



Cochrane Eyes  
and Vision Group  
eyes.cochrane.org

# Cochrane Eyes and Vision Group (CEVG)

## Interactive Roadmap to completing a Cochrane systematic review

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THE COCHRANE  
COLLABORATION®

# Welcome to the CEVG

This interactive roadmap provides a step by step reference for completing a review with the [CEVG](#)

Our [editorial team](#) is available to assist authors at every stage of the review process. [Ms. Anupa Shah](#), the CEVG Managing Editor, maintains communication between the editorial team, authors, and other group members. Members in the United States are additionally supported by our satellite team, the [CEVG US Project](#).

We recommend familiarizing yourself with [\*The Cochrane Handbook for Systematic Reviews of Interventions\*](#) (updated September 2009)

# The Cochrane Systematic Review Process

- Title registration
- Protocol preparation
- Editorial and peer review of the protocol
- Publication of the protocol
- Systematic review preparation
- Editorial and peer review of the systematic review
- Publication of the systematic review
- Updating the systematic review

# Preparing to do a Cochrane Review

Things to consider before undertaking a Cochrane review:

**Time:** It takes about 18 months to complete the steps in the systematic review process.

**Topic:** Consider what area interests you and what question you would like to answer. Check current reviews and consult the CEVG Review Group Coordinator to ensure that your topic is not already registered.

[Click here to view the list of current CEVG review titles](#)

# Preparing to do a Cochrane Review

Things to consider before undertaking a Cochrane review  
(continued):

**Co-authors:** At least one co-author is needed to assist with the review

- The co-author duplicates the main steps of the review process
- There must be at least one person on the review team with:
  - Content expertise
  - Methodological expertise
  - Statistical expertise
- The CEVG can assist with identifying co-authors if needed

# Topics for Cochrane Reviews

- Cochrane reviews focus on evidence from randomized controlled trials (RCTs) and quasi-randomized controlled trials (CCTs)
- Begin by creating a **PICO** outline for your topic.
  - P** : Participants (include population/condition of interest)
  - I** : Intervention(s) of interest
  - C** : Comparison(s) of interest (e.g., placebo)
  - O** : Outcome(s) of interest (e.g., visual acuity at 12 months)

# Title Registration

Once you have decided on a review topic, you should register your interest in initiating a review with the CEVG by completing a [Title Registration Form](#). We recommend consulting Chapters 4 and 5 of the Cochrane Handbook and checking our website for more [title registration notes](#).

The completed form should be submitted to [Ms. Anupa Shah](#)



The CEVG editorial team will review your title and either respond with comments or approve your title for protocol preparation.

# Protocol Preparation

- Once your title is approved by the CEVG editors, we will provide access to a Review Manager (RevMan) file which will contain a template for the protocol. RevMan is the software used by the Cochrane Collaboration to prepare systematic reviews. We strongly recommend [downloading RevMan](#) and completing the tutorial before you begin work on your protocol.
- RevMan interacts with the Cochrane Collaboration's central server called *Archie*. *Archie* stores review author contact information and drafts of every systematic review. The process of retrieving, editing, and saving your protocol via *Archie* is explained in the RevMan tutorial. There is also a [Quick start guide to Archie for authors](#).



# Protocol Preparation

- We will set up an Archie user account for the lead/contact author (and will add accounts for co-authors at the lead author's request). The Archie server will send a welcome email with further instructions on activating your user account. You must activate your account before retrieving your protocol from Archie (within two weeks of receiving the welcome message).
- You may access your RevMan file by opening RevMan and selecting the option "Check out a review from the central server (Archie)." You may also access it by logging into Archie. In the Eyes and Vision Group folder, click on the subfolder "Reviews" and then look for your file in the folder "Registered titles".
- Each time you make a change to your RevMan file, you should "check it in" to Archie so that the draft is saved on our central server. This process is explained in the RevMan tutorial.

# Training and Workshops

[Click here to see if a Cochrane Center near you has scheduled a training workshop](#)



# Things to Consider While Drafting Your Protocol

- General background information
  - Description of the condition
  - Description of the intervention
  - How the intervention might work
  - Why is it important to do this review

These items are described in Chapter 4.5 of the Handbook. Also feel free to consult our website for additional [review author resources](#).

# Things to Consider While Drafting your Protocol

- Our Trials Search Coordinator will create and run the search strategies for your review. In the section “Search strategy for identification of studies”, specify the search terms you believe should be included in the search. The Trials Search Coordinator will insert the search strategy before your protocol is published and will run the searches when your protocol has been submitted for publication.
- It may be helpful to refer to CEVG protocols published in [The Cochrane Library](#) to get a feel for what’s expected in a Cochrane methods section. Chapter 4.5 of the [Handbook](#) and the [CEVG Module](#) are also good references.

# Editorial and Peer Review of the Protocol

- All protocols must be submitted to the CEVG editors using RevMan. When you have completed your protocol, RevMan will offer the additional option of submitting it for editorial approval (when you check it back in to Archie).

The editors will review your protocol and may respond with initial comments. Once any comments have been addressed, the protocol will be sent out for full peer review (about 6 – 8 weeks). Once you have responded to all peer review comments, your protocol will be submitted for publication in the next issue of *The Cochrane Library*.



# Publication of the Protocol

- Shortly after your protocol is accepted for publication the CEVG Trials Search Coordinator will run the search strategy and send you the search results (a list of titles and abstracts) in a text file.
- Your protocol file will be saved in Archie and should be checked out when you begin preparing your review.

# Systematic Review Preparation

Once your protocol has been submitted for publication, review preparation usually takes about 9 - 12 months to complete.

It may be helpful to complete the learning modules from the [Cochrane Collaboration Open Learning Materials](#) before undertaking the review process



# Systematic Review Preparation

- Two authors independently screen the titles and abstracts from the search results and classify each reference as 1) Definitely include, 2) Unsure, or 3) Definitely exclude
- Authors should retrieve and review the full text of all references designated “definitely include” or “unsure” to select a final list of “included studies”
- Document reasons for excluding studies from your review. You will need to enter this information in RevMan’s *Characteristics of Excluded Studies Table*.
- The CEVG editorial team can assist with retrieving full text articles if needed
- Consult Chapter 7 of the [Cochrane Handbook](#) for further guidance



# Systematic Review Preparation

- Check the bibliographies of included studies, the World Health Organization trial register, and the Science Citation Index for other RCTs and CCTs relevant to your review. Document where you found any additional references.
- Prepare forms for data extraction and risk of bias assessments. You will also use this information to complete the *Characteristics of Included Studies Table*

 [Click here for sample data extraction and risk of bias forms](#) 

# Data Extraction and Risk of Bias Assessments

- At least two authors should independently
  - Assess the methodological quality of the included studies and complete a *Risk of Bias Table* for each study
  - Extract relevant design, conduct, and analysis characteristics and complete a *Characteristics of Included Studies Table* for each study
  - Extract outcome data (e.g., visual acuity, intraocular pressure)
- Contact the authors of included studies for missing information
- Resolve disagreements by consensus or with a third party
- Enter above data into corresponding tables in RevMan
- Consult Chapters 7 and 8 of the [Cochrane Handbook](#) for additional guidance

# Data Analysis

- Select the appropriate analysis for each outcome (e.g., dichotomous, continuous)
- Test for heterogeneity
- Perform subgroup analyses if appropriate
- Test for publication bias
- Conduct sensitivity analyses
- Consult Chapters 9 and 10 of the [Cochrane Handbook](#) for additional guidance

# Things to Consider While Drafting Your Systematic Review

- Confirm that the review methods are consistent with the published protocol. Discuss deviations from the protocol with your co-authors and the CEVG editorial team before submitting the review for publication.
- Confirm that all required sections of the review are complete:
  - Main text: Remember to update verbs from future to past tense where appropriate (e.g., change protocol text “We will search MEDLINE” to “We searched MEDLINE”)
  - References: Included studies, excluded studies, studies awaiting assessment, other references
  - Tables and figures: Including data tables, risk of bias tables, characteristics of included and excluded studies tables

# Editorial and Peer Review of the Systematic Review

The editorial review process for full reviews is similar to the editorial review process for protocols. Return to the slide “[Editorial and peer review of the protocol](#)” for additional information.

# **Publication of the Systematic Review**

## **Congratulations!**

**You have completed a Cochrane Review**

**Your review will be submitted for publication in  
*The Cochrane Library***

# Updating the Review

- Once your review is published you will receive a free subscription to *The Cochrane Library*
- Your review will be indexed on MEDLINE
- You may also choose to submit your review to another peer reviewed journal. Please consult Chapter 2 of the Cochrane Handbook for guidance on co-publication
- You will need to update your review based on post-publication comments or as new data become available
- The CEVG editorial team will send you updated search results every year for your consideration
- You should plan on updating your review every 2 years