# Evidence Search Service Results of your search request

## Caring for patients with COVID-19 (suspected or confirmed) in the Emergency Department

**ID of request:** 22623  
**Date of request:** 7th April, 2020  
**Date of completion:** 9th April, 2020

If you would like to request any articles or any further help, please contact:  Tom Roper at [tom.roper@nhs.net](mailto:tom.roper@nhs.net)

Please acknowledge this work in any resulting paper or presentation as: Evidence search: Caring for patients with COVID-19 (suspected or confirmed) in the Emergency Department. Tom Roper. ( 9th April, 2020). BRIGHTON, UK: Brighton and Sussex Library and Knowledge Service.

**Sources searched**  
EMBASE (6)  
MEDLINE (46)

**Date range used** (5 years, 10 years): 2019 onwards   
**Limits used** (gender, article/study type, etc.): None   
**Search terms and notes** (full search strategy for database searches below):

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## A. Original Research

1. **2019-nCoV: The Identify-Isolate-Inform (3I) Tool Applied to a Novel Emerging Coronavirus**  
   Koenig K.L. The western journal of emergency medicine 2020;21(2):184-190.

2019 Novel Coronavirus (2019-nCoV) is an emerging infectious disease closely related to MERS-CoV and SARS-CoV that was first reported in Wuhan City, Hubei Province, China in December 2019. As of January 2020, cases of 2019-nCoV are continuing to be reported in other Eastern Asian countries as well as in the United States, Europe, Australia, and numerous other countries. An unusually high volume of domestic and international travel corresponding to the beginning of the 2020 Chinese New Year complicated initial identification and containment of infected persons. Due to the rapidly rising number of cases and reported deaths, all countries should be considered at risk of imported 2019-nCoV. Therefore, it is essential for prehospital, clinic, and emergency department personnel to be able to rapidly assess 2019-nCoV risk and take immediate actions if indicated. The Identify-Isolate-Inform (3I) Tool, originally conceived for the initial detection and management of Ebola virus and later adjusted for other infectious agents, can be adapted for any emerging infectious disease. This paper reports a modification of the 3I Tool for use in the initial detection and management of patients under investigation for 2019-nCoV. After initial assessment for symptoms and epidemiological risk factors, including travel to affected areas and exposure to confirmed 2019-nCoV patients within 14 days, patients are classified in a risk-stratified system. Upon confirmation of a suspected 2019-nCoV case, affected persons must immediately be placed in airborne infection isolation and the appropriate public health agencies notified. This modified 3I Tool will assist emergency and primary care clinicians, as well as out-of-hospital providers, in effectively managing persons with suspected or confirmed 2019-nCoV.

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1. **A case of COVID-19 and pneumonia returning from Macau in Taiwan: Clinical course and anti-SARS-CoV-2 IgG dynamic**  
   Lee N.-Y. Journal of Microbiology, Immunology and Infection 2020;:No page numbers.

A 46-year-old woman presented to the emergency department with 2-day fever and cough at seven days after returning from Macau. COVID-19 and pneumonia was diagnosed based on the positive real-time RT-PCR tests for oropharyngeal swab samples and the presence of anti-SARS-COV-2 IgG starting from the illness day 11 and post-exposure 18-21 days.Copyright © 2020

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1. **A Case of Novel Coronavirus Disease 19 in a Chronic Hemodialysis Patient Presenting with Gastroenteritis and Developing Severe Pulmonary Disease**  
   Ferrey A.J. American journal of nephrology 2020;:1-6.

Novel coronavirus disease 2019 (COVID-19) is a highly infectious, rapidly spreading viral disease with an alarming case fatality rate up to 5%. The risk factors for severe presentations are concentrated in patients with chronic kidney disease, particularly patients with end-stage renal disease (ESRD) who are dialysis dependent. We report the first US case of a 56-year-old nondiabetic male with ESRD secondary to IgA nephropathy undergoing thrice-weekly maintenance hemodialysis for 3 years, who developed COVID-19 infection. He has hypertension controlled with angiotensin receptor blocker losartan 100 mg/day and coronary artery disease status-post stent placement. During the first 5 days of his febrile disease, he presented to an urgent care, 3 emergency rooms, 1 cardiology clinic, and 2 dialysis centers in California and Utah. During this interval, he reported nausea, vomiting, diarrhea, and low-grade fevers but was not suspected of COVID-19 infection until he developed respiratory symptoms and was admitted to the hospital. Imaging studies upon admission were consistent with bilateral interstitial pneumonia. He was placed in droplet-eye precautions while awaiting COVID-19 test results. Within the first 24 h, he deteriorated quickly and developed acute respiratory distress syndrome (ARDS), requiring intubation and increasing respiratory support. Losartan was withheld due to hypotension and septic shock. COVID-19 was reported positive on hospital day 3. He remained in critical condition being treated with hydroxychloroquine and tocilizumab in addition to the standard medical management for septic shock and ARDS. Our case is unique in its atypical initial presentation and highlights the importance of early testing.Copyright © 2020 S. Karger AG, Basel.

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1. **A Novel Coronavirus Outbreak from Wuhan City in China, Rapid Need for Emergency Departments Preparedness and Response; a Letter to Editor.**  
   Alavi-Moghaddam Mostafa Archives of academic emergency medicine 2020;8(1):e12.

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1. **Adoption of COVID-19 triage strategies for low-income settings**  
   Ayebare R.R. The Lancet Respiratory Medicine 2020;8(4):e22.

[Available online at this link](https://www.knowledgeshare.nhs.uk/index.php?PageID=link_resolver&link=ab14b50754c9d6eee6255462a3f16dac)

1. **Advice on Standardized Diagnosis and Treatment for Spinal Diseases during the Coronavirus Disease 2019 Pandemic.**  
   Zou Jun Asian spine journal 2020;14(2):258-263.

Coronavirus disease 2019 (COVID-19) outbreak started in December 2019 that caused difficulties for clinical work. Practical work experience in our spinal outpatient and emergency department during the COVID-19 pandemic is summarized in this article, with combined evidence-based medical evidence to explore a standardized process of diagnosis and treatment for spinal diseases. Outpatient reservation, continuous screening, triage, and isolation, first consultation accountability system, pandemic reporting system, and online revisit were strictly followed. We hope that our experience in prevention and control of COVID-19 can help spine surgeons globally in stopping the spread of COVID-19. Spine surgeons should collaborate with infection control specialists to avoid cross-infection in hospitals and optimize treatment.

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1. **Anesthesia Procedure of Emergency Operation for Patients with Suspected or Confirmed COVID-19.**  
   Wen Xianjie Surgical infections 2020;21(3):299.

[Available online at this link](https://www.knowledgeshare.nhs.uk/index.php?PageID=link_resolver&link=9751bd693ffd14318118be838dce59f7)

1. **Anesthetic Management of Patients with COVID 19 Infections during Emergency Procedures.**  
   Zhao Shuai Journal of cardiothoracic and vascular anesthesia 2020;34(5):1125-1131.

OBJECTIVES: The aim of the present study was to prevent cross-infection in the operating room during emergency procedures for patients with confirmed or suspected 2019 novel coronavirus (2019-nCoV) by following anesthesia management protocols, and to document clinical- and anesthesia-related characteristics of these patients., DESIGN: This was a retrospective, multicenter clinical study., SETTING: This study used a multicenter dataset from 4 hospitals in Wuhan, China., PARTICIPANTS: Patients and health care providers with confirmed or suspected 2019-nCoV from January 23 to 31, 2020, at the Wuhan Union Hospital, the Wuhan Children's Hospital, The Central Hospital of Wuhan, and the Wuhan Fourth Hospital in Wuhan, China., INTERVENTIONS: Anesthetic management and infection control guidelines for emergency procedures for patients with suspected 2019-nCoV were drafted and applied in 4 hospitals in Wuhan., MEASUREMENTS AND MAIN RESULTS: Cross-infection in the operating rooms of the 4 hospitals was effectively reduced by implementing the new measures and procedures. The majority of patients with laboratory-confirmed 2019-nCoV infection or suspected infection were female (23 [62%] of 37), and the mean age was 41.0 years old (standard deviation 19.6; range 4-78). 10 (27%) patients had chronic medical illnesses, including 4 (11%) with diabetes, 8 (22%) with hypertension, and 8 (22%) with digestive system disease. Twenty-five (68%) patients presented with lymphopenia, and 23 (62%) patients exhibited multiple mottling and ground-glass opacity on computed tomography scanning., CONCLUSIONS: The present study indicates that COVID 19-specific guidelines for emergency procedures for patients with confirmed or suspected 2019-nCoV may effectively prevent cross-infection in the operating room. Most patients with confirmed or suspected COVID 19 presented with fever and dry cough and demonstrated bilateral multiple mottling and ground-glass opacity on chest computed tomography scans. Copyright © 2020 Elsevier Inc. All rights reserved.

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1. **Buffer areas in emergency department to handle potential COVID-19 community infection in Taiwan**  
   Chen T.-Y. Travel medicine and infectious disease 2020;:101635.

[Available online at this link](https://www.knowledgeshare.nhs.uk/index.php?PageID=link_resolver&link=73943d5e4e484053cae4babd32747639)

1. **Cardiac Involvement in a Patient with Coronavirus Disease 2019 (COVID-19)**  
   Inciardi R.M. JAMA Cardiology 2020;:No page numbers.

Importance: Virus infection has been widely described as one of the most common causes of myocarditis. However, less is known about the cardiac involvement as a complication of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection. Objective(s): To describe the presentation of acute myocardial inflammation in a patient with coronavirus disease 2019 (COVID-19) who recovered from the influenzalike syndrome and developed fatigue and signs and symptoms of heart failure a week after upper respiratory tract symptoms. Design, Setting, and Participant(s): This case report describes an otherwise healthy 53-year-old woman who tested positive for COVID-19 and was admitted to the cardiac care unit in March 2020 for acute myopericarditis with systolic dysfunction, confirmed on cardiac magnetic resonance imaging, the week after onset of fever and dry cough due to COVID-19. The patient did not show any respiratory involvement during the clinical course. Exposure: Cardiac involvement with COVID-19. Main Outcomes and Measures: Detection of cardiac involvement with an increase in levels of N-terminal pro-brain natriuretic peptide (NT-proBNP) and high-sensitivity troponin T, echocardiography changes, and diffuse biventricular myocardial edema and late gadolinium enhancement on cardiac magnetic resonance imaging. Result(s): An otherwise healthy 53-year-old white woman presented to the emergency department with severe fatigue. She described fever and dry cough the week before. She was afebrile but hypotensive; electrocardiography showed diffuse ST elevation, and elevated high-sensitivity troponin T and NT-proBNP levels were detected. Findings on chest radiography were normal. There was no evidence of obstructive coronary disease on coronary angiography. Based on the COVID-19 outbreak, a nasopharyngeal swab was performed, with a positive result for SARS-CoV-2 on real-time reverse transcriptase-polymerase chain reaction assay. Cardiac magnetic resonance imaging showed increased wall thickness with diffuse biventricular hypokinesis, especially in the apical segments, and severe left ventricular dysfunction (left ventricular ejection fraction of 35%). Short tau inversion recovery and T2-mapping sequences showed marked biventricular myocardial interstitial edema, and there was also diffuse late gadolinium enhancement involving the entire biventricular wall. There was a circumferential pericardial effusion that was most notable around the right cardiac chambers. These findings were all consistent with acute myopericarditis. She was treated with dobutamine, antiviral drugs (lopinavir/ritonavir), steroids, chloroquine, and medical treatment for heart failure, with progressive clinical and instrumental stabilization. Conclusions and Relevance: This case highlights cardiac involvement as a complication associated with COVID-19, even without symptoms and signs of interstitial pneumonia..Copyright © 2020 Cambridge University Press. All rights reserved.

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1. **Clinical Characteristics of 54 medical staff with COVID-19: A retrospective study in a single center in Wuhan, China**  
   Chu J. Journal of medical virology 2020;:No page numbers.

BACKGROUND: In December 2019, an outbreak of the SARS-Cov-2 infection occurred in Wuhan, and rapidly spread to worldwide, which has attracted many people's concerns about the patients. However, studies on the infection status of medical personnels is still lacking. METHOD(S): 54 cases of SARS-Cov-2 infected medical staff from Tongji Hospital between January 7th to February 11th of 2020 were analyzed in this retrospective study. Clinical and epidemiological characteristics were compared between different groups by statistical method. RESULT(S): From January 7 to February 11, 2020, 54 medical staff of Tongji Hospital were hospitalized due to COVID-19. Most of them were from other clinical departments (72.2%) rather than emergency department (3.7%) or medical technology departments (18.5%). Among the 54 COVID-19 patients, the distribution of age had a significant difference between non-severe type and severe/critical cases (median age: 47 years vs. 38 years, p=0.0015). However, there was no statistical difference in terms of gender distribution and the first symptoms between theses two groups. Furthermore, we observed that the lesion regions in SARS-Cov-2 infected lungs with severe-/critical-type of medical staff were more likely to exhibit lesions in the right upper lobe (31.7% vs. 0%, P=0.028) and right lung (61% vs. 18.2%, P=0.012). CONCLUSION(S): Based on our findings with medical staff infection data, we suggest training for all hospital staff to prevent infection and preparation of sufficient protection and disinfection materials. This article is protected by copyright. All rights reserved.

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1. **Co-infection with SARS-CoV-2 and Human Metapneumovirus.**  
   Touzard-Romo Francine Rhode Island medical journal (2013) 2020;103(2):75-76.

The novel coronavirus (now called SARS-CoV-2) initially discovered in Wuhan, China, has now become a global pandemic. We describe a patient presenting to an Emergency Department in Rhode Island on March 12, 2020 with cough and shortness of breath after a trip to Jamaica. The patient underwent nasopharyngeal swab for a respiratory pathogen panel as well as SARS-CoV-2 RT-PCR. When the respiratory pathogen panel was positive for human metapneumovirus, the patient was treated and discharged. SARS-CoV-2 RT-PCR came back positive 24 hours later. Although respiratory viral co-infection is thought to be relatively uncommon in adults, this case reflects that SARS-CoV-2 testing algorithms that exclude patients who test positive for routine viral pathogens may miss SARS-CoV-2 co-infected patients.

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1. **Coronavirus Disease (COVID-19): A primer for emergency physicians.**  
   Chavez Summer The American journal of emergency medicine 2020;:No page numbers.

INTRODUCTION: Rapid worldwide spread of Coronavirus Disease 2019 (COVID-19) has resulted in a global pandemic., OBJECTIVE: This review article provides emergency physicians with an overview of the most current understanding of COVID-19 and recommendations on the evaluation and management of patients with suspected COVID-19., DISCUSSION: Severe Acute Respiratory Syndrome coronavirus 2 (SARS-CoV-2), the virus responsible for causing COVID-19, is primarily transmitted from person-to-person through close contact (approximately 6 ft) by respiratory droplets. Symptoms of COVID-19 are similar to other viral upper respiratory illnesses. Three major trajectories include mild disease with upper respiratory symptoms, non-severe pneumonia, and severe pneumonia complicated by acute respiratory distress syndrome (ARDS). Emergency physicians should focus on identifying patients at risk, isolating suspected patients, and informing hospital infection prevention and public health authorities. Patients with suspected COVID-19 should be asked to wear a facemask. Respiratory etiquette, hand washing, and personal protective equipment are recommended for all healthcare personnel caring for suspected cases. Disposition depends on patient symptoms, hemodynamic status, and patient ability to self-quarantine., CONCLUSION: This narrative review provides clinicians with an updated approach to the evaluation and management of patients presenting to the emergency department with suspected COVID-19. Copyright Published by Elsevier Inc.

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1. **COVID-19 pandemic: triage for intensive-care treatment under resource scarcity**  
   Swiss Academy Of Medical Sciences Swiss medical weekly 2020;150:w20229.

[Available online at this link](https://www.knowledgeshare.nhs.uk/index.php?PageID=link_resolver&link=3a7adc4183c09d57525470cf8307772d)

1. **COVID-19: A Singapore Orthopedic resident's musings in the Emergency Department**  
   Liang Z.C. Academic emergency medicine : official journal of the Society for Academic Emergency Medicine 2020;:No page numbers.

I felt my heart skip a beat as I took off my lead gown, preparing to put in my post-operative orders. A transient wave of apprehension, and I daresay fear swept past me that very moment. It has been a good 8 years since I've graduated medical school, with nary an exposure to emergency medicine since my intern days. I wasn't sure I could remember how to read an EKG accurately, much less manage a patient in respiratory failure.Copyright This article is protected by copyright. All rights reserved.

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1. **Covid-19: emergency departments lack proper isolation facilities, senior medic warns**  
   Iacobucci G. BMJ (Clinical research ed.) 2020;368:m953.

[Available online at this link](https://www.knowledgeshare.nhs.uk/index.php?PageID=link_resolver&link=002fad1f920dbcf49a622384a2435ca1)

1. **Creating a Palliative Care Inpatient Response Plan for COVID19 - The UW Medicine Experience.**  
   Fausto James Journal of pain and symptom management 2020;:No page numbers.

INTRODUCTION: The COVID-19 pandemic is stressing healthcare systems throughout the world. Significant numbers of patients are being admitted to the hospital with severe illness, often in the setting of advanced age and underlying co-morbidities. Therefore, palliative care is an important part of the response to this pandemic. The Seattle area and UW Medicine have been on the forefront of the pandemic in the US., METHODS: UW Medicine developed a strategy to implement a palliative care response for a multi-hospital healthcare system that incorporates conventional capacity, contingency capacity, and crisis capacity. The strategy was developed by our palliative care programs with input from the healthcare system leadership., RESULTS: In this publication, we share our multi-faceted strategy to implement high-quality palliative care in the context of the COVID-19 pandemic that incorporates conventional, contingency, and crisis capacity and focuses on the areas of the hospital caring for the most patients: the emergency department, the intensive care units, and the acute care services. The strategy focuses on key content areas including identifying and addressing goals of care, addressing moderate and severe symptoms, and supporting family members., CONCLUSIONS: Strategy planning for delivery of high-quality palliative care in the context of the COVID-19 pandemic represents an important area of need for our healthcare systems. We share our experiences developing such a strategy to help other institutions conduct and adapt such strategies more quickly. Copyright © 2020. Published by Elsevier Inc.

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1. **Electronic Personal Protective Equipment: A Strategy to Protect Emergency Department Providers in the Age of COVID-19.**  
   Turer Robert W. Journal of the American Medical Informatics Association : JAMIA 2020;:No page numbers.

Emergent policy changes related to telemedicine and the Emergency Medical Treatment and Labor Act (EMTALA) during the novel coronavirus pandemic (COVID-19) have created opportunities for technology-based clinical evaluation, which serves to conserve personal protective equipment (PPE) and protect emergency providers. We define electronic personal protective equipment (ePPE) as an approach using telemedicine tools to perform electronic medical screening exams while satisfying EMTALA. We discuss the safety, legal, and technical factors necessary for implementing such a pathway. This approach has the potential to conserve PPE and protect providers while maintaining safe standards for medical screening exams in the ED for low risk patients in whom COVID-19 is suspected. Copyright © The Author(s) 2020. Published by Oxford University Press on behalf of the American Medical Informatics Association. All rights reserved. For permissions, please email: journals.permissions@oup.com.

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1. **Emergency departments and the COVID-19 pandemic: making the most of limited resources.**  
   Mitchell Rob Emergency medicine journal : EMJ 2020;:No page numbers.

[Available online at this link](https://www.knowledgeshare.nhs.uk/index.php?PageID=link_resolver&link=24c066ff3a2a34cb1202d6834af82553)

1. **End-of-life care in the Emergency Department for the patient imminently dying of a highly transmissible acute respiratory infection (such as COVID-19)**  
   Hendin A. CJEM 2020;:1-5.

[Available online at this link](https://www.knowledgeshare.nhs.uk/index.php?PageID=link_resolver&link=17de68a28fe7098d6c3b3fd9e3ab378f)

1. **European Society For Emergency Medicine position paper on emergency medical systems response to COVID-19.**  
   Garcia-Castrillo Luis European journal of emergency medicine : official journal of the European Society for Emergency Medicine 2020;:No page numbers.

The 2019 novel coronavirus acute respiratory epidemic is creating a stressed situation in all the health systems of the affected countries. Emergency medical systems and specifically the emergency departments as the front line of the health systems are suffering from overload and severe working conditions, the risk of contagion and transmission of the health professionals adds a substantial burden to their daily work. Under the perspective of European Society For Emergency Medicine, the recommendations provided by the health authorities are reviewed focus on the emergency department's activity.

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1. **Fast reshaping of intensive care unit facilities in a large metropolitan hospital in Milan, Italy: facing the COVID-19 pandemic emergency.**  
   Zangrillo Alberto Critical care and resuscitation : journal of the Australasian Academy of Critical Care Medicine 2020;:No page numbers.

At the end of 2019, the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) outbreak spread from China all around the world, causing thousands of deaths. In Italy, the hardest hit region was Lombardy, with the first reported case on 20 February 2020. San Raffaele Scientific Institute - a large tertiary hospital and research centre in Milan, Italy - was immediately involved in the management of the public health emergency. Since the beginning of the outbreak, the elective surgical activity of the hospital was rapidly reduced and large areas of the hospital were simultaneously reorganised to admit and assist patients with coronavirus disease 2019 (COVID-19). In addition, the hospital became the regional referral hub for cardiovascular emergencies in order to keep ensuring a high level of health care to non-COVID-19 patients in northern Italy. In a few days, a COVID-19 emergency department was created, improving the general ward capacity to a total number of 279 beds dedicated to patients with COVID-19. Moreover, the number of intensive care unit (ICU) beds was increased from 28 to 72 (54 of them dedicated to patients with COVID-19, and 18 to cardiology and cardiac surgery hub emergencies), both converting pre-existing areas and creating new high technology spaces. All the involved health care personnel were rapidly trained to use personal protection equipment and to manage this particular category of patients both in general wards and ICUs. Furthermore, besides clinical activities, continuously important research projects were carried out in order to find new strategies and more effective therapies to better face an unprecedented health emergency in Italy.

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1. **Headaches Associated with Personal Protective Equipment - A Cross-sectional Study Amongst Frontline Healthcare Workers During COVID-19 (HAPPE Study).**  
   Jy Ong Jonathan Headache 2020;:No page numbers.

BACKGROUND: COVID-19 is an emerging infectious disease of pandemic proportions. Healthcare workers in Singapore working in high-risk areas were mandated to wear personal protective equipment (PPE) such as N95 face-mask and protective eyewear while attending to patients., OBJECTIVES: We sought to determine the risk factors associated with the development of de novo PPE-associated headaches as well as the perceived impact of these headaches on their personal health and work performance. The impact of COVID-19 on pre-existing headache disorders was also investigated., METHODS: This is a cross-sectional study amongst healthcare workers at our tertiary institution who were working in high-risk hospital areas during COVID-19. All respondents completed a self-administered questionnaire., RESULTS: A total of 158 healthcare workers participated in the study. Majority [126/158 (77.8%)] were aged 21-35 years. Participants included nurses [102/158 (64.6%)], doctors [51/158 (32.3%)] and paramedical staff [5/158 (3.2%)]. Pre-existing primary headache diagnosis was present in about a third [46/158 (29.1%)] of respondents. Those based at the emergency department had higher average daily duration of combined PPE exposure compared to those working in isolation wards [7.0 (SD 2.2) vs 5.2 (SD 2.4) hours, p<0.0001] or medical ICU [7.0 (SD 2.2) vs 2.2 (SD 0.41) hours, p<0.0001]. Out of 158 respondents, 128 (81.0%) respondents developed de novo PPE-associated headaches. A pre-existing primary headache diagnosis (OR=4.20, 95% CI 1.48-15.40; p=0.030) and combined PPE usage for >4 hours per day (OR 3.91, 95% CI 1.35-11.31; p=0.012) were independently associated with de novo PPE-associated headaches. Since COVID-19 outbreak, 42/46 (91.3%) of respondents with pre-existing headache diagnosis either 'agreed' or 'strongly agreed' that the increased PPE usage had affected the control of their background headaches, which affected their level of work performance., CONCLUSION: Most healthcare workers develop de novo PPE-associated headaches or exacerbation of their pre-existing headache disorders. Copyright This article is protected by copyright. All rights reserved.

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1. **Hospital Emergency Management Plan During the COVID-19 Epidemic**  
   Cao Y. Academic emergency medicine : official journal of the Society for Academic Emergency Medicine 2020;:No page numbers.

The confirmed and suspected cases of the 2019 novel coronavirus disease (COVID-19) have increased not only in Wuhan, Hubei Province but also China and the world. Enormous demand for handling the COVID-19 outbreak challenged both the healthcare personnel and medical supply system. In West China Hospital, Emergency Department (ED) undertook the mission of clinical reception, primary diagnosis, and interim treatment for the suspected cases of COVID-19.Copyright This article is protected by copyright. All rights reserved.

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1. **How emergency departments prepare for virus disease outbreaks like COVID-19.**  
   Mockel Martin European journal of emergency medicine : official journal of the European Society for Emergency Medicine 2020;:No page numbers.

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1. **Informing Emergency Care for COVID-19 patients: The COVID-19 Emergency Department (COVED) Quality Improvement Project Protocol.**  
   O'Reilly G. M Emergency medicine Australasia : EMA 2020;:No page numbers.

There is an urgency to support Australian ED clinicians with real-time tools as the COVID-19 pandemic evolves. The COVID-19 Emergency Department (COVED) Quality Improvement Project has commenced and will provide flexible and responsive clinical tools to determine the predictors of key ED-relevant clinical outcomes. The COVED Project includes all adult patients presenting to a participating ED and meeting contemporary testing criteria for COVID-19. Outcomes measured include being COVID-19 positive and requiring intensive respiratory support. The dataset has been embedded in the Electronic Medical Record and the COVED Registry has been developed. Regression methodology will be used to generate clinical prediction tools. This project will support EDs during this pandemic. This article is protected by copyright. All rights reserved. Copyright This article is protected by copyright. All rights reserved.

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1. **Initial clinical features of suspected coronavirus disease 2019 in two emergency departments outside of Hubei, China**  
   Zhu W. Journal of Medical Virology 2020;:No page numbers.

With an increasing number of Coronavirus Disease 2019 (COVID-19) cases outside of Hubei, emergency departments (EDs) and fever clinics are facing challenges posed by the large number of admissions of patients suspected to have COVID-19. Therefore, it is of crucial importance to study the initial clinical features of patients, to better differentiate between infected and uninfected patients outside Hubei. A total of 116 patients suspected of having COVID-19 who presented to two emergency departments in Anhui for the first time between 24 January 2020 and 20 February 2020 were enrolled in the study. The initial clinical data of these patients, such as epidemiological features, symptoms, laboratory results, and chest computed tomography (CT) findings were collected using a standard case report form on admission. Thirty-two patients were diagnosed with COVID-19; the remaining 84 patients were referred to as negative cases. The median age of the diagnosed patients was 46 years, but only 35 years for negative cases. History of exposure to Wuhan or COVID-19 patients in the previous 2 weeks was observed in 63% of the diagnosed and 44% of negative cases. Median time from illness onset to ED admission was 5 days for all patients, diagnosed patients, and negative cases, respectively. Fever was observed in 27 (84%) and 57 (68%) diagnosed and negative cases, respectively. Nineteen (59%) diagnosed and 24 (29%) negative cases had lymphopenia on admission in ED. A chest CT scan on admission revealed the presence of pneumonia in the majority of the diagnosed patients (30 out of 32, 94%) and in 56 (67%) negative cases. Bilateral involvement and ground-glass opacity (GGO) were present in 91% and 47% of the diagnosed patients. Thirty-two patients were diagnosed with COVID-19; the remaining 84 patients were referred to as negative cases. The median age of the diagnosed patients was 46 years, but only 35 years for negative cases. History of exposure to Wuhan or COVID-19 patients in the previous 2 weeks was observed in 63% of the diagnosed and 44% of negative cases. Median time from illness onset to ED admission was 5 days for all patients, diagnosed patients, and negative cases, respectively. Fever was observed in 27 (84%) and 57 (68%) diagnosed and negative cases, respectively. Nineteen (59%) diagnosed and 24 (29%) negative cases had lymphopenia on admission in ED. A chest CT scan on admission revealed the presence of pneumonia in the majority of the diagnosed patients (30 out of 32, 94%) and in 56 (67%) negative cases. Bilateral involvement and GGO were present in 91% and 47% of the diagnosed patients.Copyright © 2020 Wiley Periodicals, Inc.

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1. **Initial Experience of an Emergency Department in Shenzhen in Responding to the Emerging Wuhan Coronavirus Pneumonia**  
   Lu K.-L. Annals of Emergency Medicine 2020;75(4):556.

[Available online at this link](https://www.knowledgeshare.nhs.uk/index.php?PageID=link_resolver&link=d723c7d4124e199b7d51b52051e030b6)

1. **Isolation and rapid sharing of the 2019 novel coronavirus (SARS-CoV-2) from the first patient diagnosed with COVID-19 in Australia.**  
   Caly Leon The Medical journal of Australia 2020;:No page numbers.

OBJECTIVES: To describe the first isolation and sequencing of SARS-CoV-2 in Australia and rapid sharing of the isolate., SETTING: SARS-CoV-2 was isolated from a 58-year-old man from Wuhan, China who arrived in Melbourne on 19 January 2020 and was admitted to the Monash Medical Centre, Melbourne from the emergency department on 24 January 2020 with fever, cough, and progressive dyspnoea., MAJOR OUTCOMES: Clinical course and laboratory features of the first reported case of COVID-19 (the illness caused by SARS-CoV-2) in Australia; isolation, whole genome sequencing, imaging, and rapid sharing of virus from the patient., RESULTS: A nasopharyngeal swab and sputum collected when the patient presented to hospital were each positive for SARS-CoV-2 (reverse transcription polymerase chain reaction). Inoculation of Vero/hSLAM cells with material from the nasopharyngeal swab led to the isolation of SARS-CoV-2 virus in culture. Electron microscopy of the supernatant confirmed the presence of virus particles with morphology characteristic of viruses of the family Coronaviridae. Whole genome sequencing of the viral isolate and phylogenetic analysis indicated the isolate exhibited greater than 99.99% sequence identity with other publicly available SARS-CoV-2 genomes. Within 24 hours of isolation, the first Australian SARS-CoV-2 isolate was shared with local and overseas reference laboratories and major North American and European culture collections., CONCLUSIONS: The ability to rapidly identify, propagate, and internationally share our SARS-CoV-2 isolate is an important step in collaborative scientific efforts to deal effectively with this international public health emergency by developing better diagnostic procedures, vaccine candidates, and antiviral agents. Copyright © 2020 AMPCo Pty Ltd.

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1. **Migraine Care in the Era of COVID-19: Clinical Pearls and Plea to Insurers.**  
   Szperka Christina L. Headache 2020;:No page numbers.

OBJECTIVE: To outline strategies for the treatment of migraine which do not require in-person visits to clinic or the emergency department, and to describe ways that health insurance companies can remove barriers to quality care for migraine., BACKGROUND: COVID-19 is a global pandemic causing widespread infections and death. To control the spread of infection we are called to observe "social distancing" and we have been asked to postpone any procedures which are not essential. Since procedural therapies are a mainstay of headache care, the inability to do procedures could negatively affect our patients with migraine. In this manuscript we review alternative therapies, with particular attention to those which may be contra-indicated in the setting of COVID-19 infection., DESIGN/RESULTS: The manuscript reviews the use of telemedicine visits and acute, bridge, and preventive therapies for migraine. We focus on evidence-based treatment where possible, but also describe "real world" strategies which may be tried. In each section we call out areas where changes to rules from commercial health insurance companies would facilitate better migraine care., CONCLUSIONS: Our common goal as health care providers is to maximize the health and safety of our patients. Successful management of migraine with avoidance of in-person clinic and emergency department visits further benefits the current urgent societal goal of maintaining social distance to contain the COVID-19 pandemic. Copyright © 2020 American Headache Society.

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1. **Mimics and chameleons of COVID-19.**  
   Nickel Christian Hans Swiss medical weekly 2020;150:w20231.

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1. **Novel 2019 coronavirus SARS-CoV-2 (COVID-19): An updated overview for emergency clinicians.**  
   Giwa A. L Emergency medicine practice 2020;22(5):1-28.

The novel coronavirus, COVID-19, has quickly become a worldwide threat to health, travel, and commerce. This overview analyzes the best information from the early research, including epidemiologic and demographic features from SARS-CoV-1 and MERS-CoV viruses; lessons learned from the experience of an emergency physician in Northern Italy, where the outbreak has devastated the healthcare system; evidence on transmission and prevention through safe use of PPE; evidence and advice on SARS-CoV-2 testing and co-infection; management options; airway management options; steps for rapid sequence intubation in the ED and managing disaster ventilation; and information on managing pediatric and pregnant patients.

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1. **Novel coronavirus COVID-19: an overview for emergency clinicians**  
   Giwa A. Emergency medicine practice 2020;22(2 Supplement 2):1-21.

Prior to the global outbreak of SARS-CoV in 2003, HCoV-229E and HCoV-OC43 were the only coronaviruses known to infect humans. Following the SARS outbreak, 5 additional coronaviruses have been discovered in humans, most recently the novel coronavirus COVID-19, believed to have originated in Wuhan, Hubei Province, China. SARS-CoV and MERSCoV are particularly pathogenic in humans and are associated with high mortality. In this review, the epidemiology, pathophysiology, and management of the recently discovered COVID-19 are reviewed, with a focus on best practices and the public health implications.

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1. **Novel Screening and Triage Strategy in Iran During Deadly COVID-19 Epidemic; Value of Humanitarian Teleconsultation Service**  
   Davarpanah A.H. Journal of the American College of Radiology : JACR 2020;:No page numbers.

[Available online at this link](https://www.knowledgeshare.nhs.uk/index.php?PageID=link_resolver&link=d5f048cc2d1dfacba9d42467b44735bf)

1. **Performance of VivaDiag COVID-19 IgM/IgG Rapid Test is inadequate for diagnosis of COVID-19 in acute patients referring to emergency room department.**  
   Cassaniti Irene Journal of medical virology 2020;:No page numbers.

[Available online at this link](https://www.knowledgeshare.nhs.uk/index.php?PageID=link_resolver&link=5b21e0cd4caa50af6094f58cb457efbe)

1. **Preliminary Results of Initial Testing for Coronavirus (COVID-19) in the Emergency Department.**  
   Tolia Vaishal M. The western journal of emergency medicine 2020;21(3):No page numbers.

INTRODUCTION: On March 10, 2020, the World Health Organization declared a global pandemic due to widespread infection of the novel coronavirus 2019 (COVID-19). We report the preliminary results of a targeted program of COVID-19 infection testing in the ED in the first 10 days of its initiation at our institution., METHODS: We conducted a review of prospectively collected data on all ED patients who had targeted testing for acute COVID-19 infection at two EDs during the initial 10 days of testing (March 10-19, 2020). During this initial period with limited resources, testing was targeted toward high-risk patients per Centers for Disease Control and Prevention guidelines. Data collected from patients who were tested included demographics, clinical characteristics, and test qualifying criteria. We present the data overall and by test results with descriptive statistics., RESULTS: During the 10-day study period, the combined census of the study EDs was 2157 patient encounters. A total of 283 tests were ordered in the ED. The majority of patients were 18-64 years of age, male, non-Hispanic white, had an Emergency Severity Index score of three, did not have a fever, and were discharged from the ED. A total of 29 (10.2%) tested positive. Symptoms-based criteria most associated with COVID-19 were the most common criteria identified for testing (90.6%). All other criteria were reported in 5.51-43.0% of persons being tested. Having contact with a person under investigation was significantly more common in those who tested positive compared to those who tested negative (63% vs 24.5%, respectively). The majority of patients in both results groups had at least two qualifying criteria for testing (75.2%)., CONCLUSION: In this review of prospectively collected data on all ED patients who had targeted testing for acute COVID-19 infection at two EDs in the first 10 days of testing, we found that 10.2% of those tested were identified as positive. The continued monitoring of testing and results will help providers understand how COVID-19 is progressing in the community.

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1. **Proposed protocol to keep COVID-19 out of hospitals.**  
   Glauser Wendy CMAJ : Canadian Medical Association journal = journal de l'Association medicale canadienne 2020;192(10):E264-E265.

[Available online at this link](https://www.knowledgeshare.nhs.uk/index.php?PageID=link_resolver&link=ffa64fa41e95241247409438f98bb44e)

1. **Quarantined.**  
   Lee Moon Academic emergency medicine : official journal of the Society for Academic Emergency Medicine 2020;:No page numbers.

As an emergency medicine physician, I am used to working when most people are not working. At the end of February, the first patient in the U.S. to be diagnosed with COVID-19 without a travel history occurred in Sacramento, CA. Over 120 healthcare professionals who had contact with the patient were quarantined. Beginning of March, I worked in the emergency department and treated a patient with viral symptoms without a travel history who was admitted to the hospital. Copyright This article is protected by copyright. All rights reserved.

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1. **Strengths, Weaknesses, Opportunities and Threats (SWOT) Analysis of China's Prevention and Control Strategy for the COVID-19 Epidemic.**  
   Wang Jia International journal of environmental research and public health 2020;17(7):No page numbers.

This study used the Strengths (S), Weaknesses (W), Opportunities (O) and Threats (T) (SWOT) analysis method, drawing on our experience of the response to the 2003 SARS epidemic, the 2019 China Health Statistics Yearbook data, and changes in China's policy environment for the pneumonia epidemic response relating to the novel coronavirus (COVID-19) infection, to perform a systematic analysis of the COVID-19 epidemic prevention and control strategy S, W, O, and T, with a further analysis of a strategic foundation and to determine a significant and relative strategy. We assessed and formulated strength-opportunity (SO), weakness-opportunity (WO), strength-threat (ST), and weakness-threat (WT) strategies for the prevention and control of the COVID-19 epidemic. We conducted an in-depth analysis and identified the highest-priority policies. These are: reshaping the emergency system (SO1); adding health emergency departments to universities and other institutions (WO2); adjusting the economic structure and strengthening international and domestic linkages (ST2); and strengthening public intervention in responding to public health emergencies (WT1).

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1. **The impending storm: COVID-19, pandemics and our overwhelmed emergency departments.**  
   Mareiniss Darren P. The American journal of emergency medicine 2020;:No page numbers.

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1. **The response of Milan's Emergency Medical System to the COVID-19 outbreak in Italy**  
   Spina S. The Lancet 2020;395(10227):e49-e50.

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1. **The Role of Emergency Radiology in COVID-19: From Preparedness to Diagnosis.**  
   Nasir Muhammad Umer Canadian Association of Radiologists journal = Journal l'Association canadienne des radiologistes 2020;:846537120916419.

Emergency trauma radiology, although a relatively new subspecialty of radiology, plays a critical role in both the diagnosis/triage of acutely ill patients, but even more important in providing leadership and taking the lead in the preparedness of imaging departments in dealing with novel highly infectious communicable diseases and mass casualties. This has become even more apparent in dealing with COVID-19, the disease caused by the novel coronavirus SARS-CoV-2, first emerged in late 2019. We review the symptoms, epidemiology, and testing for this disease. We discuss characteristic imaging findings of COVID-19 in relation to other modern coronavirus diseases including SARS and MERS. We discuss roles that community radiology clinics, outpatient radiology departments, and emergency radiology departments can play in the diagnosis of this disease. We review practical methods to reduce spread of infections within radiology departments.

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1. **Therapeutic and triage strategies for 2019 novel coronavirus disease in fever clinics**  
   Zhang J. The Lancet Respiratory Medicine 2020;8(3):e11-e12.

[Available online at this link](https://www.knowledgeshare.nhs.uk/index.php?PageID=link_resolver&link=f8e733174b677f1ac5d3001dff6cd574)

1. **To control the covid-19 outbreak, young, healthy patients should avoid the emergency department.**  
   Karan Abraar BMJ (Clinical research ed.) 2020;368:m1040.

[Available online at this link](https://www.knowledgeshare.nhs.uk/index.php?PageID=link_resolver&link=e05a55ea97fc2e74fd1c412066224e5a)

1. **Translating COVID-19 Pandemic Surge Theory to Practice in the Emergency Department: How to Expand Structure**  
   Paganini M. Disaster medicine and public health preparedness 2020;:1-30.

Multiple professional societies, nongovernment and government agencies have studied the science of sudden onset disaster mass casualty incidents to create and promote surge response guidelines. The COVID-19 pandemic has presented the health care system with challenges that have limited science to guide the staff, stuff and structure surge response.This study reviewed the available surge science literature specifically to guide an Emergency Department's surge structural response using a translational science approach to answer the question: How does the concept of sudden onset mass casualty incident (MCI) surge capability apply to the process to expand COVID-19 Pandemic surge structure response?The available surge structural science literature was reviewed to determine the application to a pandemic response. The on-line ahead of print and print COVID-19 scientific publications, as well as grey, literature were studied to learn the best available COVID-19 surge structural response science. A checklist was created to guide the Emergency Department team's COVID-19 surge structural response.

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1. **"Five-minute emergency life chain" centering on department of emergency and intensive care unit patients: Experience in the integration of department of emergency and intensive care unit of Yichang Central People's Hospital in Hubei Province**  
   Jun Y. Zhonghua Wei Zhong Bing Ji Jiu Yi Xue 2019;31(10):1179-1184.

Yichang Central People's Hospital is a large prefecture-level tertiary hospital in Hubei Province. Since the late foundation and interdisciplinary characteritics, the department of emergency and critical care medicine faced many difficulties during development. Based on the actual situation of the hospital, leaders of the hospital and two disciplines advocated their core values of "putting patients' interests first and building team spirit". In consideration of the timeliness, multidisciplinary collaboration and importance of critical care, the department of emergency and critical care medicine in Yichang Central People's Hospital of Hubei Province was set up, and an integrated first-aid platform was established. The concept of "5-minute emergency life chain" was proposed, which highlighted the status and role of the department of emergency and critical care medicine in modern medical rescue and modern general hospitals. In the past 5 years, the emergency department and intensive care unit have made rapid development, including successful establishment of national demonstration centers for chest pain and stroke. Quality of the discipline has also been greatly improved, and a new construction path of department of the emergency and critical care medicine has been created.Copyright © 2019 Heilongjiang Institute of Science and Technology Information. All rights reserved.

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1. **Healthcare-associated infections: the hallmark of Middle East respiratory syndrome coronavirus with review of the literature**  
   Al-Tawfiq J.A. Journal of Hospital Infection 2019;101(1):20-29.

Middle East respiratory syndrome coronavirus (MERS-CoV) is capable of causing acute respiratory illness. Laboratory-confirmed MERS-CoV cases may be asymptomatic, have mild disease, or have a life-threatening infection with a high case fatality rate. There are three patterns of transmission: sporadic community cases from presumed non-human exposure, family clusters arising from contact with an infected family index case, and healthcare-acquired infections among patients and from patients to healthcare workers. Healthcare-acquired MERS infection has become a well-known characteristic of the disease and a leading means of spread. The main factors contributing to healthcare-associated outbreaks include delayed recognition, inadequate infection control measures, inadequate triaging and isolation of suspected MERS or other respiratory illness patients, crowding, and patients remaining in the emergency department for many days. A review of the literature suggests that effective control of hospital outbreaks was accomplished in most instances by the application of proper infection control procedures. Prompt recognition, isolation and management of suspected cases are key factors for prevention of the spread of MERS. Repeated assessments of infection control and monitoring of corrective measures contribute to changing the course of an outbreak. Limiting the number of contacts and hospital visits are also important factors to decrease the spread of infection.Copyright © 2018 The Healthcare Infection Society

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1. **Impact of the 2015 middle east respiratory syndrome outbreak on emergency care utilization and mortality in South Korea**  
   Lee S.Y. Yonsei Medical Journal 2019;60(8):796-803.

Purpose: In May 2015, South Korea experienced an epidemic of Middle East respiratory syndrome (MERS). This study investigated the impacts of MERS epidemic on emergency care utilization and mortality in South Korea. Material(s) and Method(s): A natural experimental study was conducted using healthcare utilization and mortality data of the entire Korean population. The number of monthly emergency room (ER) visits was investigated to identify changes in emergency care utilization during the MERS epidemic; these trends were also examined according to patients' demographic factors, disease severity, and region. Deaths within 7 days after visiting an ER were analyzed to evaluate the impact of the reduction in ER visits on mortality. Result(s): The number of ER visits during the peak of the MERS epidemic (June 2015) decreased by 33.1% compared to the average figures from June 2014 and June 2016. The decrease was observed in all age, sex, and income groups, and was more pronounced for low-acuity diseases (acute otitis media: 53.0%; upper respiratory infections: 45.2%) than for high-acuity diseases (myocardial infarctions: 14.0%; ischemic stroke: 16.6%). No substantial changes were detected for the highest-acuity diseases, with increases of 3.5% for cardiac arrest and 2.4% for hemorrhagic stroke. The number of deaths within 7 days of an ER visit did not change significantly. Conclusion(s): During the MERS epidemic, the number of ER visits decreased in all age, sex, and socioeconomic groups, and decreased most sharply for low-acuity diseases. Nonetheless, there was no significant change in deaths after emergency care.Copyright © Yonsei University College of Medicine 2019.

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1. **Risk of transmission via medical employees and importance of routine infection-prevention policy in a nosocomial outbreak of Middle East respiratory syndrome (MERS): a descriptive analysis from a tertiary care hospital in South Korea**  
   Ki H.K. BMC pulmonary medicine 2019;19(1):190.

BACKGROUND: In 2015, South Korea experienced an outbreak of Middle East respiratory syndrome (MERS), and our hospital experienced a nosocomial MERS infection. We performed a comprehensive analysis to identify the MERS transmission route and the ability of our routine infection-prevention policy to control this outbreak. METHOD(S): This is a case-cohort study of retrospectively analysed data from medical charts, closed-circuit television, personal interviews and a national database. We analysed data of people at risk of MERS transmission including 228 in the emergency department (ED) and 218 in general wards (GW). Data of personnel location and movement, personal protection equipment and hand hygiene was recorded. Transmission risk was determined as the extent of exposure to the index patient: 1) high risk: staying within 2m; 2) intermediate risk: staying in the same room at same time; and 3) low risk: only staying in the same department without contact. RESULT(S): The index patient was an old patient admitted to our hospital. 11 transmissions from the index patient were identified; 4 were infected in our hospital. Personnel in the ED exhibited higher rates of compliance with routine infection-prevention methods as observed objectively: 93% wore a surgical mask and 95.6% washed their hands. Only 1.8% of personnel were observed to wear a surgical mask in the GW. ED had a higher percentage of high-risk individuals compared with the GW (14.5% vs. 2.8%), but the attack rate was higher in the GW (16.7%; l/6) than in the ED (3%; 1/33). There were no transmissions in the intermediate- and low-risk groups in the ED. Otherwise 2 patients were infected in the GW among the low-risk group. MERS were transmitted to them indirectly by staff who cared for the index patient. CONCLUSION(S): Our study provide compelling evidence that routine infection-prevention policies can greatly reduce nosocomial transmission of MERS. Conventional isolation is established mainly from contact tracing of patients during a MERS outbreak. But it should be extended to all people treated by any medical employee who has contact with MERS patients. TRIAL REGISTRATION: NCT02605109 , date of registration: 11th November 2015.

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1. **The Rates and Medical Necessity of Cesarean Delivery in the Era of the Two-Child Policy in Hubei and Gansu Provinces, China.**  
   Liao Zijun American journal of public health 2019;109(3):476-482.

OBJECTIVES: To describe the cesarean rates in different child policy periods and assess the medical necessity of cesareans during the 2-child policy period., METHODS: We collected hospital-level aggregate data on 93 745 deliveries and individual-level data on 27 977 deliveries from 6 hospitals in the Hubei and Gansu provinces of China from 2013 to 2016. Experts in gynecology and obstetrics assessed the medical necessity of 1024 randomly selected cesareans in 2016., RESULTS: The overall cesarean rate decreased significantly from 45.1% in the 1-child policy period (January 2013-September 2014) to 40.4% in the selective 2-child policy period (October 2014-July 2016) and further to 38.9% in the universal 2-child policy period (August 2016-December 2016). The rate of cesarean delivery on maternal request decreased by 46.3%, whereas the rate of cesarean delivery indicated by a previous cesarean delivery increased by 118.8% (P < .001). The experts assessed 222 (21.6%) cesareans as lacking medical necessity., CONCLUSIONS: The overall cesarean rate in Hubei and Gansu provinces decreased after the implementation of the 2-child policy, and one fifth of cesareans might be nonessential.

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1. **Veno-venous extracorporeal life support for the successful treatment of severe acute respiratory syndrome from e-cigarette use**  
   Baumann A. ASAIO Journal 2019;65(Supplement 2):17.

The use of e-cigarettes is increasing across the United States, specifically among young adults.1 Despite public opinion that such products are generally safe, there is significant concern that e-cigarettes could be equally harmful to the lungs as smoking tobacco.2 The pathologic effects of e-cigarette use remains unclear. A single previous case report3 illustrates how residual chemical injury from e-cigarette usage can cause respiratory failure; however, the exact pathology hypothesized to result from e-cigarettes is not known. We present two cases successfully using veno-venous extracorporeal life support (ECLS) in the treatment of presumed e-cigarette induced respiratory failure. A 42 year-old female and a 56 year-old male, both with a recent past medical history of non-specific respiratory symptoms, independently presented to the emergency department for ongoing dyspnea despite receiving outpatient antibiotic treatment for presumed community acquired pneumonia. Both patients underwent extensive in-hospital workup to rule-out infectious causes. Broncho-alveolar lavage revealed lymphocytosis and diffusive alveolar disease with no specific etiology. Upon hospital admission, both patients progressively developed severe acute respiratory distress syndrome and refractory hypoxemia requiring venous-venous extracorporeal membranous oxygenation (ECMO). Due to the idiopathic nature of both patients' respiratory failure, we presume that their respiratory symptoms were likely due to recent recreational e-cigarette usage, which was confirmed with the patients' family. Both patients were successfully weaned and decannulated from ECLS.

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1. **Viral prevalence, clinical profiles and comparison of severity scores for predicting the mortality of adults with severe acute respiratory infections**  
   Aydin H. Turkish Journal of Medical Sciences 2019;49(3):862-871.

Background/aim: The aim of this study was to determine the accuracy of severity scores for predicting the 28-day mortality among adults with severe acute respiratory infection (SARI) admitted to the emergency department. Material(s) and Method(s): This study included 159 consecutive adult patients with SARI admitted to the emergency department of a tertiary hospital. A standard form was filled out in order to record demographic information, clinical parameters, laboratory tests, and radiographic findings of the patients. CURB-65, PSI, SIRS, qSOFA, SOFA and APACHE II scores were compared between the survivor and nonsurvivor groups. Result(s): Of 159 patients included in the study, 38.4% were positive for respiratory viruses and 28.3% were positive for influenza viruses. 35.8% of the patients were admitted to an intensive care unit (ICU) and the mortality rate was 36.5%. The area under the receiver operating characteristic curve of CURB-65, PSI, SIRS criteria, qSOFA, SOFA and APACHE II scores were 0.717, 0.712, 0.607, 0.683, 0.755, and 0.748, respectively in predicting mortality and 0.759, 0.744, 0.583, 0.728, 0.741, and 0.731, respectively in predicting ICU admission. Conclusion(s): SOFA and APACHE II were more accurate than SIRS in predicting the 28-day mortality among adults with SARI. There was no significant difference among these scores in terms of other multivariate comparisons.Copyright © TUBITAK.

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