV) could overcome barriers to cross-species transmission.

PIWIL4 Maintains HIV-1 Latency by Enforcing Epigenetically Suppressive Modifications on the 5’ Long Terminal Repeat (LTR) [Virus-Cell Interactions]
11 Mar 2020
Although substantial progress has been made in depicting the molecular pathogenesis of human immunodeficiency virus type I (HIV-1) infection, the comprehensive mechanism of HIV-1 latency and the most promising therapeutic strategies to effectively reactivate the HIV-1 latent reservoir to achieve a functional cure for AIDS remain to be systematically illuminated.

Novel insights in the role of Bcl-2 homolog Nr-13 (vNr-13) encoded by herpesvirus of turkeys in the virus replication cycle, mitochondrial networks and apoptosis inhibition [Virus-Cell Interactions]
11 Mar 2020
Bcl-2 (B cell lymphoma-2)-related gene Nr-13 plays a major role in the regulation of cell death in developing avian B-cells. With over 65% sequence similarity to the chicken Nr-13, herpesvirus of turkeys (HVT)-encoded HVT079 and HVT096 gene product vNr-13 is the first known alphaherpesvirus-encoded Bcl-2 homolog.

Ubqln4 facilitates ER-to-cytosol escape of a nonenveloped virus during infection [Virus-Cell Interactions]
11 Mar 2020
The nonenveloped polyomavirus SV40 must penetrate the host endoplasmic reticulum (ER) membrane to enter the cytosol in order to promote infection. How this is accomplished is not entirely clear. Here we demonstrate that the cytosolic chaperone Ubiquilin4 (Ubqln4) binds directly to the ER membrane J proteins B12 and B14.

HIV-1-Specific CAR-T Cells Fail to Recognize and Eliminate the Follicular Dendritic Cell (FDC) HIV Reservoir In Vitro [Vaccines and Antiviral Agents]
11 Mar 2020
The major obstacle to a cure for HIV infection is persistence of replication competent viral reservoirs during antiretroviral therapy. HIV-specific chimeric antigen receptor (CAR) T cells have been developed to target latently infected CD4+ T cells that express virus either spontaneously or after intentional latency reversal.
hnRNP L negatively regulates foot-and-mouth disease virus replication through inhibiting viral RNA synthesis by interacting with IRES in 5’ untranslated region [Virus-Cell Interactions]

Upon infection, the highly structured 5’ untranslated region (5’UTR) of picornavirus is involved in viral protein translation and RNA synthesis. As a critical element in the 5’UTR, the internal ribosome entry site (IRES) binds to various cellular proteins to function in these processes of picornavirus replication.

Comprehensive characterisation of transcriptional activity during influenza A virus infection reveals biases in cap-snatching of host RNA sequences [Virus-Cell Interactions]

Macrophages in the lung detect and respond to influenza A virus (IAV), determining the nature of the immune response. Using terminal depth 5’-RNA sequencing (CAGE) we quantified transcriptional activity of both host and pathogen over a 24-hour timecourse of IAV infection in primary human monocyte-derived macrophages (MDM).

Interleukin-1 Receptor Associated Kinase (IRAK) signaling in Kaposi Sarcoma-associated herpesvirus (KSHV) induced Primary Effusion Lymphoma [Virus-Cell Interactions]

Kaposi’s sarcoma-associated herpesvirus (KSHV) is necessary but not sufficient for Primary effusion lymphoma (PEL) development. Alterations in cellular signaling pathways are also a characteristic of PEL. Other B cell lymphomas have acquired an oncogenic mutation in the Myeloid Differentiation Primary Response 88 (MYD88)

Morbidity and Mortality Weekly Report (MMWR)


First detected in China in late 2019, coronavirus disease 2019 (COVID-19) transmission has spread globally. Singapore implemented a multipronged surveillance and containment strategy that contributed to enhanced case ascertainment and slowing of the outbreak.

Vital Signs: Colorectal Cancer Screening Test Use - United States, 2018

Of cancers that affect both men and women, colorectal cancer (CRC) is the second leading cause of cancer death in the United States. This report describes current CRC screening prevalence by age, various demographic factors, and state.

Notes from the Field: Opioid-Involved Overdose Deaths with Fentanyl or Fentanyl Analogs Detected - 28 States and the District of Columbia, July 2016-December 2018

The declines in overdose deaths with fentanyl analogs (carfentanil, furanylfentanyl, acrylfentanyl, and cyclopropylfentanyl) detected contributed to declines in opioid-involved overdose deaths during 2018 among a subset of states, even as deaths with fentanyl detected increased over time, which highlights the continued need to test for fentanyl analogs.

QuickStats: Percentage of Children and Adolescents Aged 4-17 Years with Serious Emotional or Behavioral Difficulties, by Sex and Urbanization Level - National Health Interview Survey, 2016-2018
During 2016-2018, the percentage of children and adolescents aged 4-17 years with serious emotional or behavioral difficulties was higher among those living in nonmetropolitan areas (6.7%) than among those living in metropolitan areas (5.3%).

**Investigation of Presumptive HIV Transmission Associated with Hospitalization Using Nucleotide Sequence Analysis - New York, 2017**

12 Mar 2020

Health care associated transmission of human immunodeficiency virus (HIV) is rare in the United States; however, investigations of acute HIV infection in persons with recent health care exposure and no traditional risk factors should consider whether health care-associated transmission likely occurred.

**Screening for Alcohol Use and Brief Counseling of Adults - 13 States and the District of Columbia, 2017**

12 Mar 2020

Screening all adults for excessive alcohol use, including binge drinking, using validated tools can help health care providers advise adults who drink too much. Advice should include the impact of excessive alcohol use on the patient's health and helping interested patients to take steps to reduce their drinking.

**Notes from the Field: Carbapenemase-Producing Klebsiella pneumoniae in a Ventilator-Capable Skilled Nursing Facility - Maricopa County, Arizona, July-November 2018**

12 Mar 2020

Maricopa County Department of Public Health in Arizona investigated a cluster of two genetically similar antibiotic-resistant bacterial infections in residents of the ventilator-capable unit of a skilled nursing facility to look for health care-associated bacterial spread.

**Nature Reviews Microbiology - Current Issue**

**Critical analysis of antibacterial agents in clinical development**

09 Mar 2020

Nature Reviews Microbiology, Published online: 09 March 2020; doi:10.1038/s41579-020-0340-0 New antibacterial agents are urgently needed to address the global increase in resistance. In this Review, Theuretzbacher and colleagues critically review the current published literature and publicly available information on antibacterial agents in all phases of clinical development.

**New England Journal of Medicine - Current Issue**

**Detection of Covid-19 in Children in Early January 2020 in Wuhan, China**

12 Mar 2020

New England Journal of Medicine, Ahead of Print.

**SARS-CoV-2 Infection among Travelers Returning from Wuhan, China**

12 Mar 2020

New England Journal of Medicine, Ahead of Print.

**Virtually Perfect? Telemedicine for Covid-19**

11 Mar 2020

New England Journal of Medicine, Ahead of Print.

**Association of Aspirin with Hepatocellular Carcinoma and Liver-Related Mortality**

11 Mar 2020

Massive Splenomegaly from Disseminated Mycobacterium avium–intracellulare Infection
11 Mar 2020

Scandinavian Journal of Infectious Diseases: Table of Contents
Antibiotic switch after treatment with UTI antibiotics in male patients
14 Mar 2020

Sexually Transmitted Infection Online First
Immunity to hepatitis A among men who have sex with men attending a large sexual health clinic in Melbourne, Australia, 2012-2018
13 Mar 2020
Background Outbreaks of hepatitis A are being reported more commonly among men who have sex with men (MSM) globally. Australia has also reported a sharp increase in the number of cases of hepatitis A in 2017. This study aimed to determine the level of immunity to hepatitis A among MSM attending a large urban sexual health clinic in Victoria in the lead up to recent outbreak

NIS Affiliation

PubMed: NIS affiliation

Antibodies Against Chlamydia trachomatis and Ovarian Cancer Risk in Two Independent Populations.
12 Mar 2020