



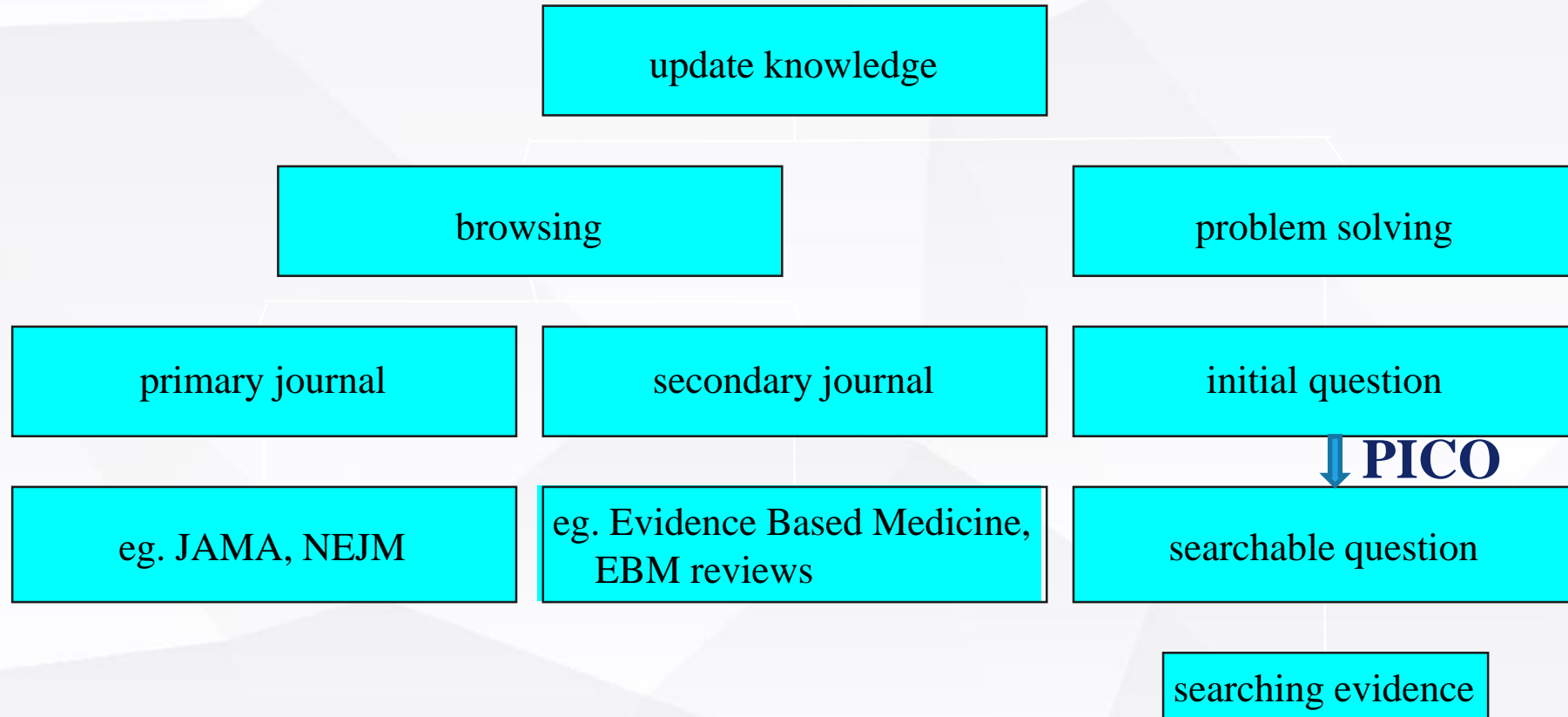
# Finding the Evidence

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(020)61648055



- Evidence-Based Medicine (EBM): The conscientious, explicit and judicious use of current best evidence in making decisions about the care of individual patients.
- The practice of evidence-based medicine means integrating individual clinical expertise with the best available external clinical evidence from systematic research.
- Evidence-based medicine does **not** mean "cook-book" medicine, or the unthinking use of guidelines. It **does** imply that evidence should be reasonably readily available in an easily understood and useable form.

# Knowledge Updating



# Formulate clinical question according to PICO principles



- **P:** Patients/Problems, that is, the description of the specific situation of the practice object, including age, gender, race, past history, etc.
- **I:** Intervention, such as treatment plan, diagnostic test, etc.
- **C:** Comparison(optional), factors in contrast to the interventions taken
- **O:** Outcome, the diagnosis and treatment effect of intervention measures



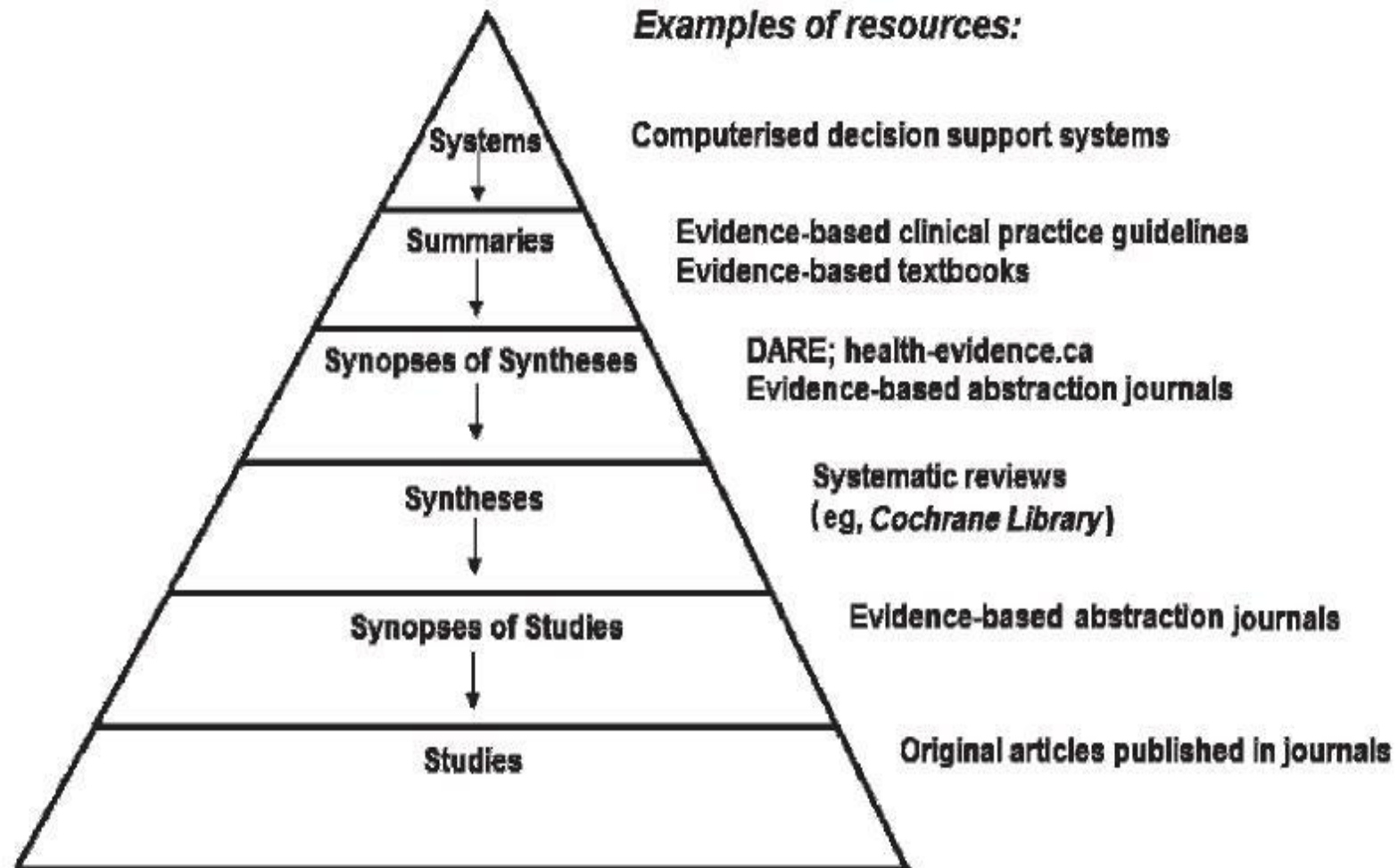
# Searching The Best Evidence

- Traditional database(primary journals or databases): PubMed, NEJM, Lancet...
- New generation EBP database(secondary journals or databases): ACP journal club, Cochrane Library, Best practice...
- Try to find the literature with the same level of evidence as the patient's problem, and then carefully evaluate its applicability to the patient's problem

# Clarify Your Topic

- ❖ What is your question?
- ❖ What do you already know?
- ❖ Any research by others?
- ❖ Consider using a stepwise process, e.g. PICO, to clarify and create a question that can be answered

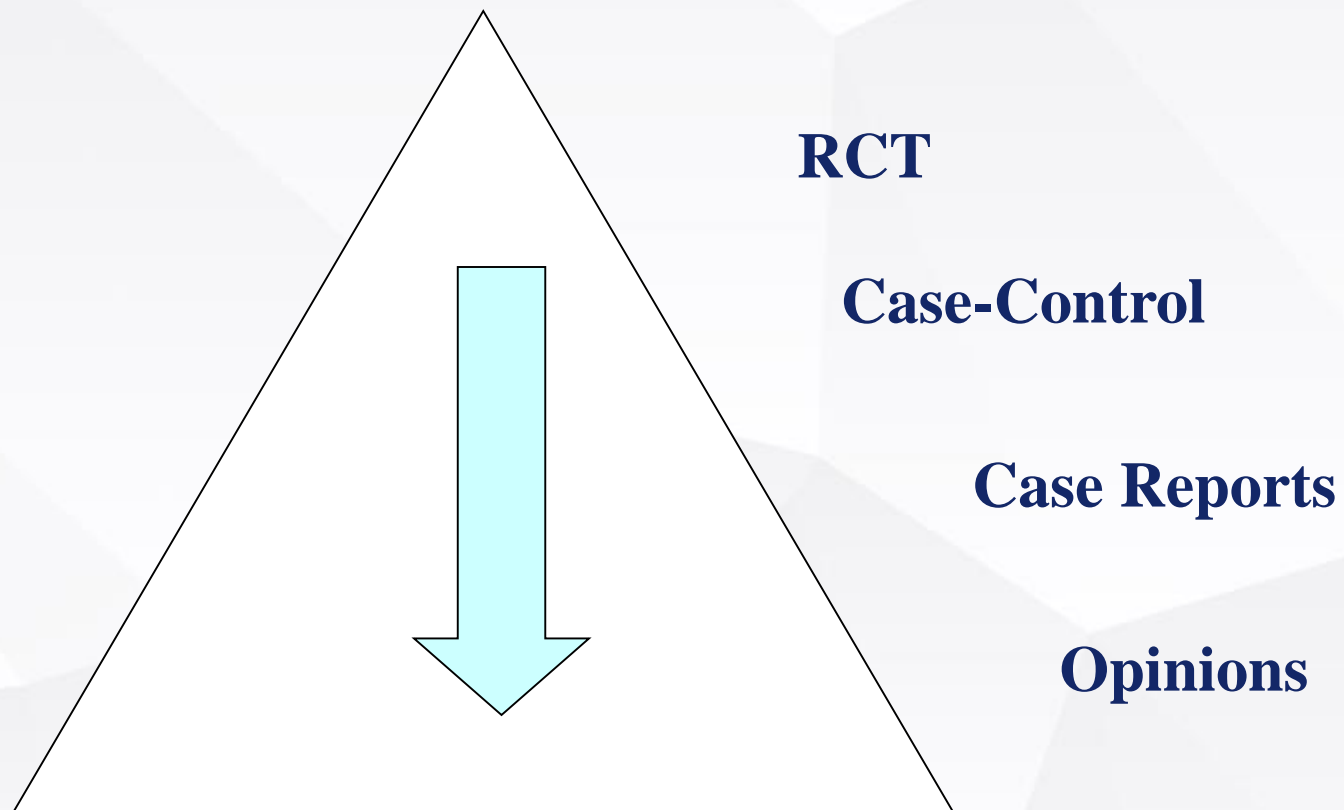
# “6S” Model in EBM



# Searching



- ❖ **Key Words :**
- ❖ **检索策略 top down**





# Case

- ❖ A 51-year-old woman with a total hysterectomy presents to a primary health care clinic with signs of menopause. She is having hot flashes and night sweats. She is an active and healthy woman with no family history of breast cancer or cardiovascular disease. She is reluctant to consider hormone replacement therapy (HRT) because her friend said there is a higher risk of breast cancer, strokes, and heart attacks. However, the menopause symptoms are affecting her QoL and she wants to do something.



**Initial question:**

*Is it safe to prescribe HRT to this woman?*



**Reformulated question using PICO:**

*Among healthy middle-aged women, does estrogen increase the incidence of breast cancer, cardiovascular death, or stroke?*

# PICO

**PATIENT/PROBLEM** – healthy middle-aged women with menopause symptoms

**INTERVENTION** –HRT

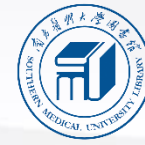
**COMPARISON, IF ANY** – no HRT

**OUTCOME** – is there a risk in developing stroke, breast cancer or heart attack

# Learning Outcomes

- ❖ Identify web resources for evidence-based practice
- ❖ Describe different methods to improve research skills in searching for evidence on the web
- ❖ Learn to perform an evidence search in different evidence-based sources

# Outline



- Clinical Practice Guidelines
- Structured Abstracts and Summaries
- Systematic Reviews and Meta-Analyses
- MetaSearch Engines
- Research Articles

# What is a Guideline?

- ❖ Systemically developed statements to assist practitioner and patient decisions about appropriate health care for specific clinical circumstances.
- ❖ **Purpose: to make explicit recommendations with a definite intent to influence what clinicians do.**

# What is a Guideline?

- ❖ Guidelines may be
  - Explicit evidence-based
  - Evidence-based
  - Research-based (highly referenced)
  - Opinion-based
  - “expert consensus”

# Evidence Guidelines Resources

- ❖ **PubMed**

  - <http://www.pubmed.gov>

- ❖ **SIGN - Scottish Intercollegiate Guidelines Network**

  - <http://www.sign.ac.uk/>

- ❖ **Guidelines International Network**

  - <http://www.g-i-n.net/>

- ❖ **Professional societies websites**

    - **AASLD: [www.aasld.org](http://www.aasld.org)**



# Searching for Practice Guidelines in *PubMed*

## Filter to Practice Guideline under Article Types

The screenshot shows the PubMed website interface. At the top, there is a navigation bar with 'NCBI Resources' and 'How To' menus, and a 'Sign in to NCBI' link. Below this is the 'PubMed.gov' logo and the text 'US National Library of Medicine National Institutes of Health'. A search bar contains the text 'earache antibiotics' and a 'Search' button. To the right of the search bar are links for 'RSS', 'Save search', and 'Advanced'. A 'Help' link is located at the bottom right of the search bar area.

Below the search bar, there are several options: 'Show additional filters', 'Display Settings: Summary, 20 per page, Sorted by Recently Added', 'Send to:', and 'Filters: Manage Filters'. The 'Article types' section is expanded, showing 'Clinical Trial' and 'Practice Guideline' (which is highlighted with a red box). Other options include 'Review' and 'More ...'. The 'Text availability' section shows 'Abstract available', 'Free full text available', and 'Full text available'.

The search results section displays 'Results: 1 to 20 of 111' and navigation buttons for 'First', 'Prev', 'Page 1 of 6', 'Next', and 'Last'. The first result is a 'Practice Guideline' titled 'Predictors of suppurative complications for acute sore throat in primary care: prospective clinical cohort study.' by Little P, Stuart B, Hobbs FD, Butler CC, Hay AD, Campbell J, Delaney B, Broomfield S, Barratt P, Hood K, Everitt H, Mullee M, Williamson I, Mant D, Moore M; DESCARTE investigators. The citation is 'BMJ. 2013 Nov 25;347:f6867. doi: 10.1136/bmj.f6867. PMID: 24277339 [PubMed - indexed for MEDLINE] Free PMC Article'. There is a link for 'Related citations'.

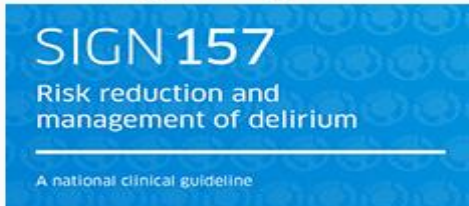
On the right side, there are two promotional boxes: 'New feature' with the text 'Try the new Display Settings option - Sort by Relevance' and 'Titles with your search terms' with the text 'A child with earache. Are antibiotics the best tre [Aust Fam Physician. 2002]'. A 'See more...' link is at the bottom right.

## Delirium is among the most common of medical emergencies.

SIGN 157: Risk reduction and management of delirium provides recommendations based on current evidence for best practice in the detection, assessment, treatment and follow up of adults with delirium, as well as reducing the risk of delirium. The guideline applies to all settings: home, long-term care, hospital, and hospice.



### New guideline published



First guideline on risk reduction and management of delirium for Scotland

### 25 years of SIGN guidelines



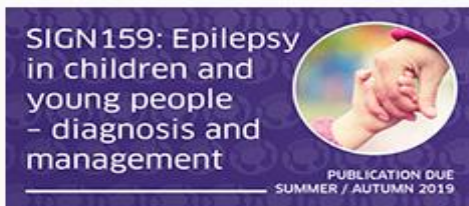
[View our time line](#)

### Patient booklet



Read the booklet [here](#)

### Raising awareness



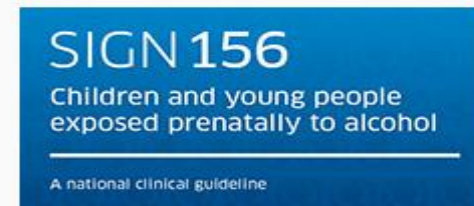
Forthcoming national clinical guideline

### MHRA advice on Valproate



MHRA advice. Affects guidelines SIGN 127 | SIGN 143 | SIGN 155

### Guideline



First UK guideline for diagnosing fetal alcohol spectrum disorder (FASD)



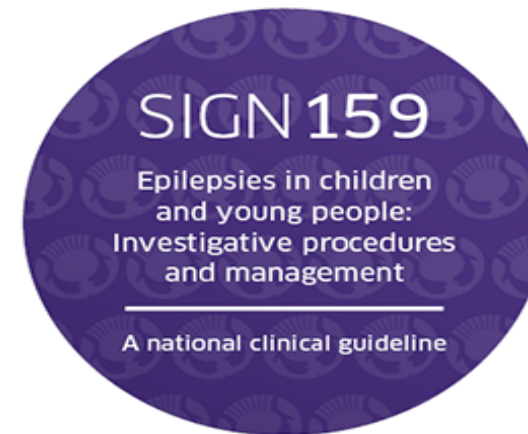
## Improving patient care through evidence-based guidelines

### **SIGN 159: Epilepsies in children and young people: investigative procedures and management**

This new guideline will enable healthcare professionals to appropriately investigate children presenting with seizures, consider correct management including early referral for specialist treatment where appropriate and create a clear transition plan for children who continue to have epilepsy into their adult life.

Read the new guideline here.

<http://www.sign.ac.uk/>



Eating disorders - consultation draft open for comments

Find out more

### **Epilepsy**

Patient booklets now published



Epilepsy in Children: Patient Booklets Now Published

Find out more

### **COVID-19 guidance**



Assessment of COVID-19 in primary care Evidence review, updated 03/02/2021

Definitions of respiratory patients at high risk of COVID-19 infection, for shielding (PDF) published 30/04/2020

COVID-19 position statement: CPAP for COVID-19-related respiratory failure (PDF) updated 09/09/2020

# Our guidelines

Home / Our guidelines

• **Founded in 1993**

This is a list of current guidelines, guidelines under development and archived guidelines that have been or are being developed or updated by the Scottish Intercollegiate Guidelines Network.

| <span>Current</span> <span>In development</span> <span>Proposed</span> <span>Archived</span> <span>Apps</span> |  |                        |           |
|--|--|------------------------|-----------|
| Number   | Title  | Topic                  | Published |
|  | Assessment of COVID-19 in primary care   | Infectious disease     | 2021      |
| 159  | Epilepsies in children and young people: Investigative procedures and management | Central nervous system | 2021      |
| 142  | Management of osteoporosis and the prevention of fragility fractures             | Musculoskeletal        | 2021      |
| 160  | Management of suspected bacterial lower urinary tract infection in adult women   | Urogenital             | 2020      |
| 161  | Managing the long-term effects of COVID-19                                       | Infectious disease     | 2020      |
| 158  | British guideline on the management of asthma                                    | Respiratory            | 2019      |

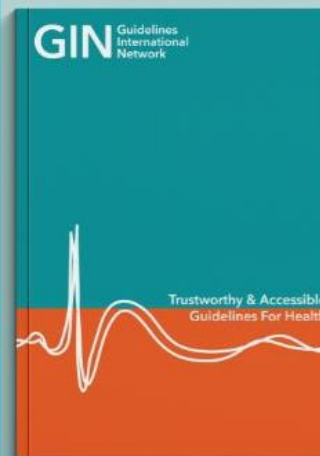
[View the board >](#)

## International Guidelines Library & Registry

The open access GIN library contains links to around 3000 guidelines, published or endorsed by GIN members, as well as health guidelines from non-member organisations.

Additionally, there is a register of planned guidelines and guidelines in development, which is open and free of charge to any guideline producers with the aim of avoiding duplication of effort, increasing transparency and offering potential for collaboration.

[Visit our library >](#)



## Guidelines International Network

# Guidelines International Network

<http://www.g-i-n.net/>

2,972 Result(s) Found

- Countries of Application
- Publication Year
- Authors
- Publication Scope
- Languages
- Guideline Publication Status
- Name of Endorsing Member Organization
- Willingness to Collaborate

Group By

- Development +
- Living guideline +
- Planned +
- Published +
- Replaced +
- Review +
- Withdrawn +

# Guidelines International Network

53 Result(s) Found

Your Filters

English ×

 Reset filters

Development -

**Clinical Practice Guideline: Tympanostomy Tubes in Children (Update)**

Expected Publication Date: 1/1/2022

Authors: AAO HNSF (US)

MeSH Terms:

Otorhinolaryngologic Diseases (C09)

Publication Scope: assessment, diagnosis, management, treatment

Countries of Application: US

Guideline Publication Status : Development

Languages : English

Guideline Contact: Taskin Monjur (Tmonjur@entnet.org)

 View publication

 Add to Saved list

Living guideline +

Published +

Publication Year

Countries of Application

Authors

Publication Scope

Languages

Willingness to Collaborate

Guideline Publication Status

Name of Endorsing Member Organization

Group By

Guideline Publication Status

Sort

Ascending

Apply

# AASLD

[www.aasld.org](http://www.aasld.org)



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JOIN US FOR THE AASLD /  
FDA DILI CONFERENCE APRIL  
20-22

The conference will feature panel discussions and a  
live poster session.

LEARN MORE AND REGISTER



## AASLD EVENTS

Meetings and webinars offer opportunities for professional development,  
networking and collaboration.



*The AASLD is where I stay up-to-date on hepatology breakthroughs, establish life-long professional relationships, and contribute creatively to preventing and curing liver disease.*



Rotonya M. Carr, MD  
AASLD Member since 2008



Become a Member



Qs

❖ **Is it possible to search for practice guidelines in PubMed?**



# Structured Abstracts and Summaries

- ❖ UpToDate (subscribe)

- [www.uptodate.com](http://www.uptodate.com)

- ❖ BMJ Best Practice (subscribe)

- <https://bestpractice.bmj.com/>

- ❖ ACP Journal Club (part charge)

- <http://acpjc.acponline.org/>

- ❖ Bandolier (free)

- <http://www.bandolier.org.uk>



# UpToDate

[www.uptodate.com](http://www.uptodate.com)

- ❖ the premier evidence-based clinical decision support resource, trusted worldwide by healthcare practitioners to help them make the right decisions at the point of care.
- ❖ It is proven to change the way clinicians practice medicine, and is the only resource of its kind associated with improved outcomes.

# UpToDate

[www.uptodate.com](http://www.uptodate.com)

- Concise comprehensive uptodate reviews of clinical topics in multiple specialties
- 25 Specialties
- 10000+ Topics
- Including diagnostic and therapy methods as well as drug instructions related to most of the diseases
- 6000+ famous international expert authors and peer reviewers
- Integrated into Electronic Medical Record(EMR) in the most hospitals in America.

搜索 UpToDate

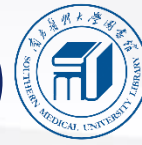


## Exercise

❖ Please use UpToDate to find out the answer to target BP goals in infants with hypertension.

**Target BP goal** — Although target BP goals have not been established for infants treated with antihypertensive therapy, we use a targeted BP goal less than the 90<sup>th</sup> percentile as recommended by the 2017 American Academy of Pediatrics Guidelines for Screening and Management of High Blood Pressure in Children and Adolescents .

# BMJ Best Practice(BP)



南方医科大学图书馆  
SOUTHERN MEDICAL UNIVERSITY LIBRARY

<https://bestpractice.bmj.com/>

Access provided by: Southern Medical University Log in Create account Help ▾

**BMJ Best Practice 临床实践**

Search conditions, symptoms... 🔍

Recent updates Specialties Calculators Procedural videos Evidence Drugs

### Best Practice app

Get fast access to clinical answers.

### Important updates

31 五月 2018  
🚫 **Post-exposure HIV prophylaxis**

31 五月 2018  
🚫 **Post-exposure HIV prophylaxis**

30 五月 2018  
🚫 **HIV infection**

### Re-inventing BMJ Best Practice

Our programme of product development

# BMJ Best Practice(BP)

<https://bestpractice.bmj.com/>

- ❖ A clinical decision support tool, uniquely structured around the patient consultation, with advice on symptom evaluation, tests to order and treatment approach.
- ❖ It is ranked one of the best clinical decision support tools for health professionals worldwide.

# BMJ Best Practice(BP)

<https://bestpractice.bmj.com/>

- ❖ BP's in-house evidence team continues to collaborate with over 1,600 international expert authors and over 2,500 peer reviewers, to ensure that BP provides access to the best available information possible, in line with the robust evidence processes that include:



# BMJ Best Practice(BP)

<https://bestpractice.bmj.com/>

- ❖ Systematic searches for high quality new and updated international guidelines.
- ❖ Continuous in-house scanning and triaging of drug alerts.
- ❖ Daily monitoring and triaging of user/customer feedback by BP's Senior Clinical Editor.

# BMJ Best Practice(BP)

<https://bestpractice.bmj.com/>

- ❖ External peer review of all new topics by at least 2 leading international experts and practicing clinicians.
- ❖ Internal peer review and sign-off for all content by in-house pharmacist and clinical editors.
- ❖ Updated daily, together with information about the changes made.

# BMJ Best Practice(BP)

<https://bestpractice.bmj.com/>

- ❖ 4 categories, 32 specialties, 1010 topics(847 disease related )
- ❖ 7000+ guidelines
- ❖ 10000+ diagnostic approaches
- ❖ 3500+ clinical photos
- ❖ 3000+ diagnostic investigations
- ❖ 250+ calculators
- ❖ EBM toolkit, patient education, CME certifications, videos, app...

# Medical Calculators

- ❖ To enable decisions to be made on the best available evidence in a timely way, BP has partnered with a leading supplier of medical calculators, EBMcalc.
- ❖ These easy to use, interactive calculators cover medical formulas, clinical criteria sets, decision tree analysis, dose/unit converters and more.

# Medical Calculators

- ❖ Over 250 of these interactive calculators are now available within BP and the app.
- ❖ To access you can browse calculators from the BP homepage or search for a specific calculator in the search bar.

# Procedural videos

- ❖ Introduced in 2017, BP now has procedural videos which cover essential clinical techniques such as bag-valve-mask ventilation, lumbar puncture and performing an ECG.
- ❖ A list of equipment, contraindications, indications, complications and aftercare is included.

# New clinical answers

Practical evidence for healthcare decision making

- ❖ BP has teamed up with Cochrane Clinical Answers to better deliver evidence and inform decision making at the point of care.
- ❖ Cochrane Clinical Answers distil the essential information from Cochrane systematic reviews into a short question and answer, ideal for use at the point of care.

# New clinical answers

Practical evidence for healthcare decision making

- ❖ Evidence is displayed in a user friendly format, mixing narrative, numbers and graphics along with key data including Population, Intervention, Comparison, Outcome and GRADE summaries.
- ❖ Cochrane Clinical Answers is now available in over 70% of most popular BMJ Best Practice topics.



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### Browse Clinical Answers

Allergy & intolerance  
Blood disorders  
Cancer  
Child health  
Complementary & alternative medicine  
Consumer & communication strategies  
Dentistry & oral health  
Developmental, psychosocial & learning problems  
Ear, nose & throat  
Effective practice & health systems  
Endocrine & metabolic  
Eyes & vision  
Fertility  
Gastroenterology & hepatology  
Genetic disorders  
Gynecology  
Health & safety at work  
Heart & circulation  
Infectious disease  
Kidney

### Question:

**How do bisphosphonates compare with placebo/no treatment and each other in people with multiple myeloma?**

### Clinical Answer:

**When bisphosphonates were compared with each other for treatment of people with multiple myeloma, zoledronate was consistently ranked the best in terms of efficacy, followed by pamidronate and clodronate. However, approximately 1% of people taking zoledronate were reported as developing osteonecrosis of the jaw (ONJ).**

Trials comparing a bisphosphonate (etidronate, pamidronate, clodronate, ibandronate or zoledronate) with placebo, no bisphosphonate or an alternative treatment regimen were combined in a network meta-analysis (where interventions are compared indirectly via common comparators).

Network meta-analysis showed that zoledronate appears to be superior to etidronate in terms of overall survival (moderate-quality evidence) and superior to ibandronate (moderate-quality evidence) and clodronate (low-quality evidence; analysis did not quite reach statistical significance) in terms of total skeletal events. However, zoledronate was more commonly associated with ONJ than clodronate (low-quality evidence).

Zoledronate was reported as superior to placebo/no treatment in terms of

THIS CLINICAL ANSWER IS UPDATED 

### Search Clinical Answers



Clinical Answer derived from



Bisphosphonates in multiple myeloma: an updated network meta-analysis

### Related Clinical Answers

**Q.** What are the effects of blood transfusion for preventing stroke in children and adolescents with sickle cell disease?

**Q.** Can prophylactic antibiotics help to prevent pneumococcal infection in children with sickle cell disease?

# EBM Toolkit

- ❖ The EBM Toolkit enables users to learn how to evaluate how much weight can be put on study results and how far results from trials can be generalized into routine clinical practice.
- ❖ It includes contributions from some of the leading thinkers in EBM and introduces key methods such as clarifying a clinical question, designing a search, appraising/ synthesizing research and assessing the quality of evidence.
- ❖ It also promotes shared decision making between clinicians and patients.

# Excercise

- ❖ **Please use BMJ Best Practice to find out the guideline about Panic disorders written by National Institute for Health and Care Excellence and last published in 2011. Write down the guideline's title and the main symptoms of generalized anxiety disorder.1**

Title: Generalised anxiety disorder and panic disorder in adults: management

Symptoms: having a number of different worries that are excessive and out of proportion to a particular situation having difficulty controlling one's worries.

# ACP Journal Club

*<http://acpjc.acponline.org/>*

- ❖ Actually a journal produced by the American College of Physicians-American Society of Internal Medicine (ACP-ASIM).
- ❖ Its stated aim is to select published articles according to explicit criteria and to abstract those studies and reviews that warrant immediate attention by physicians attempting to keep pace with important advances in the treatment, prevention, diagnosis, cause, prognosis, or economics of the disorders managed by internists.

# ACP Journal Club

*<http://acpjc.acponline.org/>*

- ❖ About 130 journals systematically surveyed
- ❖ Highest-validity articles abstracted
- ❖ Structured abstracts to guide critical appraisal
- ❖ Clinical commentary



<http://www.acpjc.org>

## Archived Issues 1991-2008

1990s 2000s

2000 2001 2002 2003 2004 2005 2006 2007 2008

Volume 148 | Issue 2  
1 March 2008

Volume 148 | Issue 1  
1 January 2008

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## Search results

### ARTICLE TYPE


|                  |      |
|------------------|------|
| Letter           | 1140 |
| Abstract         | 1063 |
| Book Review      | 839  |
| Research Article | 151  |
| Review Article   | 53   |
| More             | ▼    |

### TOPICS

|  |     |
|--|-----|
| Diagnostic medicine                    | 820 |
| Research and reporting methods         | 803 |
| Hospital medicine                      | 580 |
| Prevention, policy, and public health  | 552 |
| Cardiology and cardiovascular diseases | 467 |
| More                                   | ▼   |

### PUBLICATION DATE

1 - 20 of 3377 result for "sepsis AND steroids"

 Save search

 RSS

Refine Search ▼

Sort by: Best Match ▼

ACP Journal Club | 17 January 2017

### In patients with severe sepsis, hydrocortisone did not prevent progression to septic shock

Bram Rochwerg, MD, MSc, Gordon Guyatt, MD, MSc

ACP Journal Club | 19 June 2018

### Hydrocortisone did not reduce mortality at 90 days in patients with septic shock

Brent A. Duran, DO, Robert G. Badgett, MD, Steven Q. Simpson, MD

ACP Journal Club | 19 June 2018

### Hydrocortisone plus fludrocortisone reduced mortality at 90 days in patients with septic shock

Brent A. Duran, DO, Robert G. Badgett, MD, Steven Q. Simpson, MD

Original Research | 7 July 2020





### Association Between Oral Corticosteroid Bursts and Severe Adverse Events:

ACP Journal Club | 17 January 2017

## In patients with severe sepsis, hydrocortisone did not prevent progression to septic shock

Bram Rochwerg, MD, MSc, Gordon Guyatt, MD, MSc

<https://doi.org/10.7326/ACPJC-2017-166-2-010>

 Full Text |  PDF |  Tools |  Share

### Source Citation

Keh D, Trips E, Marx G, et al; SepNet-Critical Care Trials Group. **Effect of hydrocortisone on development of shock among patients with severe sepsis: the HYPRESS randomized clinical trial.** JAMA. 2016;316:1775-85. <https://pubmed.ncbi.nlm.nih.gov/27695824>

### Clinical Impact Ratings

Critical Care: ★★★★★☆☆



# Bandolier

<http://www.bandolier.org.uk/>



Bandolier

"Evidence based thinking about health care"

Match ALL words ▾

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[Oxford Pain Site](#)

[Bandolier links](#) | [Bandolier background](#)

## Welcome to Bandolier

Apologies for being quiet this past few months. New material will begin being posted on the website. What has been holding things back has been a very considerable dynamic in figuring out how clinical trials in chronic pain should be interpreted. The evidence is accumulating that using average pain score values is just plain wrong, and a new approach based on responder analyses will be needed. But it's a tad more complicated than that, and it will probably be a little while yet before all the finer points are teased out.

The photograph this month is from an autumnal view of the Westonbirt Arboretum in Gloucestershire.

## Disclaimer

The information in Bandolier is not intended as specific medical advice, and is Bandolier's own interpretation of data largely published elsewhere. Individuals seeking specific advice should consult their own doctor.

## Newly written for Bandolier for October-December 2010

[What does "evidence" mean in chronic pain](#)  
[Pregabalin in neuropathic pain - 2010 update](#)  
[Duloxetine: painful diabetic neuropathy and fibromyalgia \(2010 update\)](#)  
[Carbamazepine for neuropathic pain](#)  
[Investigating OTC oral analgesics](#)

## Bandolier Books and Journal

Visit the section on [Bandolier Books](#), which will keep you informed about other products from the Bandolier stable. Most recent is "[Bandolier's Little Book of Making Sense of the Medical Evidence](#)" available from [Oxford University Press](#).

All previous issues of the Bandolier Journal are available online for [Bandolier](#) and [ImpAct](#); they are also available as [PDFs](#).

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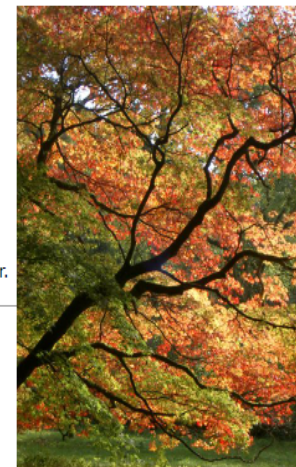
▶ [Knowledge Library](#)

▶ [Healthy Living Zone](#)

▶ [Extended Essays](#)

▶ [Learning Zone](#)

▶ [EBM Glossary](#)



## Bandolier Knowledge

In this section **Bandolier** collects good quality evidence under a variety of different headings. We search for systematic reviews of treatments, of evidence about diagnosis, epidemiology or health economics, and abstract it. It is time consuming, and **Bandolier** has been able to do it only through sponsorship, which is a limiting factor. Sponsorship is acknowledged at the top of each topic heading. The fundamental criterion is that sponsors have no say or control whatsoever. Users who know of no-strings funding to maintain our independent status, please let us know.

### Alphabetical Listing

| A   | B  | C                                       |
|---|--|---|
| <a href="#">Acute pain</a>                      | <a href="#">Back pain</a>                                      | <a href="#">Cancer</a>                  |
| <a href="#">Alcohol, coffee, tea</a>            | <a href="#">Benign prostatic hyperplasia</a>                   | <a href="#">Cancer pain</a>             |
| <a href="#">Allergy, asthma and respiratory</a> | <a href="#">Blood pressure</a>                                 | <a href="#">Cardiac</a>                 |
| <a href="#">Arthritis, bones and joints</a>     | <a href="#">Book reviews</a>                                   | <a href="#">Chronic pain</a>            |
| <a href="#">Aspirin</a>                         |  | <a href="#">Claudication</a>            |
| <a href="#">Atrial fibrillation</a>             |  | <a href="#">Complementary</a>           |
| D   | E  | F                                       |
| <a href="#">Dental</a>                          | <a href="#">Eating</a>   | <a href="#">Family health</a>           |
| <a href="#">Diabetes</a>                        | <a href="#">EBM stories</a>                                    |   |
| <a href="#">Diagnostics</a>                     | <a href="#">ENT</a>  |   |
| <a href="#">Drug abuse</a>                      | <a href="#">Erectile dysfunction and premature ejaculation</a> |   |
| <a href="#">Dysmenorrhoea</a>                   | <a href="#">Exercise</a>                                       |   |
|   | <a href="#">Eyes</a>   |   |
| G   | H  | I                                       |
| <a href="#">Gastrointestinal</a>                | <a href="#">Handwashing</a>                                    | <a href="#">Internet and electronic</a> |
| <a href="#">Genetics</a>                        | <a href="#">Health economics and implementation</a>            | <a href="#">Infectious diseases</a>     |
| <a href="#">Gout</a>                            | <a href="#">Healthy living</a>                                 |   |
| J   | L  | M                                       |

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## Aspirin in postoperative pain

### Clinical bottom line

A single oral dose of aspirin is effective in the relief of postoperative pain (doses 600 mg to 1200 mg). A dose of 600/650 mg had an NNT of 4.4 (4.0 to 4.9) for at least 50% pain relief over 4 to 6 hours compared with placebo in pain of moderate to severe intensity. This is as effective as 1000 mg of paracetamol, but is associated with increased adverse effects (gastric irritation and nausea).

Aspirin (Acetylsalicylic Acid) is an important analgesic. It is widely available, and prescriptions of 300 mg tablets total approximately 3/4 million annually in England alone (1996).

### Systematic review

JE Edwards, AD Oldman, LA Smith, PJ Wiffen, D Carroll, HJ McQuay, RA Moore. Oral aspirin in postoperative pain: a quantitative systematic review. *Pain* 81 (1999) 289-97.

JE Edwards, A Oldman, L Smith, SL Collins, D Carroll, P Wiffen, HJ McQuay, RA Moore. Single dose aspirin in acute pain. *The Cochrane Library*, Update Software, Oxford 2000 (updated with no additional results 2002).

- Date review completed: January 2002
- Number of trials included: 72 (88 aspirin vs. placebo comparisons)
- Number of patients: 6,550 (3,253 active / 3,297 control).
- Control group: placebo
- Main outcomes: Main outcomes: pain relief at 4-6 hours (TOTPAR / SPID), Number-needed-to-treat (NNT) (with 95% confidence intervals), relative benefit and relative risk (with 95% confidence intervals).

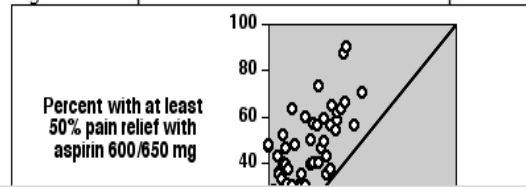
Inclusion criteria were full journal publication; randomised placebo controlled trials of aspirin; postoperative oral administration; adult patients; group size at least 10; double blind; standard pain outcomes; baseline pain moderate to severe.

Mean TOTPAR and SPID values for each trial were converted to %maxTOTPAR and %maxSPID, and then the proportion of patients achieving at least 50%maxTOTPAR were calculated. This information was used to calculate NNT and relative risk. Adverse effects frequency data were used to calculate numbers-needed-to-harm and relative risk.

### Findings

Aspirin was significantly superior to placebo with single oral doses of 600/650 mg, 1000 mg and 1200 mg. A dose of 600/650 mg had an NNT of 4.4 (4.0 to 4.9). Aspirin 500 mg was not effective for pain relief. There was insufficient data to establish the efficacy of 300/325 mg and 900 mg doses.

Figure: Comparisons of various doses of aspirin with placebo in postoperative pain.



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➤ EBM Glossary



# Systematic Review/Meta-Analyses Resources

❖ Cochrane Database of Systematic Reviews (CDSR)

*[www.cochrane.org](http://www.cochrane.org)*

❖ Database of Abstracts of Reviews of Effects (DARE)

*[www.crd.york.ac.uk/crdweb](http://www.crd.york.ac.uk/crdweb)*

❖ PubMed Systematic Reviews

*[www.ncbi.nlm.nih.gov/entrez/query/static/clinical.shtml](http://www.ncbi.nlm.nih.gov/entrez/query/static/clinical.shtml)*




# Cochrane Library

<http://www.cochranelibrary.com/>

- ❖ The current resource with the highest methodological rigor
- ❖ For each clinical question, all of the English literature meticulously searched for randomized trials
- ❖ Large systematic reviews with valid methods + collaborative effort
- ❖ Conclusions are based on all the evidence from valid randomized trials
- ❖ Limitations
  - only addresses questions amenable to randomized trials
  - most of medicine has not been studied enough to allow for conclusions



 We noticed your browser language is **Simplified Chinese**.

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Cochrane Reviews  
8Cochrane Protocols  
0Trials  
331Editorials  
1Special Collections  
0Clinical Answers  
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More

## Filter your results

## Date



## Publication date

The last 3 months ..... 0

The last 6 months ..... 0

The last 9 months ..... 0

The last year ..... 0

The last 2 years ..... 0

## Custom Range:

 to 

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## Language



Español ..... 8

Show 13 more

## Type



Intervention ..... 8

8 Cochrane Reviews matching **sepsis steroids** in **Title Abstract Keyword**Did you mean: *asepsis* | *sepsis* | *sepsid*

Cochrane Database of Systematic Reviews

Issue 2 of 12, February 2022

 Select all (8)

Export selected citation(s)

Show all previews

Order by Relevancy

Results per page 25

1 **Corticosteroids as adjunctive therapy in the treatment of influenza**

Louise Lansbury, Chamira Rodrigo, Jo Leonardi-Bee, Jonathan Nguyen-Van-Tam, Wei Shen Lim

Intervention Review 24 February 2019 Free access

Show PICOs Show preview

2 **Pharmacological interventions for the prevention of allergic and febrile non-haemolytic transfusion reactions**

Arturo J Martí-Carvajal, Ivan Solà, Luis Ernesto González, Graciela Leon de Gonzalez, Nelcy Rodriguez-Malagon

Intervention Review 16 June 2010

Show preview

3 **Inhaled versus systemic corticosteroids for the treatment of bronchopulmonary dysplasia in ventilated very low birth weight preterm infants**

Sachin S Shah, Arne Ohlsson, Henry L Halliday, Vibhuti S Shah

Intervention Review 16 October 2017 Free access

# DARE

[www.crd.york.ac.uk/crdweb](http://www.crd.york.ac.uk/crdweb)

UNIVERSITY *of* York  
Centre for Reviews and Dissemination

**NHS**  
National Institute for  
Health Research

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| Title   | <input type="text"/>                         | OR  |
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| Record date   | <input type="text"/> to <input type="text"/> |     |
| Publication year  | <input type="text"/> to <input type="text"/> |     |
| <input type="button" value="Search"/> <input type="button" value="Clear"/> <input type="button" value="MeSH search"/> |  |     |

- |                                  |   |
|----------------------------------|---|
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|                                  | <input type="checkbox"/> CRD assessed review (full abstract)              |
|                                  | <input type="checkbox"/> Cochrane review                                  |
|                                  | <input type="checkbox"/> Cochrane related review record                   |
| <input type="checkbox"/> NHS EED | <input type="checkbox"/> CRD assessed economic evaluation (bibliographic) |
|                                  | <input type="checkbox"/> CRD assessed economic evaluation (full abstract) |
| <input type="checkbox"/> HTA     | <input type="checkbox"/> HTA in progress                                  |
|                                  | <input type="checkbox"/> HTA published                                    |

## News

### DARE and NHS EED archives secure on CRD website until at least the end of March 2022

CRD would like to reassure our many thousands of users that we are committed to maintaining archive versions of DARE and NHSEED until at least the end of March 2022 (the point to which we have funds to support maintenance). [Bibliographic records were published on DARE and NHS EED until 31st March 2015. Searches of MEDLINE, Embase, CINAHL, PsycINFO and PubMed were continued until the end of the 2014.]

We know the databases remain a valuable resource to those seeking to find out if reviews and economic evaluations have already been done before embarking on new projects, and in providing brief critical reviews and bottom line statements of these.

### HTA database

## Most shared

[Effect of long-acting beta-agonists on the frequency of COPD exacerbations: a meta-analysis](#)

[Effects of the Finnish Alzheimer Disease Exercise Trial \(FINALEX\): a randomized controlled trial](#)

[A systematic review and meta-analysis of yoga for low back pain](#)

[A comparison of the clinical effectiveness and cost-effectiveness of treatments for moderate to severe psoriasis](#)

[Radiation-induced cardiac toxicity after therapy for breast cancer: interaction between treatment era and follow-up duration](#)

[Efficacy of complementary and alternative medicine therapies in relieving cancer pain: a systematic review](#)

[Continuous passive motion following primary total knee arthroplasty: short- and long-term effects on range of motion](#)

[Role of acupuncture in the treatment of insomnia](#)

## PubMed Clinical Queries

This tool uses [predefined filters](#) to help you quickly refine PubMed searches on clinical or disease-specific topics. To use this tool, enter your search terms in the search bar and select filters before searching.

**Note:** The Systematic Reviews filter has moved; it is now an option under the "Article Type" filter on the main PubMed search results page.

**Search**

### Filter category

- Clinical Studies  
 COVID-19

Clinical Queries filters were developed by [Haynes RB et al.](#) to facilitate retrieval of clinical studies.

### Filter

Therapy

See [Clinical Queries filter details](#).

### Scope

Broad

Returns more results: less specific, but more comprehensive. See [filter details](#).



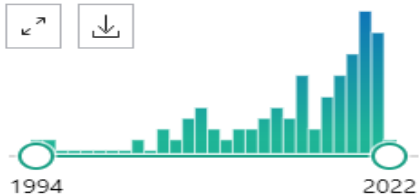
# Finding Meta-Analysis in *PubMed*

**PubMed.gov** sepsis steroids  [Advanced](#) [Create alert](#) [Create RSS](#) [User Guide](#)

Sorted by: Best match

MY NCBI FILTERS  75 results Page 1 of 8

RESULTS BY YEAR



TEXT AVAILABILITY

- Abstract
- Free full text
- Full text

ARTICLE ATTRIBUTE

- Associated data

ARTICLE TYPE

- Books and Documents
- Case Reports
- Clinical Trial
- Meta-Analysis
- Practice Guideline
- Randomized Controlled Trial

**Filters applied: Meta-Analysis. Clear all**

1 **Association Between Administration of Systemic Corticosteroids and Mortality Among Critically Ill Patients With COVID-19: A Meta-analysis.**  
Cite WHO Rapid Evidence Appraisal for COVID-19 Therapies (REACT) Working Group, Sterne JAC, Murthy S, Diaz JV, Slutsky AS, Villar J, Angus DC, Annane D, Azevedo LCP, Berwanger O, Cavalcanti AB, Dequin PF, Du B, Emberson J, Fisher D, Giraudeau B, Gordon AC, Granholm A, Green C, Haynes R, Heming N, Higgins JPT, Horby P, Jüni P, Landray MJ, Le Gouge A, Leclerc M, Lim WS, Machado FR, McArthur C, Meziani F, Möller MH, Perner A, Petersen MW, Savovic J, Tomazini B, Veiga VC, Webb S, Marshall JC. JAMA. 2020 Oct 6;324(13):1330-1341. doi: 10.1001/jama.2020.17023. PMID: 32876694 [Free PMC article.](#)

2 **The effects of **steroids** during **sepsis** depend on dose and severity of illness: an updated meta-analysis.**  
Cite Minneci PC, Deans KJ, Eichacker PQ, Natanson C. Clin Microbiol Infect. 2009 Apr;15(4):308-18. doi: 10.1111/j.1469-0691.2009.02752.x. PMID: 19416302 [Free PMC article.](#) [Review.](#)  
A previous meta-analysis determined that the effects of **steroids** during **sepsis** were dose-dependent: since then, additional trials have been published. ...There was no effect of response to adrenocorticotrophic hormone (ACTH) stimulation testing concerning the effect ...

3 **Association of Corticosteroid Treatment With Outcomes in Adult Patients With **Sepsis**: A Systematic Review and Meta-analysis.**  
Cite Fang F, Zhang Y, Tang J, Lunsford LD, Li T, Tang R, He J, Xu P, Faramand A, Xu J, You C. JAMA Intern Med. 2019 Feb 1;179(2):213-223. doi: 10.1001/jamainternmed.2018.5849. PMID: 30575845 [Free PMC article.](#)  
IMPORTANCE: Although corticosteroids are widely used for adults with **sepsis**, both the overall benefit

# Meta-Search Engines

TRIP

*tripdatabase.com*



SUMSearch2

*sumsearch.org*



# TRIP Medical Database

[www.tripdatabase.com](http://www.tripdatabase.com)

- ❖ Meta-search engine
- ❖ Performs a simple search of more than 75 databases
- ❖ Searched over 125,000,000 times
- ❖ Over 70% of clinical questions answered
- ❖ Millions of articles items indexed & uniquely ranked
- ❖ Trip Pro is the most advanced version of Trip, it has extra content and functionality

## Trip medical database

A smart, fast tool to find high quality clinical research evidence

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 [Search](#)

### Trusted Answers

A smart, fast tool to find high quality clinical research evidence.



### Upgrade to Trip PRO

Trip Pro is the most advanced version of Trip it has extra content and functionality, including:

# sepsis steroids

2,734 results [Pro users have access to +29 Systematic Reviews](#)

Latest and Greatest

## Filter Results

[Toggle All Types](#)

- All Secondary Evidence
- Systematic Reviews 60
- Evidence Based Synopses 98
- Guidelines
  - Aus. & NZ 27
  - Canada 22
  - USA 156
  - UK 96
  - Other 115
- Regulatory Guidance 62
- Key primary research 11
- Clinical Q&A 4

Order By  Show Snippets

[Results page key](#)

**1** **Steroids in Sepsis and Septic Shock**

Evidence Based Synopses 2018 [Washington University Emergency Medicine Journal Club](#)

**Steroids** in **Sepsis** and Septic Shock Emergency Medicine > Journal Club > Archive > May 2018 Toggle navigation May 2018 **Steroids** in **Sepsis** and Septic Shock Vignette You're working the weekend shift in TCC when you get a page: triage patient to 3L for low BP. You meet the patient in the room and find a critically ill-appearing 55 year-old female with one week of cough and increased shortness begins to demonstrate an improved BP and MAP and you find the patient a bed in the medical ICU. As the patient is being transferred, you begin to wonder whether **steroids** would be beneficial in this patient with clear septic shock. After all, you know that much of the problem in **sepsis** is the inflammatory response, which would theoretically be mitigated by **steroid** administration. You begin to search



[Broken Link?](#)

**2** **Are Non-Steroidal Anti-Inflammatory Drugs (NSAIDs) safe in the context of the COVID-19 pandemic?**

Evidence Based Synopses 2020 [Covid-19 Ad hoc papers](#)

Are Non- **Steroidal** Anti-Inflammatory Drugs (NSAIDs) safe in the context of the COVID-19 pandemic? COVID-19 Scientific Advisory Group Rapid Response Report April 22, 2020 © 2020, Alberta Health Services, COVID-19 Scientific Advisory Group Key Research Topic: Use of Non- **Steroidal** Anti-Inflammatory Drugs (NSAIDs) in COVID-19 Patients 1. Should patients who are on prescribed NSAIDs as chronic therapy : European Medicines Agency KRS: Knowledge Resource Services MERS: Middle East Respiratory Syndrome NHS: National Health Service NICE: National Institute for Health and Care Excellence NSAID: Non- **steroidal** anti-inflammatory drug SAG: Scientific Advisory Group SARS: Severe Acute Respiratory Syndrome WHO: World Health Organization Literature Search Details A literature search was conducted by Rachel Zhao



[Broken Link?](#)

# Trip medical database

A smart, fast tool to find high quality clinical research evidence

Search

PICO

Advanced

Pro

Recent

Pro

Population

e.g. diabetics

Intervention

e.g. a treatment, diagnostic test

Comparison

any comparison intervention

Outcome

e.g. mortality, blood pressure

Search

## SUMSearch2 sumsearch.org/

- ❖ SUMSearch2 is new method of searching the Internet for evidence based medical information.
- ❖ Querying a number of key databases, such as MEDLINE, and the Database of Abstracts of Reviews of Effects (DARE ), SUMSearch aims to select the most appropriate source, format the search query, modify this query if too few or too many hits are found, and return a single document to the clinician.

## Search Pubmed for studies, systematic reviews and guidelines:

Connect search terms with 'AND'.

- Focus:  Intervention  Diagnosis  None  
 Age:  Adult  Pediatrics  Either  
 Human only:  English only:  Require abstracts:   
 Max # iterations:  5  6 [Explain](#)  
 Target # of original studies:  20  50 [Explain](#)

MeSH - 提交 - Please click once.

### News:

- 09/11/2020: SUMSearch back online after problems at the National Library of Medicine servers yesterday
- [Comparison of SUMSearch, Scholar, PubMed published](#)

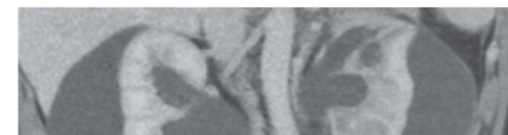
### [About SUMSearch 2](#)

### Other resources:

- [Citation maker](#)
- [Health care policy search](#)
- [Internet browser bookmarklets](#)
- [Internet browser search plugins](#)
- [open Guidelines](#) (open source, collaboratively coded rules) (includes preop assessment)
- [openRules](#) (open source, collaborative prediction rules) (currently has New Pooled Cohort ASCVD Risk Equations and Mayo rule for pulmonary nodules)
- [WikiDoc](#)

### NEJM image challenge:

#### NEJM - Image Challenge





# Research Articles

- ❖ PubMed: limit to randomized controlled trial or clinical trial
- ❖ E-Journal Databases



# PubMed Strategies for Finding Evidence-Based Citations

- ❖ Use PubMed Article Types Filters
  - Randomized Controlled Trial
  - Meta-Analysis
  - Practice Guideline
  - Clinical Trial
  - Consensus Development Conference
- ❖ Use PubMed Clinical Queries section

## TEXT AVAILABILITY

- Abstract
- Free full text
- Full text

## ARTICLE ATTRIBUTE

- Associated data

## ARTICLE TYPE

- Books and Documents
- Case Reports
- Clinical Trial
- Meta-Analysis
- Practice Guideline
- Randomized Controlled Trial
- Review
- Systematic Review

## PUBLICATION DATE

- 1 year
- 5 years
- 10 years
- Custom Range

BACKGROUND: **Sepsis** accounts for 30% to 50% of all in-hospital deaths in the United States. ...METHODS: The Vitamin C, Thiamine and **Steroids** in **Sepsis** (VICTAS) trial is a prospective, multi-center, double-blind, adaptive sample size, randomized, placebo-contro ...

- 2  
Treatment of Patients with Severe **Sepsis** and Septic Shock: Current Evidence-Based Practices.

Cite Lee J, Levy MM.

Share

R I Med J (2013). 2019 Dec 2;102(10):18-21.

PMID: 31795528 [Free article.](#) [Review.](#)

**Sepsis** remains a field of active research with many unknown and unanswered questions. ...It will also critically appraise some of the current controversies in **sepsis** management, such as fluids, **steroids**, early vasopressors, early goal-directed therapy and imm ...

- 3  
Vitamin C, Thiamine, and **Steroids** in the **Sepsis** Conquest: Replete to Defeat.

Guirguis E, Grace Y, Maarsingh H, Tran TC, Tkachuk E.

Cite

J Pharm Pract. 2020 Oct;33(5):682-695. doi: 10.1177/0897190019851923. Epub 2019 Jun 25.

Share

PMID: 31238773 [Review.](#)

Combination therapy with ascorbic acid, thiamine and **steroids** reduced hospital mortality and vasopressor use in **sepsis** and septic shock in a small single-center study. CONCLUSION: Initial studies in patients with **sepsis** and septic shock demonstrated beneficia ...

- 4  
The effects of **steroids** during **sepsis** depend on dose and severity of illness: an updated meta-analysis.

Cite Minneci PC, Deans KJ, Eichacker PQ, Natanson C.

Share

Clin Microbiol Infect. 2009 Apr;15(4):308-18. doi: 10.1111/j.1469-0691.2009.02752.x.

PMID: 19416302 [Free PMC article.](#) [Review.](#)

A previous meta-analysis determined that the effects of **steroids** during **sepsis** were dose-dependent; since then, additional trials have been published. ...There was no effect of response to adrenocorticotrophic hormone (ACTH) stimulation testing concerning the effect ...

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**Note:** The Systematic Reviews filter has moved; it is now an option under the "Article Type" filter on the main PubMed search results page.

Enter your search terms

Search

### Filter category

Clinical Studies

COVID-19

Clinical Queries filters were developed by [Haynes RB et al.](#) to facilitate retrieval of clinical studies.

### Filter

Therapy

See [Clinical Queries filter details](#).

### Scope

Broad

Returns more results: less specific, but more comprehensive. See [filter details](#).

# Advantages of *PubMed*

- ❖ *Free*
- ❖ *Links* to publisher's sites for full-text journals
- ❖ Or, can *order* full-text journal articles
- ❖ *Clinical Queries* section limits retrieval to evidence-based citations

# E-Journals

## ❖ Check with our library for access to full-text e-journals

### 📖 外文期刊

<http://lib.smu.edu.cn/article/index/24>

- AACR Journals
- Annual Reviews全文综述期刊
- BioMed Central
- Cambridge Backfile (剑桥期刊回溯库)
- EBSCO发现系统
- ESI (Essential Science Indicators)
- Journal Citation Reports (Web of Sci...)
- Karger医学电子期刊
- NEJM(New England Journal of Medic...)
- PHMC(ProQuest Health & Medical C...)
- PubMed Central
- Science Online
- SpecialSci外文特色专题数据库
- The Journal of Immunology
- 中科院JCR期刊分区数据在线平台
- AANS (美国神经外科医师协会)
- ASP+BSP (EBSCO)
- BMJ Journals Collection
- Cambridge Journals Online(Medicine)
- Emerald期刊回溯内容
- Faculty Opinions
- Journal of the American Society of N...
- LISTA with Full Text
- OVID LWW
- PNAS (美国科学院院报)
- RSC(Royal Society of Chemistry)
- ScienceDirect
- Springer Protocols实验室指南
- Web of Science (含SCIE数据库)
- 国家科技图书文献中心 (NSTL) 网络版...
- AMA(美国医学会)电子期刊
- Begell数据库
- CALIS外文期刊网
- Cell Press Journals
- Endoscopy
- InCites
- JOVE (实验视频期刊)
- Nature Series
- Oxford Journals
- PubMed
- SAGE Backfile (Sage回溯期刊库)
- SciFinder
- Springerlink
- Wiley Online Library

# Open Access Journal Sites

## ❖ BioMed Central

[www.biomedcentral.com](http://www.biomedcentral.com)



- Independent publishing house providing immediate free access to peer-reviewed biomedical research

## ➤ PubMed Central

[pubmedcentral.gov](http://pubmedcentral.gov)



- National Library of Medicine's free digital archive of biomedical and life sciences journal literature

# NIH Open Access Mandate

- ❖ December 6, 2007 law
- ❖ All investigators funded by NIH submit to NLM's PubMed Central an electronic version of their final, peer-reviewed manuscripts upon acceptance for publication to be made publicly available no later than 12 months after the official date of publication



# Additional Free Journal Sites

## ❖ Free Medical Journals

[freemedicaljournals.com](http://freemedicaljournals.com)

## ❖ Highwire Press

[highwire.stanford.edu](http://highwire.stanford.edu)

A Stanford University web site providing full-text access to over 1,000 highly cited, peer-reviewed journals, including scientific, medical, and social sciences information.

# Search for Evidence in Drug and Natural Medicines Databases

- ❖ Micromedex (subscription)

- [www.micromedex.com](http://www.micromedex.com)

- ❖ Natural Standard Online: available through *MedlinePlus*

- [www.nlm.nih.gov/medlineplus/druginformation.html](http://www.nlm.nih.gov/medlineplus/druginformation.html)

# Micromedex (\$)

[www.micromedex.com](http://www.micromedex.com)

- ❖ Clinical information on toxicology, drugs, drug interactions, and reproductive risks
- ❖ Provides evidence-based medical information:  
*DiseaseDex*
- ❖ Provides evidence-based drug information

# MedlinePlus

<http://www.nlm.nih.gov/medlineplus>

- ❖ for basic quality consumer/patient information
- ❖ Includes drug information
- ❖ Medical Encyclopedia – full-text with illustrations
- ❖ Preformulated *PubMed* searches
- ❖ Interactive tutorials
- ❖ Current health news

Also called: CF

Cystic fibrosis (CF) is an inherited disease of the mucus and sweat glands. It affects mostly your lungs, pancreas, liver, intestines, sinuses and sex organs. CF causes your mucus to be thick and sticky. The mucus clogs the lungs, causing breathing problems and making it easy for bacteria to grow. This can lead to problems such as repeated lung infections and lung damage.

The symptoms and severity of CF vary widely. Some people have serious problems from birth. Others have a milder version of the disease that doesn't show up until they are teens or young adults.

Although there is no cure for CF, treatments have improved greatly in recent years. Until the 1980s, most deaths from CF occurred in children and teenagers. Today, with improved treatments, people with CF live, on average, to be more than 35 years old.

National Heart, Lung, and Blood Institute



ADAM

## Start Here

- [Cystic Fibrosis NIH](#) (National Heart, Lung, and Blood Institute)
- [Cystic Fibrosis Interactive Tutorial](#) (Patient Education Institute) - Requires Flash Player  
Also available in [Spanish](#)
- [Genetics Home Reference: Cystic fibrosis NIH](#) (National Library of Medicine)

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## Related Topics

- [Lung Transplantation](#)
- [Genetics/Birth Defects](#)
- [Lungs and Breathing](#)

## Go Local

Services and providers for **Cystic Fibrosis** in the U.S.

Select Location

[Select from map](#)

## National Institutes of Health

The primary NIH organization for research on *Cystic Fibrosis* is the [National Heart, Lung, and Blood Institute](#)

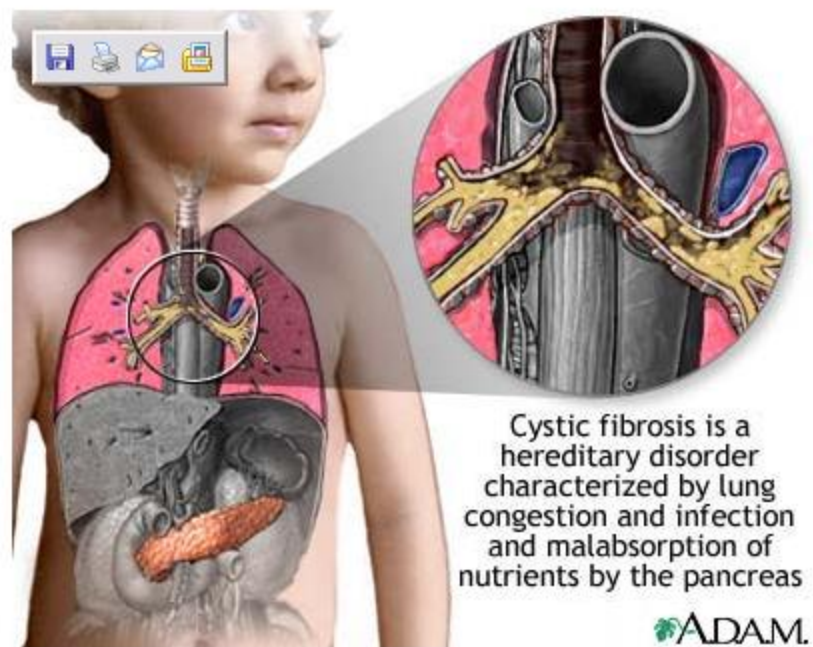
## Overviews

- [Cystic Fibrosis](#) (March of Dimes Birth Defects Foundation)

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## Medical Encyclopedia

### Cystic fibrosis



Cystic fibrosis is the most common cause of chronic lung disease in children and young adults, and the most common fatal hereditary disorder affecting Caucasians in the US.

**Update Date:** 3/23/2001

Updated by: A.D.A.M. Medical Illustration Team



combat  
**COVID.**  
hhs.gov

## COVID-19 Information

Get the latest public health information from CDC  
Get the latest research information from NIH | [Español](#)  
Learn more about COVID-19 and you from HHS

X



### Health Topics

Find information on health, wellness, disorders and conditions



### Drugs & Supplements

Learn about prescription drugs, over-the-counter medicines, herbs, and supplements



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# Drugs, Supplements & Herbal Information page

[www.nlm.nih.gov/medlineplus/druginformation.html](http://www.nlm.nih.gov/medlineplus/druginformation.html)

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## Drugs, Herbs and Supplements

### Drugs

Learn about your prescription drugs and over-the-counter medicines. Includes side effects, dosage, special precautions, and more.

**Browse by generic or brand name:**

A B C D E F G H I J K L M N O P Q R S T U  
V W X Y Z 0-9

For FDA approved labels included in drug packages, see [DailyMed](#).

### Herbs and Supplements

Browse dietary supplements and herbal remedies to learn about their effectiveness, usual dosage, and drug interactions.

[All herbs and supplements](#)

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### Related Topics

- [HIV/AIDS Medicines](#)
- [Antibiotics](#)
- [Antidepressants](#)
- [Blood Pressure Medicines](#)
- [Blood Thinners](#)
- [Cancer Alternative Therapies](#)
- [Cancer Chemotherapy](#)
- [Cold and Cough Medicines](#)
- [Complementary and Alternative](#)



# Drugs, Herbs and Supplements

Home → Drugs, Herbs and Supplements → Aspirin

## Aspirin

pronounced as (as' pir in)



**Why is this medication prescribed?**

**How should this medicine be used?**

**Other uses for this medicine**

**What special precautions should I follow?**

**What special dietary instructions should I follow?**

**What should I do if I forget a dose?**

**What side effects can this medication cause?**

**What should I know about storage and disposal of this medication?**

**In case of emergency/overdose**

**What other information should I know?**

**Brand names**

**Brand names of combination products**

**Other names**

### Why is this medication prescribed?

Prescription aspirin is used to relieve the symptoms of rheumatoid arthritis (arthritis caused by swelling of the lining of the joints), osteoarthritis (arthritis caused by breakdown of the lining of the joints), systemic lupus erythematosus (condition in which the immune system attacks the joints and organs and causes pain and swelling) and certain other rheumatologic conditions (conditions in which the immune system attacks parts of the body). Nonprescription aspirin is used to reduce fever and to relieve mild to moderate pain from headaches, menstrual periods, arthritis, colds, toothaches, and muscle aches. Nonprescription aspirin is also used to prevent heart attacks in people who have had a heart attack in the past or who have angina (chest pain that occurs when the heart does not get enough oxygen). Nonprescription aspirin is also used to reduce the risk of death in people who are experiencing or who have recently experienced a heart attack. Nonprescription aspirin is also used to prevent ischemic strokes (strokes that occur when a blood clot blocks the flow of blood to the brain) or mini-strokes (strokes that occur when the flow of blood to the brain is blocked for a short time) in people who have had this type of stroke or mini-stroke in the past. Aspirin will not prevent hemorrhagic strokes (strokes caused by bleeding in the brain). Aspirin is in a group of medications called salicylates. It works by stopping the production of certain natural substances that cause fever, pain, swelling, and blood clots.

Aspirin is also available in combination with other medications such as antacids, pain relievers, and cough and cold medications. This monograph only includes information about the use of aspirin alone. If you are taking a combination product, read the information on the package or prescription label or ask your doctor or pharmacist for more information.

# Aspirin

## What side effects can this medication cause?

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**Aspirin may cause side effects. Tell your doctor if any of these symptoms are severe or do not go away:**

- nausea
- vomiting
- stomach pain
- heartburn

**Some side effects can be serious. If you experience any of the following symptoms, call your doctor immediately:**

- hives
- rash
- swelling of the eyes, face, lips, tongue, or throat
- wheezing or difficulty breathing
- hoarseness
- fast heartbeat
- fast breathing
- cold, clammy skin
- ringing in the ears
- loss of hearing
- bloody vomit
- vomit that looks like coffee grounds
- bright red blood in stools
- black or tarry stools

Aspirin may cause other side effects. Call your doctor if you experience any unusual problems while you are taking this medication.

If you experience a serious side effect, you or your doctor may send a report to the Food and Drug Administration's (FDA) MedWatch Adverse Event Reporting program online (<http://www.fda.gov/Safety/MedWatch>) or by phone (1-800-332-1088).

**COVID-19 is an emerging, rapidly evolving situation.**

Get the latest public health information from CDC: <https://www.coronavirus.gov>  
 Get the latest research information from NIH: <https://www.nih.gov/coronavirus>

<https://medlineplus.gov/druginfo/meds/a682318.html>

Home → [Drugs, Herbs and Supplements](#) → [Chloroquine](#)

## Chloroquine

pronounced as (klor' oh kwın)



[Why is this medication prescribed?](#)

[How should this medicine be used?](#)

[Other uses for this medicine](#)

[What special precautions should I follow?](#)

[What special dietary instructions should I follow?](#)

[What should I do if I forget a dose?](#)

[What side effects can this medication cause?](#)

[What should I know about storage and disposal of this medication?](#)

[In case of emergency/overdose](#)

[What other information should I know?](#)

[Brand names](#)

### Why is this medication prescribed?

Chloroquine phosphate is in a class of drugs called antimalarials and amebicides. It is used to prevent and treat malaria. It is also used to treat amebiasis.

This medication is sometimes prescribed for other uses; ask your doctor or pharmacist for more information.



# Information Overload!

- ❖ 2 million articles published in biomedical journals each year
- ❖ considering everything of potential biomedical importance would require perusing about 6,000 articles per day...
- ❖ If you only read 2 articles a day, at the end of year you would be 60 centuries behind

# Other EBM Resources

- ❖ Clinical Trials / Clinical Alerts  
<http://www.clinicaltrials.gov/>
- ❖ EMBASE (European equivalent of MEDLINE)
- ❖ Science Citation Index <http://www.webofscience.com>
- ❖ PsycINFO
- ❖ CANCErnet <http://www.cancer.gov>
- ❖ CINAHL
- ❖ Center for Evidence Based Medicine  
<http://www.cebm.net/>

ClinicalTrials.gov is a database of privately and publicly funded clinical studies conducted around the world.

Explore **404,819** research studies in all **50** states and in **220** countries.

See [listed clinical studies related to the coronavirus disease \(COVID-19\)](#)

ClinicalTrials.gov is a resource provided by the U.S. National Library of Medicine.

**IMPORTANT:** Listing a study does not mean it has been evaluated by the U.S. Federal Government. Read our [disclaimer](#) for details.

Before participating in a study, talk to your health care provider and learn about the [risks and potential benefits](#).

## Find a study (all fields optional)

### Status ⓘ

Recruiting and not yet recruiting studies

All studies

### Condition or disease ⓘ (For example: breast cancer)

X

### Other terms ⓘ (For example: NCT number, drug name, investigator name)

X

### Country ⓘ

▼
X

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# Thank you



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