



## **Cochrane Airways Group Newsletter (June 2009)**

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

### *Staff news from the editorial office*

In June 2009 our information specialist/trials search coordinator Elizabeth Arnold went on maternity leave. We are delighted that Susan Hansen will be covering for Liz over this period.

Susan will be taking over responsibility for running electronic searches and maintaining the register of studies.

As of August 2009 the managing editor of the CAG, Toby Lasserson, will also be working at the Editorial Unit of the Cochrane Library under the direction of the Editor in Chief of the Cochrane Library, Dr David Tovey. This will be on a part-time basis over a six month period, and we are hoping to appoint a systematic reviewer to replace some of the work that Toby has been responsible for over the past few years.

We are very pleased to announce that A/Prof Anne Holland from Melbourne,

Australia has joined the editorial board of the Airways Group. Anne is a physiotherapist and holds a joint appointment at La Trobe University and Alfred Health in Melbourne. She is a Senior Clinician Physiotherapist in Pulmonary Rehabilitation at the Alfred Hospital and has research interests in rehabilitation for chronic lung disease, particularly interstitial lung disease. Anne will be working on a number of physiotherapy-related reviews.

### *Cochrane Collaboration news*

The appointment of Dr David Tovey as the first Editor in Chief of the Cochrane Library was confirmed early in 2009. David joins the Collaboration from his previous position in the British Medical Journal. He was Editorial Director for the Knowledge department, and oversaw both Clinical Evidence and Best Treatments.

The Cochrane Collaboration has also undertaken its first survey of authors.

What issues do authors find most problematic in producing reviews? What are the resources that authors want to see more of? Answers to these questions can be found via the author survey section of the Cochrane Collaboration [website](#).

#### *2008 Cochrane Library Impact Factor*

Based on citation analysis, the 2008 IF for the Cochrane Database of Systematic Reviews is 5.182. This represents an increase of 0.528 from the 2007 IF of 4.654, and sees the Cochrane Database of Systematic Reviews move up to 12<sup>th</sup> place from 14<sup>th</sup> in the ranking of general and internal medicine journals.

#### *Strategic review*

A strategic review of the Cochrane Collaboration has been undertaken by the coordinating editor of the Effective Practice and Organisation of Care Group, Jeremy Grimshaw, in consultation with a number of stakeholders. This identified a number of areas of improvement for the Cochrane Collaboration.

The recommendations from the strategic review were voted on by members of the Collaboration and its stakeholders. The top four recommendations were to:

1. Reaffirm our primary purpose to be the production of systematic reviews.
2. Improve the usability of The Cochrane Library and other products for diverse stakeholders.
3. Formalise additional purposes including training, methods development and advocacy for evidence-based decision-making and identify responsibilities of entities for these purposes.
4. Develop a Marketing and Communications Strategy to promote external and internal awareness of the value arguments for and achievements of The Cochrane Collaboration.

The full report and its recommendations can be accessed at Strategic Review [website](#).

#### *Hardware & software*

One of the main features of Cochrane reviewing over the past year has been the introduction of the web-based review and contacts management system ([Archie](#)).

In March 2008 the Cochrane Collaboration rolled out a new system for publishing all new protocols, reviews and

review updates. This now involves using a web-based system to retrieve and store drafts of reviews. It also enables review authors to maintain their contact details directly.

The publication process is now managed via this system (more information on this can be found on the Information Management System [website](#)).

You need a user account to use the system online, please contact Toby at the editorial base office if you do not have one yet ([tlassers@sgul.ac.uk](mailto:tlassers@sgul.ac.uk)).

Accompanying the new web-based review management system has been a new version of the software ([Review Manager 5](#)). This programme now ties in with the server and enables review authors to upload and check out their reviews directly to and from the server.

#### *CAG website*

The Cochrane Airways Group website has been relaunched with a new web address: <http://www.airways.cochrane.org>.

We have added a number of features, including a resources page which is aimed to be of use to authors, including:

- Declaration of roles and responsibilities for prospective authors and editorial base staff.
- Protocol and review checklists are intended to remind authors of appropriate formatting for their reviews
- A guide for Archie and using RevMan 5.
- Template data extraction sheets in Excel
- Characteristics of studies extraction sheets (including risk of bias items)
- Translation sheets for studies published in languages other than English.

#### *Prioritization*

As the number of reviews we have published has increased we have found that prioritizing reviews for updating a challenging area.

We aim to ensure that the reviews we publish on the Cochrane Library are current to within two years, but this has proven to be a difficult aim to police effectively.

Figure 1 (next page) shows the additive effect of reviews published by CAG review authors. The long term impact of 'additive' publication of Cochrane reviews

has been that we now have a significant number of reviews that are out of date by more than two years (the timepoint used by the Cochrane Collaboration to define an out of date review).

As new studies are published, we need to ensure that we are keeping on top of the most important questions, so that our output remains relevant and current. Some review questions can be assessed no longer in need of updating, since the evidence is clear, and future studies are unlikely to change the message of the review (one such example is

[Anticholinergic agents for chronic asthma in adults](#)).

The editorial base are considering a number of different indicators that would justify updating a review including whether new studies could alter the findings and what external bodies such as consumer advocacy groups or professional colleges are interested in prioritizing.

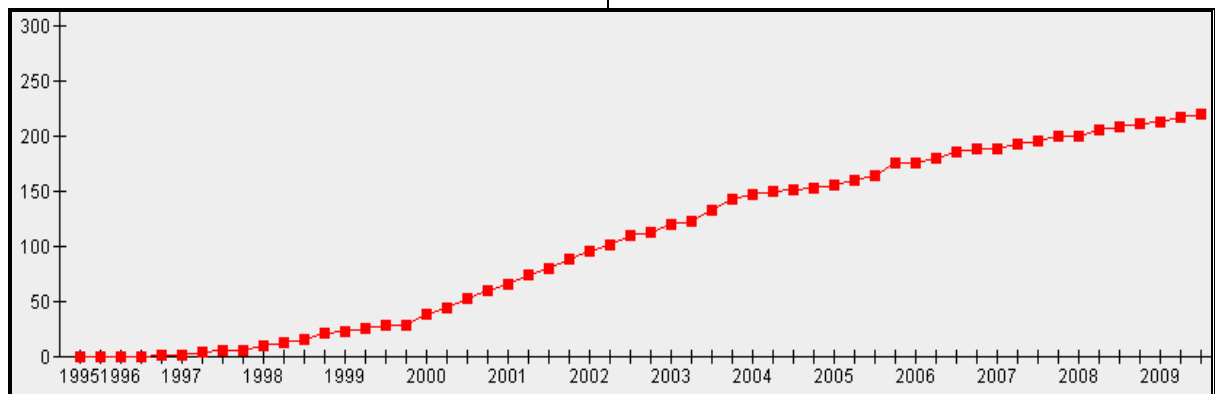


Figure 1. Graph showing the increase in reviews published by the CAG since inception to issue 3, 2009 of the Cochrane Library.

*Methodological developments:*

*1. Risk of bias assessment*

The most recent version of the [Cochrane Handbook](#) (February 2008) contains revised recommendations on how review authors should best assess the reliability of studies in their reviews.

Rather than use scoring systems such as the Jadad scale to assess how well the studies were done, the emphasis is more firmly on assessing the validity of the results in light of key information on the design of the studies for different domains. Some of this information will be available in the study report, but some

may require correspondence from study investigators or sponsors.

This approach does not necessarily mean the abandonment of quality scales, since they can be used to collect data for risk of bias assessment. However, using composite scores as a basis for sensitivity analysis is not recommended.

Both the information relevant to the specific domain of the study design (such as allocation generation, allocation concealment and blinding) and how the review author judges the risk of bias to the results of the study (low, high or unclear) are presented explicitly in the review. More information, including an example risk of bias table, is given in Chapter 8 of the [Cochrane Handbook](#).

## *2. Summary of Findings tables*

In reporting the results of statistical meta-analysis, it is often appropriate to express what these results mean in absolute terms. For example using numbers needed to treat (NNT) expresses the number of patients that would need to be treated with an intervention for one to benefit.

There are problems with such an approach when there is variation between the populations represented by the studies combined in a given outcome. In chronic obstructive pulmonary disease studies, some studies may recruit participants during winter months when exacerbations are more likely, or there might be variation between the study populations in terms of disease severity or trial duration. This would make the NNT estimate less applicable to one population.

Summary of Findings (SoF) tables present the results of meta-analyses in both original relative terms (such as relative risks) and in absolute terms giving natural frequencies for treated and untreated populations. The 'reference' population can be generated from the studies themselves (with low, medium and high, or mean) event rates, or from an external source such as estimates of prevalence/incidence from an observational study.

Review authors should also give some information on how reliable and relevant the results are; with the findings of the risk of bias assessment, consideration of the study populations recruited and the

level of certainty around the statistical result featuring here.

The software used to generate the SoF tables is external to Revman 5 ([GRADEpro](#)). This is freely available and the [website](#) contains guidance on how the scoring system operates for determining the credibility of the results.

*Recent new & updated CAG reviews*

Issue 1, 2009:

[Combination formoterol and inhaled steroid versus beta2-agonist as relief medication for chronic asthma in adults and children](#)

[Pulmonary rehabilitation following exacerbations of chronic obstructive pulmonary disease](#)

[Inhaled steroids for bronchiectasis](#)

[Systemic corticosteroids for acute exacerbations of chronic obstructive pulmonary disease](#)

Issue 2, 2009:

[Combination formoterol and budesonide as maintenance and reliever therapy versus inhaled steroid maintenance for chronic asthma in adults and children](#)

[Educational, supportive and behavioural interventions to improve usage of continuous positive airway pressure machines for adults with obstructive sleep apnoea](#)

[Honey and lozenges for children with non-specific cough](#)

[Regular treatment with formoterol and inhaled steroids for chronic asthma: serious adverse events](#)

[Adenotonsillectomy for obstructive sleep apnoea in children](#)

[Interventions for educating children who are at risk of asthma-related emergency department attendance](#)

[Pneumococcal vaccines for children and adults with bronchiectasis](#)

## **Training events**

To access information on training events local to you, please visit the training pages of your local Cochrane Centre. Details of upcoming protocol workshops, review development/completion events and Evidence-based medicine workshops are available from:

<http://www.cochrane.org/news/workshops.htm>

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## **17<sup>th</sup> Annual Cochrane Colloquium, Singapore**

11<sup>th</sup>-14<sup>th</sup> October 2009



For more information and to register, visit:

<http://www.colloquium09.com/>