



Cochrane
Pre-hospital and
Emergency Care

<http://pec.cochrane.org>

HAPPY NEW YEAR



The Cochrane PEC team wishes you all the best for 2026.

The Cochrane PEC is involved in knowledge translation particularly by disseminating Cochrane reviews to enhance emergency care professionals' knowledge and decision making.

All year round, meet us in conferences, training sessions and on our website!

COCHRANE PEC MAJOR CONTRIBUTOR MARCEL EMOND



Pr Marcel Émond (MD, M.Sc.)

Family Medicine and Emergency
Medicine Department

Faculty of Medicine, Laval University.

A seasoned clinician–researcher, he is a member of the CHU de Québec Research Centre. For more than 20 years, Pr Émond has been recognized as a highly prolific researcher in emergency medicine, with several hundred scientific publications. His Google Scholar profile lists over 5,900 citations and an h-index of 42, reflecting a substantial and influential body of work.

To improve international collaboration among French-speaking emergency physicians, Pr Émond founded in 2017 a French-language web platform dedicated to evidence-based medicine, TopMU, aimed at accelerating knowledge translation in emergency medicine. Within this framework, a collaboration with the French Society of Emergency Medicine, and more specifically with the Cochrane Pre-hospital and Emergency Care group, led to the development of the Top Cochrane PEC.

RECENT REVIEWS

[HEAD IMPULSE, NYSTAGMUS, AND TEST OF SKEW \(HINTS\) EXAMINATION FOR
DIAGNOSING CENTRAL CAUSES OF ACUTE VESTIBULAR SYNDROME \(AVS\)](#)

[Michael Gottlieb, Gary D Peksa, Jestin N Carlson](#)

The HINTS and HINTS Plus examinations have good sensitivity and reasonable specificity for diagnosing a central cause for AVS in the emergency department when performed by trained clinicians with low evidence of certainty. Future research should include more high-quality studies of the HINTS and HINTS Plus examination; assessment of inter-rater reliability across users; accuracy across different providers, specialties, and experience; and direct comparison with no HINTS or MRI to assess the effect on clinical care.

APPENDECTOMY VERSUS ANTIBIOTIC TREATMENT FOR ACUTE APPENDICITIS

[Brett Doleman](#), [Siv Fonnes](#), [Jon N Lund](#), [Hannah Boyd-Carson](#), [Hannah Javanmard-Emamghissi](#), [Susan Moug](#), [Marianne Hollyman](#), [Gillian Tierney](#), [Samson Tou](#), [John P Williams](#)

Compared to appendectomy, antibiotics may be associated with higher rates of unsuccessful treatment for 76 per 1000 people, although differences may not be clinically significant. It is uncertain if antibiotics increase length of hospital stay by half a day. Antibiotics may reduce wound infections. A third of the participants initially treated with antibiotics required subsequent appendectomy or two-thirds avoided surgery within one year, but the evidence is very uncertain. There were too few data from the included studies to comment on major complications.

ULTRASOUND-GUIDED ARTERIAL CANNULATION IN THE PAEDIATRIC POPULATION

[Christian K Raphael](#), [Nour A El Hage Chehade](#), [Joanne Khabsa](#), [Elie A Akl](#), [Marie Aouad-Maroun](#), [Roland Kaddoum](#)

We identified moderate-certainty evidence that ultrasound guidance for arterial cannulation compared with palpation or Doppler auditory assistance improves first-attempt success rate, second-attempt success rate and overall success rate. We also found moderate-certainty evidence that ultrasound guidance reduces the incidence of complications, the number of attempts to successful cannulation and the duration of the cannulation procedure.

HYPOTHERMIA FOR NEUROPROTECTION IN ADULTS AFTER CARDIAC ARREST

[Jasmin Arrich](#), [Nikola Schütz](#), [Julia Oppenauer](#), [Janne Vendt](#), [Michael Holzer](#), [Christof Havel](#), [Harald Herkner](#)

Current evidence suggests that conventional cooling methods to induce therapeutic hypothermia (target temperature 32 °C to 34 °C) may improve neurological outcomes after cardiac arrest.

HEALTH CARE WORKERS INFORMAL USES OF MOBILES PHONES AND OTHER MOBILE DEVICES TO SUPPORT THEIR WORK : A QUALITATIVE EVIDENCE SYNTHESIS

[Claire Glenton](#), [Elizabeth Paulsen](#), [Smisha Agarwal](#), [Unni Gopinathan](#), [Marit Johansen](#), [David Kyaddondo](#), [Susan Munabi-Babigumira](#), [Josephine Nabukenya](#), [Immaculate](#)

[Nakityo](#), [Rehema Namaganda](#), [Josephine Namitala](#), [Tom Neumark](#), [Allen Nsangi](#), [Neil M Pakenham-Walsh](#), [Arash Rashidian](#), [Geoff Royston](#), [Nelson Sewankambo](#), [Tigest Tamrat](#), [Simon Lewin](#)

By finding their own informal solutions to workplace challenges, healthcare workers can be more efficient and more responsive to the needs of patients, colleagues and themselves. But these solutions also have several drawbacks. Efforts to strengthen formal health systems should consider how to retain the benefits of informal solutions and reduce their negative effects.

NON INVASIVE POSITIVE PRESSURE VENTILATION FOR ACUTE ASTHMA IN CHILDREN

[Steven Kwasi Korang](#), [Matthew Baker](#), [Joshua Feinberg](#), [Christopher JL Newth](#), [Robinder G Khemani](#), [Janus C Jakobsen](#)

The currently available evidence for non invasive positive pressure ventilation (NPPV) is uncertain. NPPV may lead to an improvement in asthma symptom score, decreased intubation rate, and slightly shorter pediatric intensive care unit stay with very low evidence of certainty. Larger randomized controlled trials with low risk of bias are warranted.

TIME TO PUBLICATION FOR RESULTS OF CLINICAL TRIALS

[Marian G Showell](#), [Sammy Cole](#), [Mike J Clarke](#), [Nicholas J DeVito](#), [Cindy Farquhar](#), [Vanessa Jordan](#)

Trial publication is poor, with only half of all trials that are conducted being published. Factors that may make publication more likely and lead to faster publication are positive results, large sample size and being funded by non-industry sources. Differences in publication rates result in publication bias and time-lag bias that may influence findings and therefore ultimately affect treatment decisions.

TRANSFUSION OF BLOOD AND BLOOD PRODUCTS FOR THE MANAGEMENT OF POSTPARTUM HAEMORRHAGE

[Caitlin R Williams](#), [Hanna E Huffstetler](#), [Angelo S Nyamtema](#), [Eva Larkai](#), [Magdalena Lyimo](#), [Afrodit I Kanellopoulou](#), [Lindsay Robertson](#), [Leslie Choi](#), [Fadhlun M Alwy Al-beity](#)

Overall, available evidence for the effects of blood and blood product transfusion on priority maternal outcomes is largely uncertain. Low-certainty evidence suggests that 1 to 2 units of Red Blood Cells transfusion may increase the risk of severe maternal morbidity; however, we urge caution when interpreting this finding as the effect estimates are at serious risk of bias due to possible confounding. We are unable to comment on the effects of larger blood transfusion amounts on severe maternal morbidity.

CORTICOSTEROIDS FOR TREATING SEPSIS IN CHILDREN AND ADULTS

[Djillali Annane](#), [Josef Briegel](#), [David Granton](#), [Eric Bellissant](#), [Pierre Edouard Bollaert](#), [Didier Keh](#), [Yizhak Kupfer](#), [Romain Pirracchio](#), [Bram Rochwerg](#).

Moderate-certainty evidence indicates that corticosteroids probably reduce 28-day, 90-day and hospital mortality amongst patients with sepsis. Corticosteroids may shorten Intensive Care Unit and hospital length of stay (low-certainty evidence). There may be little or no difference in the risk of superinfection. The risk of muscle weakness is uncertain. The effects of continuous versus intermittent bolus administration of corticosteroids are uncertain.

AUDIT AND FEEDBACK: EFFECTS ON PROFESSIONAL PRACTICE

[Noah Ivers](#), [Sharlini Yogasingam](#), [Meagan Lacroix](#), [Kevin A Brown](#), [Jesmin Antony](#), [Charlene Soobiah](#), [Michelle Simeoni](#), [Thomas A Willis](#), [Jacob Crawshaw](#), [Vivi Antonopoulou](#), [Carly Meyer](#), [Nathan M Solbak](#), [Brenna J Murray](#), [Emily-Ann Butler](#), [Simone Lepage](#), [Martina Giltenane](#), [Mary D Carter](#), [Guillaume Fontaine](#), [Michael Sykes](#), [Michael Halasy](#), [Abdalla Bazazo](#), [Samantha Seaton](#), [Tony Canavan](#), [Sarah Alderson](#), [Catherine Reis](#), [Stefanie Linklater](#), [Aislinn Lalor](#), [Ashley Fletcher](#), [Emma Gearon](#), [Hazel Jenkins](#), [Jason A Wallis](#), [Liesl Grobler](#), [Lisa Beccaria](#), [Sheila Cyril](#), [Tomas Rozbroj](#), [Jia Xi Han](#), [Alice XT Xu](#), [Kelly Wu](#), [Geneviève Rouleau](#), [Maryam Shah](#), [Kristin Konnyu](#), [Heather Colquhoun](#), [Justin Presseau](#), [Denise O'Connor](#), [Fabiana Lorencatto](#), [Jeremy M Grimshaw](#)

Audit & Feedback (A&F) can be effective in improving professional practice, but effects vary in size. A&F is most often delivered along with co-interventions which can contribute additive effects. A&F may be most effective when designed to help recipients prioritise and take action on high-priority clinical issues.

These conclusions require further confirmatory research; future research should focus on discerning ways to optimise the effectiveness of A&F interventions.

TRANEXAMIC ACID (TXA) FOR PREVENTING POSTPARTUM HAEMORRHAGE (PPH) AFTER VAGINAL BIRTH

[Christa Rohwer](#), [Anke C Rohwer](#), [Catherine Cluver](#), [Katharine Ker](#), [G Justus Hofmeyr](#)

Adding prophylactic TXA to standard care of women during vaginal birth makes little to no difference to blood loss ≥ 500 mL and likely makes little to no difference to blood loss ≥ 1000 mL or the risk of severe morbidity, compared to placebo and standard care.

TXA may result in little to no difference in additional surgical interventions to control PPH and results in little to no difference in blood transfusions. One trial found that TXA

reduced the use of additional uterotronics in women without anaemia, whereas the largest trial found little to no difference in the use of additional uterotronics in women with anaemia.

TESTS FOR DIAGNOSIS OF POSTPARTUM HAEMORRHAGE (PPH) AT VAGINAL BIRTH

[Idnan Yunas](#), [Ioannis D Gallos](#), [Adam J Devall](#), [Marcelina Podesek](#), [John Allotey](#), [Yemisi Takwoingi](#), [Arri Coomarasamy](#)

Visual estimation of blood loss to diagnose PPH showed low sensitivity and is likely to miss the diagnosis in half of women giving birth vaginally. A diagnostic approach using a calibrated drape to objectively measure blood loss plus clinical observations showed high sensitivity and specificity for diagnosing PPH. Other index tests showed low to moderate sensitivities in diagnosing PPH and severe PPH.

Future research should determine the accuracy of diagnostic tests in non-hospital settings and consider combining index tests to increase the sensitivity of PPH diagnosis.

DIURETICS FOR PREVENTING AND TREATING ACUTE KIDNEY INJURY(AKI)

[Hiroyuki Hashimoto](#), [Hiroyuki Yamada](#), [Maki Murata](#), [Norio Watanabe](#)

When used for the prevention of AKI, diuretics may reduce the risk of AKI. However, our confidence in the effect estimate is limited. Diuretics probably reduce the incidence of Kidney Replacement Therapy (KRT) use, and we are moderately confident in the effect estimate.

When used for the treatment of AKI, diuretics may make little or no difference to any use of KRT, and our confidence in the effect estimate is limited. More randomized controlled trials are needed to explore the role of diuretics for treating established AKI.

NONSTEROIDAL ANTI-INFLAMMATORY DRUGS (NSAID) FOR ACUTE RENAL COLIC

[Kourosh Afshar](#), [Jagdeep Gill](#), [Hanan Mostafa](#), [Maryam Noparast](#)

NSAIDs may reduce pain in adult patients with renal colic compared to placebo. Comparing one NSAID against another, intravenous ketorolac may be less effective than intravenous ibuprofen, and pirprofen may result in less need for rescue medication than indomethacin. The intravenous route of administration is probably similar to the intramuscular route but may be better than the rectal route. The evidence

is uncertain regarding the potential harms of NSAIDs.

FIRST AID TRAINING FOR LAYPEOPLE

[Irvin Kendall](#), [Jorien Laermans](#), [Tine Daes](#), [Vere Borra](#), [Michael McCaul](#), [Bert Aertgeerts](#), [Emmy De Buck](#)

Our review found no studies that compared the effects of first aid training to no first aid training on the health outcomes of people receiving first aid or the quality of first aid provided. There were insufficient data to draw conclusions about the impact on helping behaviour. Nevertheless, in the short term, first aid training probably increases the acquisition of knowledge, skills, and self-efficacy. But the evidence regarding its effect on willingness to help in the short term remains very uncertain.

INSIDE COCHRANE



The Cochrane PEC participated to the **Cochrane Leadership Meeting** that took place in Lisbon, Portugal from 29 October to 30 October 2025, generating valuable insights and collaboration.

As part of these collaborations, the Cochrane PEC regularly disseminates Cochrane reviews through regular newsletters in partnership with **Cochrane France**.

The Cochrane PEC also collaborates with **Cochrane Brazil** to translate Cochrane abstracts into Portuguese. This helps make them accessible through publication in medical journals.

Finally, the Cochrane PEC is part of the **Cochrane Acute and Emergency Care Thematic Group**. This partnership aims to function as an evidence-based knowledge hub and an umbrella for groups dealing with the broad scope of first aid, pre-hospital and in-hospital emergency care, critical care, and anaesthesia.

COCHRANE PEC CORNER

The Cochrane PEC team selects Cochrane reviews relevant to emergency medicine and publishes them in different formats and languages.

EMERGENCIAS

Perlas para urgenciólogos

A Cochrane PEC Corner is regularly published in the Journal of the Spanish Society of Emergency Medicine **EMERGENCIAS**.



LATIN AMERICAN JOURNAL OF EMERGENCY CARE

A Cochrane PEC Corner is now regularly published in the Journal of the Brasilian Society of Emergency Medicine 'Jornal Brasileiro de Medecina de Emergência'.



PANORAMA OF EMERGENCY MEDECINE

A Cochrane PEC Corner is also regularly published in the Lebanese Journal 'Panorama of Emergency Medicine'.



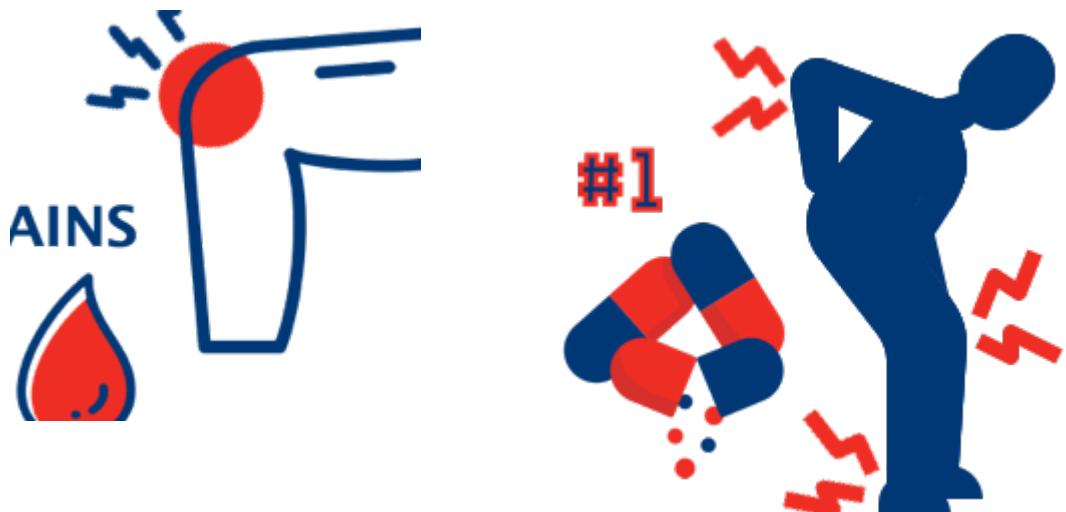
[ANNALES FRANCAISES DE MEDECINE D'URGENCE](#)

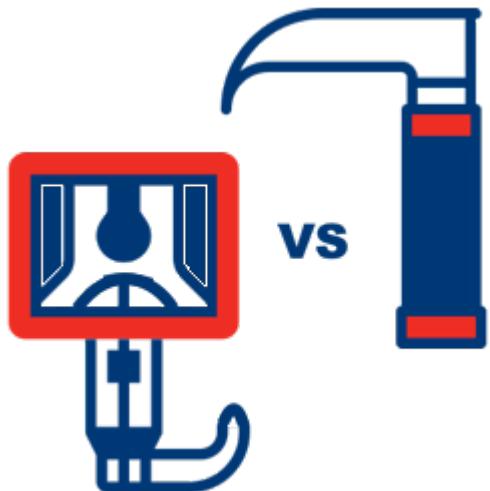
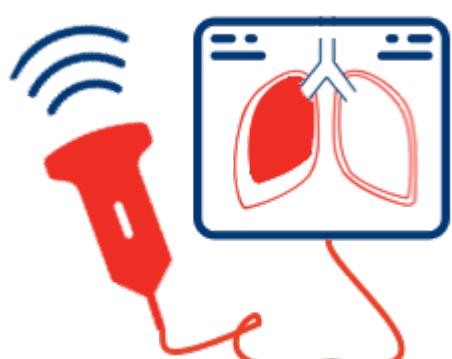
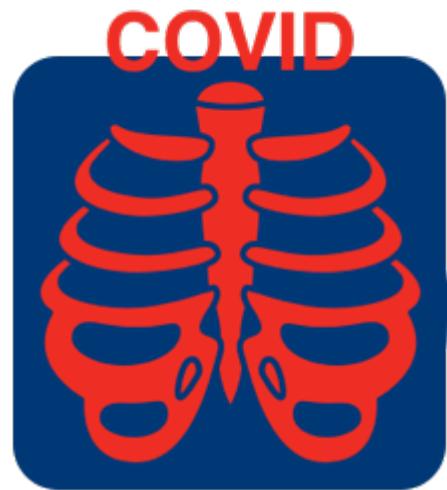
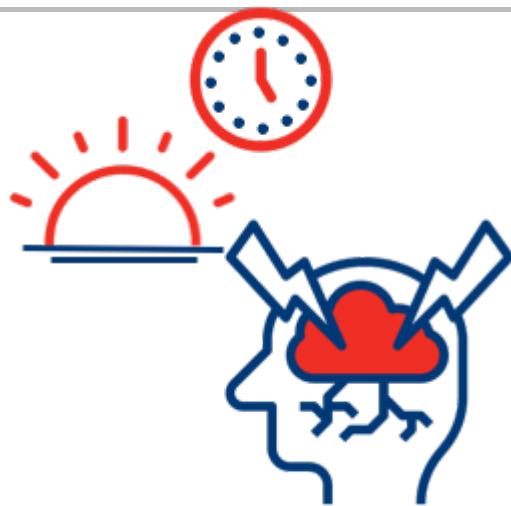
Cochrane PEC PEARLS are also regularly published in French in the Journal of the French Society of Emergency Medicine 'Annales Françaises de Médecine d'Urgence'



TOP COCHRANE PEC

The Cochrane PEC team is pleased to continue its partnership with TopMU (Transfert Optimisé des Publications en Médecine d'Urgence) from Québec.





TOP COCHRANE PEC

The Cochrane PEC also produces videos in French summarizing some Cochrane emergency reviews. They

are available on the Cochrane PEC website.

COCHRANE PEC VIDEO (IN FRENCH)



LATEST'S NEWS

COPACAMU

- 3-4 April 2025
- Marseille
- France



Journées de Médecine d'Urgence du Grand Est

- 13-14 May 2025
- Reims
- France

Urgences Le Congrès

- 4-6 June 2025
- Paris
- France



Emergency Management Conferences in Monaco

- 11-12 September 2025
- Monaco
- France

EUSEM 2025

- 27-28 September 2025
- Vienna
- Austria



Congrès Breton d'Abord Vasculaire

- 2, 3 October 2025
- Lorient
- France

UPCOMMING EVENTS



Cochrane Acute and Emergency Care Thematic Group Seminar

- 19-21 May 2026
- Copenhagen
- Denmark

Urgences Le Congrès

- 3-5 June 2026
- Paris
- France



EUSEM 2026

- 25-27 September 2026
- Paris
- France

EUSEM 2026

EUROPEAN EMERGENCY MEDICINE CONGRESS



WADEM 2027



COCHRANE PEC LIFE

Carnet Rose

1 new Cochrane PEC member joined the Cochrane PEC family in 2025.



TRAINING AND WORKSHOP

Workshop at SFMU annual congress Urgences 2026

META-ANALYSES' PITFALLS

Hosted by **Patricia JABRE, Tania MARX and Andréa PENALOZA.**

Group activities, discussions and hands-on tasks on systematic reviews, forest plots, heterogeneity...
and even levels of evidence!

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