
Issue 01 | Winter 2017

Winter 2017 Cochrane Neonatal News

It has been a busy 6 months at Cochrane Neonatal. We have much to share – a new funding contract, expanded editorial staff, new projects on the horizon, and many new and updated reviews!

• Upcoming Live Webinar on Oxygen in the Delivery Room, March 10, 2017

• New NICHD 5-year Contract to Fund Cochrane Neonatal

• Expanded Editorial Staff – a bittersweet goodbye and some warm welcomes

• Cochrane Neonatal 2015 Impact Factor

• Managing Editor Notes

• Many, many new registered titles, published protocols, and published new and updated reviews

Upcoming Live Webinar
Oxygen in the delivery room:
Evidence from systematic reviews

Please join us March 10, 2017 12:00pm EST
Register here for this webinar

Cochrane Neonatal is pleased to announce the sixteenth in a series of sessions focused on specific Cochrane Reviews and the evidence that they provide for practice.

The goal of this session is to evaluate and translate the evidence regarding the use of oxygen in delivery room resuscitation of the newborn.

The webinar is available free to all neonatal physicians, practitioners and trainees

Recorded Webinars:

October 2016 - "Estimation of procalcitonin levels for the diagnosis of sepsis in infants: Evidence from diagnostic test accuracy reviews" with guest discussants Miriam Stewart, MD, and Haresh Kirpalani, MD

June 2016 - "Prevention and treatment of Patent Ductus Arteriosus: Evidence from systematic reviews" with guest discussant William Benitz, MD

March 2016 - "Prevention and Treatment of Bronchopulmonary Dysplasia: Evidence from systematic reviews" with guest discussant Matthew Laughon, MD

All of our previous webinars regarding systematic Cochrane reviews in neonatal medicine, are archived on our website.

New NICHD 5-year Contract
We are pleased to announce that we have received a further five-year contract for our work at Cochrane Neonatal. The contract from the Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD) is focused on our creating a significant number of reviews and updates each year to be published in the Cochrane Library and posted on the NICHD website (https://www.nichd.nih.gov/cochrane/). We have been very pleased and appreciative of the support we have received over the past decades.

In addition to the role of Cochrane Neonatal in creating these reviews, another important aspect of the contract is dissemination of materials, with a particular focus on trainees and early career neonatologists in the United States. That said, we hope to make sure that these materials for dissemination are posted on our website and available worldwide. Cochrane Neonatal has also had an important role in guideline development worldwide. Our reviews have formed the basis for recommendations ranging from the WHO guidelines on breastfeeding and care of preterm infants, to NIH Consensus statement on inhaled nitric oxide. We recognize that none of this can happen without the expert input of our worldwide panel of authors and greatly appreciate your work in making this a success.

Many thanks to our volunteer authors whose expertise creates the material that ultimately the NICHD values in its website and Cochrane values in its library.

Expanded Editorial Staff

A Note from Roger Soll, Coordinating Editor, Cochrane Neonatal on the retirement of Arne Ohlsson
Arne Ohlsson, Professor Emeritus from the Department of Pediatrics, Obstetrics and Gynecology and Health Policy, Management and Evaluation from the University of Toronto, has retired his editorial role with Cochrane Neonatal, though remains onboard as one of our prolific review authors. We owe a great deal to Arne's investment in Cochrane Neonatal over the past several contract periods.

Arne was hand-picked by Jack Sinclair, the father of Cochrane Neonatal, to continue to ensure Jack's high standards. Arne was one of the original founders of the course in meta-analysis at McMaster University in Hamilton, Canada. As course instructor, he worked with such luminaries as Andy Oxman, Tom Chalmers, Iain Chalmers, Gord Guyatt and Marc Keirse. Arne is responsible for some of the first peer reviewed systematic reviews in perinatal-neonatal medicine. He has always had a foot in both the antenatal and postnatal camp, being actively involved with Cochrane Pregnancy and Childbirth as well as Cochrane Neonatal. His work has informed many important guideline development committees, including work on neonatal pain and postnatal steroids. Arne was the director of the Canadian Cochrane Center and Network from November 1998 to January of 2005. We were lucky enough to have him join us in his retirement years to provide his expert editorial assistance. From the authors' point of view, there was no editorial review more complete, insightful or helpful than Arne's very clear input.

Personally, I will miss him for his expert contribution to the work, his wonderful joie-de-vivre, his photography and his generous spirit. We wish him well as he pursues a real retirement in the coming years.

Introducing William McGuire

It is hard to think of who could possibly replace Arne Ohlsson on the editorial team, but we have just the person! William McGuire, Professor of Child Health at the Center for...
Reviews and Dissemination in Hull York Medical School, University of York, UK, has stepped in to become a Co-editor in Cochrane Neonatal. Bill has been a longtime review author and advocate for issues in evidence-based medicine. He has developed an interdisciplinary and inter-institutional collaborative research program centered in the University of York, for which he is principal investigator. He has developed and led regional and national initiatives in the best and safest practice in the UK National Health Service (NHS), including as Co-director for Maternal and Infant Health of the UK Department of Health Funded Health Innovation and Education Cluster.

At his own university, he has acted as the Associate Dean for Research and a member of the Management Board. Still, Bill is an active neonatologist with half of his time dedicated to working in a busy NHS hospital, where he has contributed to service, delivery and undergraduate and postgraduate training and mentoring. He has been an active member of the Cochrane Collaboration and been involved in over 20 reviews, as well as a principal or co-principal investigator of multiple randomized, controlled trials. We welcome him for his experience, commitment to evidence based medicine and wonderful sense of humor and energy!

Introducing Cochrane Neonatal Associate Editors

As we look at the workflow for Cochrane Neonatal and the processes that other successful review groups have used, we realize that we have not tapped the rich reserve of expertise in our own field to make this an efficient and broad process. There are many members of the Neonatal-Perinatal field who have experience in evidence-based medicine and in drafting Cochrane Neonatal reviews.

We have decided to expand Cochrane Neonatal by creating a team of Associate Editors to harness a greater scope of expertise and to move the review process forward in a timelier manner. We welcome the following new members to team:
Robert H. Pfister  
Attending Neonatologist  
NICU Medical Director  
Chief of Pediatrics  
St. Charles Health Systems  
Bend, Oregon, USA

Mohan Pammi  
Associate Professor  
Section of Neonatology,  
Department of Pediatrics  
Baylor College of Medicine  
Houston, Texas, USA

Marie T. Berg  
Associate Professor of Pediatrics  
Attending Neonatologist  
University of Vermont Children's Hospital  
Burlington, Vermont, USA

Eugene Dempsey  
Professors of Paediatrics and Child Health  
University College Cork  
and Principal Investigator  
INFANT Centre  
Cork University Maternity Hospital  
University College Cork  
Cork, Ireland

Prakashkumar S Shah  
Professor
Departments of Paediatrics and HPME
Mount Sinai Hospital and University of Toronto
CIHR Applied Research Chair in Reproductive and Child Health Services and Policy Research
Director, Canadian Neonatal Network
Toronto, Ontario Canada

Newton Opiyo
Editor
Cochrane Editorial Unit
Cochrane Central Executive
St Albans House
London, UK

Jann P Foster
Senior Lecturer
School of Nursing and Midwifery
Western Sydney University
Penrith, DC Australia

David A Osborn
Senior Neonatologist and Director NICU
Discipline of Obstetrics, Gynaecology and Neonatology
Central Clinical School
Sydney Medical School,
University of Sydney
Sydney, NSW Australia

Martin Offringa
Professor of Paediatrics,
University of Toronto
Senior Scientist and Program Head
Child Health Evaluative Sciences
Research Institute, The Hospital for Sick Children
Staff Neonatologist,
Department of Paediatrics
Toronto, ON, Canada

John A. F. Zupancic
Associate Professor of Pediatrics
Harvard Medical School
Associate Chief of Neonatology
Beth Israel Deaconess Medical Center
Boston, Massachusetts USA

Mohamed E Abdel-Latif
Professor of Neonatology and Senior Staff Specialist
Department of Neonatology,
Centenary Hospital for Women and Children
ANU College of Medicine, Biology and Environment
Australian National University
Acton, Canberra, Australia

Haresh Kirpalani
Professor
Department of Pediatrics
Perelman School of Medicine at the University of Pennsylvania and

Jacqueline J Ho
Deputy Dean Academic Affairs and Head of Department
Department of Paediatrics
Penang Medical College
Convenor of Cochrane Malaysia
Penang, Malaysia
Department of Clinical Epidemiology and Biostatistics, McMaster University
Director, Newborn and Infant Chronic Lung Disease Program
Children's Hospital of Philadelphia
Philadelphia, Pennsylvania USA

Vibhuti S Shah
Associate Professor
Department of Paediatrics and Institute of Health Policy, Management and Evaluation
University of Toronto
Staff Neonatologist, Mount Sinai Hospital
Toronto, ON Canada

Georg M Schmöller
Assistant Professor
Research Neonatologist
Department of Pediatrics, Division of Neonatology
University of Alberta
Royal Alexandra Hospital
Edmonton, AB Canada

Lisa M Askie
Associate Professor
Principal Research Fellow
Director, Systematic Reviews & Health Technology Assessment
NHMRC Clinical Trials Centre
University of Sydney
Australia
New Cochrane Neonatal Staff

Cochrane Neonatal has hired a new full-time Information Specialist, Jennifer Spano, who is working with us in our Burlington office. Jenn comes to us with a background in Psychology and various research projects at the University of Vermont. In addition to many other supportive responsibilities, Jenn will be running literature searches for your reviews. Please email Jenn with your literature search requests.

Cochrane Neonatal 2015 Impact Factor

In June, Thomson Reuters published the Impact Factor of all journals indexed in the Journal Citation Report. Cochrane Neonatal’s 2015 Impact Factor was 5.980. This means that a Cochrane Neonatal review published in 2013 or 2014 was cited, on
average, 5.980 times in 2015. This includes new and updated reviews.

In comparison, the 2015 Impact Factor of Pediatrics was 5.473, The Journal of Pediatrics was 3.890, JAMA Pediatrics was 2.810, and Neonatology was 2.754.

The ten most cited reviews from the Neonatal Group contributing to the 2015 Impact Factor were:

<table>
<thead>
<tr>
<th>Title</th>
<th>Times Cited</th>
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<tr>
<td>Cooling for newborns with hypoxic ischaemic encephalopathy</td>
<td>94</td>
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<tr>
<td>Probiotics for prevention of necrotizing enterocolitis in preterm infants</td>
<td>34</td>
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<tr>
<td>Prebiotics in infants for prevention of allergy</td>
<td>23</td>
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<tr>
<td>Formula versus donor breast milk for feeding preterm or low birth weight infants</td>
<td>19</td>
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<tr>
<td>Prophylactic oral/topical non-absorbed antifungal agents to prevent invasive fungal infection in very low birth weight</td>
<td>13</td>
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<tr>
<td>Ibuprofen for the treatment of patent ductus arteriosus in preterm or low birth weight (or both) infants</td>
<td>13</td>
</tr>
<tr>
<td>Intravenous immunoglobulin for preventing infection in preterm and/or low birth weight infants</td>
<td>12</td>
</tr>
<tr>
<td>Late (&gt; 7 days) postnatal corticosteroids for chronic lung disease in preterm infants</td>
<td>12</td>
</tr>
<tr>
<td>Skin-to-skin care for procedural pain in neonates</td>
<td>12</td>
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<tr>
<td>Nasal intermittent positive pressure ventilation (NIPPV) versus nasal continuous positive airway pressure (NCPAP) for preterm neonates after extubation</td>
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Managing Editor Notes

On a personal note, I would like to thank you all for your support and patience this fall, while our editorial office was closed following the sudden death of my oldest son. I know I have not responded personally to all of your many well wishes, but please know that hearing from all corners of the earth was heartening (and my young children loved seeing stamps from around the globe!).

Our office is back to full operating capacity and we hope to have caught up on everything. However, if there is editorial work or otherwise that you sent that has not been answered,
please send me a reminder, in case it fell through the cracks.
~Colleen

What's New: Reviews, Titles, Protocols

Issue 5, 2016 - Issue 1, 2017
Full reviews available on our NICHD website.

New Reviews
- Epinephrine for transient tachypnea of the newborn
- Heparin for the prevention of intraventricular haemorrhage in preterm infants
- High frequency jet ventilation versus high frequency oscillatory ventilation for pulmonary dysfunction in preterm infants
- Oral dextrose gel for the treatment of hypoglycaemia in newborn infants
- Salbutamol for transient tachypnea of the newborn
- Endothelin receptor antagonists for persistent pulmonary hypertension in term and late preterm infants
- Oral stimulation for promoting oral feeding in preterm infants
- Polysaturated fatty acid supplementation in infancy for the prevention of allergy
- Heparin for the treatment of thrombosis in neonates
- Early nasal intermittent positive pressure ventilation (NIPPV) versus early nasal continuous positive airway pressure (NCPAP) for preterm infants
- Systemic corticosteroid regimens for prevention of bronchopulmonary dysplasia in preterm infants
- Fluid restriction for treatment of preterm infants with chronic lung disease
- Topical anaesthesia for needle-related pain in newborn infants

Updated Reviews
- Sucrose for analgesia in newborn infants undergoing painful procedures
- Cup feeding versus other forms of supplemental enteral feeding for newborn infants unable to fully breastfeed
- Cycled light in the intensive care unit for preterm and low birth weight infants
- Instruments for assessing readiness to commence suck feeds in preterm infants: effects on time to establish full oral feeding and duration of hospitalisation
- Kangaroo mother care to reduce morbidity and mortality in low birthweight infants
- Responsive versus scheduled feeding for preterm infants
- Vitamin A supplementation to prevent mortality and short- and long-term morbidity in very low birth weight infants
- Vitamin A supplementation for the prevention of morbidity and mortality in infants one to six months of age
- Non-nutritive sucking for increasing physiologic stability and nutrition in preterm infants
- Paracetamol (acetaminophen) for prevention or treatment of pain in newborns
- Infant position in neonates receiving mechanical ventilation
- Bronchodilators for the prevention and treatment of chronic lung disease in preterm infants
• Longchain polyunsaturated fatty acid supplementation in preterm infants
• Nutrient-enriched formula versus standard formula for preterm infants following hospital discharge
• One dose per day compared to multiple doses per day of gentamicin for treatment of suspected or proven sepsis in neonates
• Nitric oxide for respiratory failure in infants born at or near term
• Intravenous midazolam infusion for sedation of infants in the neonatal intensive care unit
• Inhaled nitric oxide for respiratory failure in preterm infants
• Cromolyn sodium for the prevention of chronic lung disease in preterm infants
• Body positioning for spontaneously breathing preterm infants with apnoea
• Nasal intermittent positive pressure ventilation (NIPPV) versus nasal continuous positive airway pressure (NCPAP) for preterm neonates after extubation

Protocols
Protocols available on our Cochrane website.

• Antibiotics at the time of removal of central venous catheter to reduce morbidity and mortality in newborn infants
• Heparin for the treatment of thrombosis in preterm and term neonates
• Lutein and zeaxanthin for reducing morbidity and mortality in preterm infants
• Education of family members to support weaning to solids and nutrition in later infancy in infants born preterm
• Education of family members to support weaning to solids and nutrition in later infancy in term-born infants
• Lactoferrin for the post-operative management of term neonates after gastrointestinal surgery
• Neurally adjusted ventilatory assist for neonatal respiratory support
• Probiotics for the post-operative management of term neonates after gastrointestinal surgery
• Branched-chain amino acid supplementation for improving nutrition in term and preterm neonates
• Pulse oximetry sensor application for neonates during resuscitation
• Different strains of probiotics for preventing morbidity and mortality in preterm infants: a network meta-analysis
• Short versus long feeding interval for bolus feedings in very preterm infants
• Dexmedetomidine for analgesia and sedation in newborn infants receiving mechanical ventilation
• Head midline position for preventing the occurrence or extension of germinal matrix-intraventricular hemorrhage in preterm infants
• Plasma transfusion to prevent intraventricular haemorrhage in very preterm infants
• High versus standard volumes of enteral feeds for preterm or low birth weight infants
• Neonatal interventions for preventing cerebral palsy: an overview of Cochrane systematic reviews
• Protein hydrolysate versus standard formula for preterm infants
• Clonidine for neonates receiving mechanical ventilation
• Effect of exchange transfusion on mortality in neonates with septicemia
• Infant isolation and cohorting for preventing or reducing transmission of healthcare-associated infections in neonatal units
• Maternal probiotic supplementation for prevention of morbidity and mortality in preterm infants
• Provision of respiratory support compared to no respiratory support before cord clamping for preterm infants
Title

- Diagnostic accuracy of MRI versus cranial ultrasound for hypoxic ischaemic encephalopathy in neonates
- Diaphragm triggered non-invasive respiratory support for preventing respiratory failure in preterm infants
- Fetal lung maturity tests for prediction of Respiratory Distress Syndrome
- Frequency of ventilator circuit changes for preventing ventilator-associated pneumonia in newborn infants
- Non-invasive continuous distending airway pressure levels for the prevention of morbidity and mortality in preterm infants
- Parenteral administration of calcium and phosphorous for growth and bone health in preterm infants receiving parenteral nutrition
- Pharmacological and non-pharmacological interventions for prevention of pain during endotracheal suctioning in ventilated neonates
- Protein free synthetic surfactant for the prevention and treatment of respiratory distress syndrome in neonates
- Brain-type natriuretic peptide (BNP) versus echocardiography for predicting bronchopulmonary dysplasia in preterm infants
- Animal-derived surfactant extract for the prevention and treatment of respiratory distress syndrome
- Amplitude-integrated EEG versus conventional video EEG for detection of neonatal seizures
- Altering circadian rhythms for neonates with moderate to severe hypoxic ischemic encephalopathy