



# Cochrane Evidence Aid: Resources for Haiti & Chile earthquakes

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A selection of systematic reviews and their conclusions from *The Cochrane Library* on healthcare topics that our colleagues in aid agencies and others have reported as important at this time. These are signposts to systematic reviews that might be helpful to decision-makers, and links to the full-text articles are provided. All countries in Latin America and the Caribbean can access *The Cochrane Library* for free via the [Virtual Health Library BIREME interface](#) (in English, Spanish, or Portuguese).

**Sources and review selection:** Compiled from searches of the *Cochrane Database of Systematic Reviews (CDSR)* and the Database of Abstracts of Reviews of Effects (DARE), this resource presents the conclusions from systematic reviews where these point to an intervention being beneficial or neutral/harmful. It does not seek to include systematic reviews which conclude that there is insufficient evidence to either make a recommendation or to confirm or refute a benefit or harm for an intervention.

**Contact:** Mike Clarke and Harriet MacLehose ([mclarke@cochrane.ac.uk](mailto:mclarke@cochrane.ac.uk); [hmaclehose@cochrane.org](mailto:hmaclehose@cochrane.org)) for queries or suggestions for other topics.

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## Diarrhoea prevention and treatment

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| <p><b>Interventions to improve water quality for preventing diarrhoea</b></p> <p>“Interventions to improve water quality are generally effective in preventing diarrhoea, and interventions to improve water quality at the household level are more effective than those at the source.”</p>   | <p>Cochrane Review, Thomas 2006</p> <p><a href="#">Abstract and review</a></p> <p>En español: <a href="#">resumen</a></p> <p><a href="#">Evidence Update summary (en español)</a></p> <p>External link: <a href="#">WHO document on water treatment and safe storage</a> [PDF]</p> | <p>Clasen TF, Roberts IG, Rabie T, Schmidt WP, Cairncross S. Interventions to improve water quality for preventing diarrhoea. Cochrane Database of Systematic Reviews 2006, Issue 3. Art. No.: CD004794. DOI: 10.1002/14651858.CD004794.pub2.</p>       |
| <p><b>Hand washing for preventing diarrhoea</b></p> <p>“Interventions that promote hand washing can reduce diarrhoea episodes by about one-third. This significant reduction is comparable to the effect of providing clean water in low-income areas.”</p>   | <p>Cochrane Review, Ejemot 2008</p> <p><a href="#">Abstract and review</a></p> <p>En español: <a href="#">resumen</a></p> <p><a href="#">Evidence Update summary</a></p>   | <p>Ejemot RI, Ehiri JE, Meremikwu MM, Critchley JA. Hand washing for preventing diarrhoea. Cochrane Database of Systematic Reviews 2008, Issue 1. Art. No.: CD004265. DOI: 10.1002/14651858.CD004265.pub2.</p>  |
| <p><b>Reduced osmolarity oral rehydration solution for treating dehydration caused by acute diarrhoea in children</b></p> <p>“In children admitted to hospital with diarrhoea, reduced osmolarity ORS [oral rehydration solution] [total osmolarity <math>\leq</math> 250 mmol/L with reduced sodium] when compared to WHO [World Health Organization] standard ORS [90 mmol/L sodium, 111mmol/L glucose, total osmolarity 311 mmol/L] is associated with fewer unscheduled intravenous fluid infusions, lower stool volume post randomization, and less vomiting. No additional risk of developing hyponatraemia when compared with WHO standard ORS was detected.”</p> <p>Note: Since the publication of this review, the WHO standard has changed to a reduced osmolarity ORS.</p> | <p>Cochrane Review, Hahn 2002</p> <p><a href="#">Abstract and review</a></p> <p>En español: <a href="#">resumen</a></p> <p><a href="#">Evidence Update summary (en español)</a></p>  | <p>Hahn S, Kim Y, Garner P. Reduced osmolarity oral rehydration solution for treating dehydration caused by acute diarrhoea in children. Cochrane Database of Systematic Reviews 2002, Issue 1. Art. No.: CD002847. DOI: 10.1002/14651858.CD002847.</p> |
| <p><b>Polymer-based oral rehydration solution for treating acute watery diarrhoea</b></p> <p>“Polymer-based ORS [oral rehydration solution] shows some advantages compared to ORS <math>\geq</math> 310 [the original ORS was based on glucose and had an osmolarity of <math>\geq</math> 310 mOsm/L] for treating all-cause diarrhoea, and in diarrhoea</p>  | <p>Cochrane Review, Gregorio 2009</p> <p><a href="#">Abstract and review</a></p> <p>En español: <a href="#">resumen</a></p>  | <p>Gregorio GV, Gonzales MLM, Dans LF, Martinez EG. Polymer-based oral rehydration solution for treating acute watery diarrhoea. Cochrane Database of Systematic Reviews 2009, Issue 2. Art. No.: CD006519. DOI: 10.1002/14651858.CD006519.pub2.</p>    |

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| <p>caused by cholera. Comparisons favoured the polymer-based ORS over ORS <math>\leq 270</math> [the currently agreed best formula with <math>\leq 270</math> mOsm/L], but the analysis was underpowered.”</p>  |  |   |
| <p><b>Oral versus intravenous rehydration for treating dehydration due to gastroenteritis in children</b></p> <p>“There were no important clinical differences between ORT and IVT for rehydration secondary to acute gastroenteritis in children. It seems reasonable that children presenting for medical care with mild to moderate dehydration secondary to acute gastroenteritis should initially be treated with ORT. Should treatment fail, then IVT may be used. In children who have persistent vomiting, ORT may be used, but the child must be closely observed for proof of successful treatment.</p> <p>For every 25 children treated with ORT, one would fail and require IVT. Clinicians and families need to apply this evidence to individual situations in order to decide whether they are willing to accept this minimal risk.”</p> | <p>Cochrane Review, Hartling 2006</p> <p><a href="#">Abstract and review</a></p> <p>En español: <a href="#">resumen</a></p> <p><a href="#">Evidence Update summary</a></p>           | <p>Hartling L, Bellemare S, Wiebe N, Russell KF, Klassen TP, Craig WR. Oral versus intravenous rehydration for treating dehydration due to gastroenteritis in children. Cochrane Database of Systematic Reviews 2006, Issue 3. Art. No.: CD004390. DOI: 10.1002/14651858.CD004390.pub2.</p> |
| <p><b>Oral zinc for treating diarrhoea in children</b></p> <p>“In areas where diarrhoea is an important cause of child mortality, research evidence shows zinc is clearly of benefit in children aged six months or more.”</p>  | <p>Cochrane Review, Ejemot 2008</p> <p><a href="#">Abstract and review</a></p> <p>En español: <a href="#">resumen</a></p>  | <p>Lazzerini M, Ronfani L. Oral zinc for treating diarrhoea in children. Cochrane Database of Systematic Reviews 2008, Issue 3. Art. No.: CD005436. DOI: 10.1002/14651858.CD005436.pub2.</p>  |
| <p><b>Probiotics for treating infectious diarrhoea</b></p> <p>“Probiotics appear to be a useful adjunct to rehydration therapy in treating acute, infectious diarrhoea in adults and children.”</p>   | <p>Cochrane Review, Allen 2003</p> <p><a href="#">Abstract and review</a></p> <p>En español: <a href="#">resumen</a></p> <p><a href="#">Evidence Update summary (en español)</a></p> | <p>Allen SJ, Okoko B, Martinez EG, Gregorio GV, Dans LF. Probiotics for treating infectious diarrhoea. Cochrane Database of Systematic Reviews 2003, Issue 4. Art. No.: CD003048. DOI: 10.1002/14651858.CD003048.pub2.</p>  |
| <p><b>Antibiotic therapy for Shigella dysentery</b></p> <p>“We recommend the use of antibiotics for moderate to severe Shigella dysentery. The choice of antibiotic to use as first line against Shigella dysentery should be governed by periodically updated local antibiotic sensitivity patterns of Shigella isolates. Other supportive and preventive measures recommended by the WHO [World Health Organization – see review for references] should also be instituted along with antibiotics (eg health education and handwashing).”</p>   | <p>Cochrane Review, Christopher 2009</p> <p><a href="#">Abstract and review</a></p> <p>En español: <a href="#">resumen</a></p>   | <p>Christopher PRH, David KV, John SM, Sankarapandian V. Antibiotic therapy for Shigella dysentery. Cochrane Database of Systematic Reviews 2010, Issue 1. Art. No.: CD006784. DOI: 10.1002/14651858.CD006784.pub3.</p>   |

## Other infectious diseases

Typhoid and paratyphoid fever (enteric fever): [azithromycin](#)

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| <p><b>Azithromycin for treating uncomplicated typhoid and paratyphoid fever (enteric fever)</b></p> <p>“Azithromycin appears better than fluoroquinolone drugs in populations that included participants with drug-resistant strains. Azithromycin may perform better than ceftriaxone.”</p> | <p>Cochrane Review, Effa 2008</p> <p><a href="#">Abstract and review</a></p> <p>En español: <a href="#">resumen</a></p> | <p>Effa EE, Bukirwa H. Azithromycin for treating uncomplicated typhoid and paratyphoid fever (enteric fever). Cochrane Database of Systematic Reviews 2008, Issue 4. Art. No.: CD006083. DOI: 10.1002/14651858.CD006083.pub2.</p> |
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## Wound management

[Tissue adhesives for traumatic lacerations](#), [water for wound cleansing](#), [honey as a topical treatment](#)

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| <p><b>Tissue adhesives for traumatic lacerations in children and adults</b></p> <p>“Tissue adhesives are an acceptable alternative to standard wound closure for repairing simple traumatic lacerations. They offer the benefit of decreased procedure time and less pain, when compared to standard wound closure. A small but statistically significant increased rate of dehiscence with tissue adhesives is observed.”</p>  | <p>Cochrane Review, Farion 2001</p> <p><a href="#">Abstract and review</a></p> <p>En español: <a href="#">resumen</a></p> <p><a href="#">Evidence Update summary (en español)</a></p>    | <p>Farion KJ, Russell KF, Osmond MH, Hartling L, Klassen TP, Durec T, Vandermeer B. Tissue adhesives for traumatic lacerations in children and adults. Cochrane Database of Systematic Reviews 2001, Issue 4. Art. No.: CD003326.</p> |
| <p><b>Water for wound cleansing</b></p> <p>“There is no evidence that using tap water to cleanse acute wounds in adults increases infection and some evidence that it reduces it. However there is not strong evidence that cleansing wounds per se increases healing or reduces infection. In the absence of potable tap water, boiled and cooled water as well as distilled water can be used as wound cleansing agents.”</p> | <p>Cochrane Review, Fernandez 2008</p> <p><a href="#">Abstract and review</a></p> <p>En español: <a href="#">resumen</a></p> <p><a href="#">Evidence Update summary (en español)</a></p> | <p>Fernandez R, Griffiths R. Water for wound cleansing. Cochrane Database of Systematic Reviews 2008, Issue 1. Art. No.: CD003861.</p>  |
| <p><b>Honey as a topical treatment for wounds</b></p> <p>“Honey may improve healing times in mild to moderate superficial and partial thickness burns compared with some conventional dressings.”</p>   | <p>Cochrane Review, Jull 2008</p> <p><a href="#">Abstract and review</a></p> <p>En español: <a href="#">resumen</a></p>  | <p>Jull AB, Rodgers A, Walker N. Honey as a topical treatment for wounds. Cochrane Database of Systematic Reviews 2008, Issue 4. Art. No.: CD005083.</p>  |

## Fracture management

Distal radius: [fixation method](#), [anaesthesia](#), [bone grafts and substitutes](#), [conservative interventions](#), [fixation method](#), [percutaneous pinning](#), [in children](#)

Humerus: [proximal fracture](#), [shaft fracture](#)

Ulna: [interventions for isolated diaphyseal fractures](#)

Rib: [epidural analgesia](#)

Hip and femoral shaft: [nails, pins, plates, and screws](#), [femoral shaft fractures in children](#)

Hip: [conservative vs operative treatment](#)

Long bone: [antibiotic prophylaxis](#); lower extremity – [reamed versus nonreamed intramedullary nailing](#), [with concomitant vascular injury](#); femur – [pre-operative traction](#)

Tibia: [ultrasound for healing](#)

Ankle: [rehabilitation](#)

General fracture: [calcium phosphate bone cement](#), [resting injured limbs](#), [antibiotics in open limb fractures](#); [antibiotic prophylaxis for closed long bone fractures](#)

Children: [sedation and analgesia](#), [femoral shaft fractures](#), [wrist fractures](#)

| <b>Distal radius fracture</b>  |   |   |
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| <p><b>A meta-analysis of outcomes of external fixation versus plate osteosynthesis for unstable distal radius fractures</b></p> <p>“There was no evidence to support the use of internal fixation over traditional external fixation.”</p>   | <p>Journal of Hand Surgery, Margaliot 2005</p> <p><a href="#">DARE record</a></p> <p><a href="#">External link to PubMed record</a></p> | <p>Margaliot Z, Haase S C, Kotsis S V, Kim H M, Chung K C. A meta-analysis of outcomes of external fixation versus plate osteosynthesis for unstable distal radius fractures. Journal of Hand Surgery. American volume 2005; 30A(6): 1185.e1-1185.e17</p> |
| <p><b>Anaesthesia for treating distal radial fracture in adults</b></p> <p>“There is some indication that haematoma block provides poorer analgesia than intravenous regional anaesthesia, and can compromise reduction.”</p>  | <p>Cochrane Review, Handoll 2002</p> <p><a href="#">Abstract and review</a></p> <p>En español: <a href="#">resumen</a></p>              | <p>Handoll HHG, Madhok R, Dodds C. Anaesthesia for treating distal radial fracture in adults. Cochrane Database of Systematic Reviews 2002, Issue 3. Art. No.: CD003320.</p>  |
| <p><b>Bone grafts and bone substitutes for treating distal radial fractures in adults</b></p> <p>“Bone scaffolding may improve anatomical outcome compared with plaster cast alone but there is insufficient evidence to conclude on functional outcome and safety; or for other comparisons.”</p>   | <p>Cochrane Review, Handoll 2008</p> <p><a href="#">Abstract and review</a></p> <p>En español: <a href="#">resumen</a></p>              | <p>Bone grafts and bone substitutes for treating distal radial fractures in adults. Cochrane Database of Systematic Reviews 2008, Issue 2. Art. No.: CD006836.</p>  |
| <p><b>Conservative interventions for treating distal radial fractures in adults</b></p> <p>“There remains insufficient evidence from randomised controlled trials to determine which methods of conservative treatment are the most appropriate for the more common types of distal radial fractures in adults. Therefore, at present, practitioners applying conservative management should use an accepted technique with which they are familiar, and which is cost-effective from the perspective of their provider unit. Patient preferences and circumstances, and the</p> | <p>Cochrane Review, Handoll 2003</p> <p><a href="#">Abstract and review</a></p> <p>En español: <a href="#">resumen</a></p>              | <p>Handoll HHG, Madhok R. Conservative interventions for treating distal radial fractures in adults. Cochrane Database of Systematic Reviews 2003, Issue 2. Art. No.: CD000314.</p>   |

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| risk of complications should also be considered.”   |  |   |
| <p><b>External fixation versus conservative treatment for distal radial fractures in adults</b></p> <p>“There is some evidence to support the use of external fixation for dorsally displaced fractures of the distal radius in adults. Though there is insufficient evidence to confirm a better functional outcome, external fixation reduces redisplacement, gives improved anatomical results and most of the excess surgically-related complications are minor.”</p> | <p>Cochrane Review, Handoll 2007</p> <p><a href="#">Abstract and review</a></p> <p>En español: <a href="#">resumen</a></p>                     | <p>Handoll HHG, Huntley JS, Madhok R. External fixation versus conservative treatment for distal radial fractures in adults. Cochrane Database of Systematic Reviews 2007, Issue 3. Art. No.: CD006194.</p>           |
| <p><b>Percutaneous pinning for treating distal radial fractures in adults</b></p> <p>“Though there is some evidence to support its use, the precise role and methods of percutaneous pinning are not established. The higher rates of complications with Kapandji pinning and biodegradable materials casts some doubt on their general use.”</p>   | <p>Cochrane Review, Handoll 2007</p> <p><a href="#">Abstract and review</a></p> <p>En español: <a href="#">resumen</a></p>                     | <p>Handoll HHG, Vaghela MV, Madhok R. Percutaneous pinning for treating distal radial fractures in adults. Cochrane Database of Systematic Reviews 2007, Issue 3. Art. No.: CD006080.</p>                             |
| <b>Proximal humeral fracture</b>  |  |   |
| <p><b>Interventions for treating proximal humeral fractures in adults</b></p> <p>“Early physiotherapy, without immobilisation, may be sufficient for some types of undisplaced fractures. It is unclear whether operative intervention, even for specific fracture types, will produce consistently better long term outcomes.”</p>   | <p>Cochrane Review, Handoll 2003</p> <p><a href="#">Abstract and review</a></p> <p>En español: <a href="#">resumen</a></p>                     | <p>Handoll HHG, Madhok R. Interventions for treating proximal humeral fractures in adults. Cochrane Database of Systematic Reviews 2003, Issue 4. Art. No.: CD000434.</p>   |
| <b>Humeral shaft fracture</b>   |  |   |
| <p><b>Compression plating versus intramedullary nailing of humeral shaft fractures: a meta-analysis</b></p> <p>“Plate fixation of humeral shaft fractures may reduce the risk of reoperation and shoulder impingement.”</p>   | <p>Acta Orthopaedica, Bhandari 2006</p> <p><a href="#">DARE record</a> (in progress)</p> <p><a href="#">External link to PubMed record</a></p> | <p>Bhandari M, Devereaux P J, McKee M D, Schemitsch E H. Compression plating versus intramedullary nailing of humeral shaft fractures: a meta-analysis. Acta Orthopaedica 2006;77(2):279-284</p>                      |
| <b>Ulna fracture</b>  |  |   |
| <p><b>Interventions for isolated diaphyseal fractures of the ulna in adults</b></p> <p>“There is weak evidence that in people with minimally displaced isolated fracture of the ulna, cast immobilisation of the elbow may offer no short-term advantage in respect of pain relief or fracture union, and may be associated with longer delay in return to work, when compared with the use of a cast or brace that immobilises only the forearm.”</p>                    | <p>Cochrane Review, Handoll 2009</p> <p><a href="#">Abstract and review</a></p> <p>En español: <a href="#">resumen</a></p>                     | <p>Handoll HHG, Pearce P. Interventions for isolated diaphyseal fractures of the ulna in adults. Cochrane Database of Systematic Reviews 2009, Issue 3. Art. No.: CD000523. DOI: 10.1002/14651858.CD000523.pub3.v</p> |

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| <p><b>Rib fracture</b></p>  |  |   |
| <p><b>Effect of epidural analgesia in patients with traumatic rib fractures: a systematic review and meta-analysis of randomized controlled trials</b></p> <p>“There was no significant benefit of epidural analgesia on mortality, intensive care unit stay or hospital stay, but there may have been a benefit of reduced duration of mechanical ventilation with the use of thoracic epidural analgesia with local anaesthetics. Further research was required to evaluate the benefits and harms of epidural analgesia in this population before it was offered as a standard of care.”</p>   | <p>Canadian Journal of Anaesthesia , Carrier 2009</p> <p><a href="#">DARE record</a></p> <p><a href="#">External link to PubMed record</a></p> | <p>Carrier FM, Turgeon AF, Nicole PC, Trepanier CA, Fergusson DA, Thauvette D, Lessard MR. Effect of epidural analgesia in patients with traumatic rib fractures: a systematic review and meta-analysis of randomized controlled trials. Canadian Journal of Anaesthesia 2009; 56(3): 230-242</p> |
| <p><b>Hip and femoral shaft fracture</b></p>  |  |   |
| <p><b>Concurrent ipsilateral fractures of the hip and femoral shaft: a meta-analysis of 659 cases</b></p> <p>“Locked intramedullary nails yielded results that were superior to combinations of plates or unlocked nails and separate hip screws.”</p>  | <p>Acta Orthopaedica Scandinavica, Alho 1996</p> <p><a href="#">DARE record</a></p> <p><a href="#">External link to PubMed record</a></p>      | <p>Alho A. Concurrent ipsilateral fractures of the hip and femoral shaft: a meta-analysis of 659 cases. Acta Orthopaedica Scandinavica 1996;67(1):19-28</p>   |
| <p><b>Hip fracture</b></p>  |  |   |
| <p><b>Conservative versus operative treatment for hip fractures in adults</b></p> <p>“Conservative treatment will be acceptable where modern surgical facilities are unavailable, and will result in a reduction in complications associated with surgery, but rehabilitation is likely to be slower and limb deformity more common.”</p>   | <p>Cochrane Review, Handoll 2008</p> <p><a href="#">Abstract and review</a></p> <p>En español: <a href="#">resumen</a></p>                     | <p>Handoll HHG, Parker MJ. Conservative versus operative treatment for hip fractures in adults. Cochrane Database of Systematic Reviews 2008, Issue 3. Art. No.: CD000337. DOI: 10.1002/14651858.CD000337.pub2.</p>   |
| <p><b>Long bone fracture</b></p>  |  |   |
| <p><b>Antibiotic prophylaxis for surgery for proximal femoral and other closed long bone fractures</b></p> <p>“Antibiotic prophylaxis for closed fracture surgery is an effective intervention. Single dose intravenous prophylaxis is effective if the agent used provides tissue levels exceeding the minimum inhibitory concentration over a 12 hour period. If the antibiotic chosen has a short half-life which may not allow minimum inhibitory concentrations to be exceeded throughout the period from incision to wound closure, the use of multiple dose regimens using a 12 hour dosage schedule is a satisfactory alternative.”</p> | <p>Cochrane Review, Gillespie 2001</p> <p><a href="#">Abstract and review</a></p> <p>En español: <a href="#">resumen</a></p>                   | <p>Gillespie WJ, Walenkamp G. Antibiotic prophylaxis for surgery for proximal femoral and other closed long bone fractures. Cochrane Database of Systematic Reviews 2001, Issue 1. Art. No.: CD000244. DOI: 10.1002/14651858.CD000244.</p>  |

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| <p><b>Reamed versus nonreamed intramedullary nailing of lower extremity long bone fractures: a systematic overview and meta-analysis</b></p> <p>“Reamed intramedullary nailing of lower extremity long bone fractures significantly reduces rates of nonunion and implant failure, in comparison with nonreamed nailing.”</p>   | <p>Journal of Orthopaedic Trauma , Bhandari 2000</p> <p><a href="#">DARE record</a></p> <p><a href="#">External link to PubMed record</a></p> | <p>Bhandari M, Guyatt GH, Tong D, Adili A, Shaughnessy SG. Reamed versus nonreamed intramedullary nailing of lower extremity long bone fractures: a systematic overview and meta-analysis. Journal of Orthopaedic Trauma 2000; 14(1): 2-9</p> |
| <p><b>The importance of surgical sequence in the treatment of lower extremity injuries with concomitant vascular injury: a meta-analysis</b></p> <p>“Surgical sequence did not appear to affect the amputation rate associated with surgical repair of lower extremity fracture with concomitant vascular injury.”</p>  | <p>Injury, Fowler 2009</p> <p><a href="#">DARE record</a></p> <p><a href="#">External link to PubMed record</a></p>                           | <p>Fowler J, MacIntyre N, Rehman S, Gaughan J P, Leslie S. The importance of surgical sequence in the treatment of lower extremity injuries with concomitant vascular injury: a meta-analysis. Injury 2009; 40(1): 72-76</p>                  |
| <p><b>Pre-operative traction for fractures of the proximal femur in adults</b></p> <p>“From the evidence available, the routine use of traction (either skin or skeletal) prior to surgery for a hip fracture does not appear to have any benefit. However, the evidence is also insufficient to rule out the potential advantages for traction, in particular for specific fracture types, or to confirm additional complications due to traction use.”</p>  | <p>Cochrane Review, Parker 2008</p> <p><a href="#">Abstract and review</a></p> <p>En español: <a href="#">resumen</a></p>                     | <p>Parker MJ, Handoll HHG. Pre-operative traction for fractures of the proximal femur in adults. Cochrane Database of Systematic Reviews 2006, Issue 3. Art. No.: CD000168. DOI: 10.1002/14651858.CD000168.pub2.</p>                          |
| <p><b>Tibial fracture</b></p>   |   |   |
| <p><b>Low-intensity pulsed ultrasound and pulsed electromagnetic field in the treatment of tibial fractures: a systematic review</b></p> <p>“The evidence suggested that low-intensity pulsed ultrasound may speed healing of acute tibial fractures, but comparison studies with pulsed electromagnetic field are needed.”</p>   | <p>Acta Orthopaedica, Walker 2007</p> <p><a href="#">DARE record</a></p> <p><a href="#">External link to PubMed record</a></p>                | <p>Walker NA, Denegar CR, Preische J. Low-intensity pulsed ultrasound and pulsed electromagnetic field in the treatment of tibial fractures: a systematic review. Journal of Athletic Training 2007; 42(4): 530-535</p>                       |
| <p><b>Ankle fracture</b></p>  |   |   |
| <p><b>Rehabilitation for ankle fractures in adults</b></p> <p>“There is limited evidence supporting the use of a removable type of immobilisation and exercise during the immobilisation period, early commencement of weight-bearing during the immobilisation period, and no immobilisation after surgical fixation of ankle fracture. There is also limited evidence for manual therapy after the immobilisation period. Because of the potential increased risk, the patient's ability to comply with the use of a removable type of immobilisation and exercise is essential.”</p> | <p>Cochrane Review, Lin 2008</p> <p><a href="#">Abstract and review</a></p> <p>En español: <a href="#">resumen</a></p>                        | <p>Lin CWC, Moseley AM, Refshauge KM. Rehabilitation for ankle fractures in adults. Cochrane Database of Systematic Reviews 2008, Issue 3. Art. No.: CD005595. DOI: 10.1002/14651858.CD005595.pub2.</p>                                       |

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| <p><b>General fracture management</b></p>   |   |   |
| <p><b>The use of calcium phosphate bone cement in fracture treatment: a meta-analysis of randomized trials</b></p> <p>“The use of calcium phosphate bone cement for the treatment of fractures in adults is associated with lower prevalence of fracture site pain compared to controls managed with no graft material. Use of calcium phosphate bone cement also decreased loss of fracture reduction when compared to autogenous bone graft.”</p> | <p>Journal of Bone and Joint Surgery, Bajammal 2008</p> <p><a href="#">DARE record</a></p> <p><a href="#">External link to PubMed record</a></p>                          | <p>Bajammal SS, Zlowodzki M, Lelwica A, Tornetta P, Einhorn TA, Buckley R, Leighton R, Russell TA, Larsson S, Bhandari M. The use of calcium phosphate bone cement in fracture treatment: a meta-analysis of randomized trials. Journal of Bone and Joint Surgery. American volume 2008; 90-A(6): 1186-1196</p> |
| <p><b>Resting injured limbs delays recovery: a systematic review</b></p> <p>“We should not assume any benefit for immobilization after acute upper or lower limb injuries in adults. Rest appears to be overused as a treatment”</p>  | <p>Journal of Family Practice, Nash 2004</p> <p><a href="#">DARE record</a> (in progress)</p> <p><a href="#">External link to PubMed record</a></p>                       | <p>Nash CE, Mickan SM, Del Mar CB, Glasziou PR. Resting injured limbs delays recovery: a systematic review. Journal of Family Practice 2004; 53(9): 706-712</p>   |
| <p><b>Antibiotics for preventing infection in open limb fractures</b></p> <p>“Antibiotics reduce the incidence of early infections in open fractures of the limbs.”</p>   | <p>Cochrane Review, Gosselin 2004</p> <p><a href="#">Abstract and review</a></p> <p>En español: <a href="#">resumen</a></p>   | <p>Gosselin RA, Roberts I, Gillespie WJ. Antibiotics for preventing infection in open limb fractures. Cochrane Database of Systematic Reviews 2004, Issue 1. Art. No.: CD003764.</p>  |
| <p><b>Fractures in children</b></p>   |   |   |
| <p><b>Sedation and analgesia for pediatric fracture reduction in the emergency department: a systematic review</b></p> <p>“Ketamine-midazolam seems to be more effective and have fewer adverse events than fentanyl-midazolam or propofol-fentanyl. Data on other forms of analgesia or sedation are too limited to make comparisons.”</p>   | <p>Archives of Pediatrics and Adolescent Medicine, Migita 2006</p> <p><a href="#">DARE record</a> (in progress)</p> <p><a href="#">External link to PubMed record</a></p> | <p>Migita RT, Klein EJ, Garrison MM. Sedation and analgesia for pediatric fracture reduction in the emergency department: a systematic review. Archives of Pediatrics and Adolescent Medicine 2006; 160(1): 46-51</p>   |
| <p><b>The treatment of femoral shaft fractures in children: a systematic overview and critical appraisal of the literature</b></p> <p>“Early application of a hip spica cast was associated with a shorter duration of hospital stay and low rates of malunion compared with traction. Internal fixation gave low rates of angulatory malunion compared with early hip spica casting but high rates of overlengthening.”</p>                        | <p>Canadian Journal of Surgery, Wright 2000</p> <p><a href="#">DARE record</a> (in progress)</p> <p><a href="#">External link to PubMed record</a></p>                    | <p>Wright JG. The treatment of femoral shaft fractures in children: a systematic overview and critical appraisal of the literature. Canadian Journal of Surgery 2000; 43(3): 180-189</p>  |
| <p><b>Interventions for treating wrist fractures in children</b></p> <p>“Limited evidence supports the use of removable splintage for buckle fractures and challenges the traditional use of above-elbow casts after reduction of displaced fractures. Although percutaneous wire fixation prevents redisplacement, the effects on longer term outcomes including function are not established.”</p>  | <p>Cochrane Review, Abraham 2008</p> <p><a href="#">Abstract and review</a></p> <p>En español: <a href="#">resumen</a></p>  | <p>Abraham A, Handoll HHG, Khan T. Interventions for treating wrist fractures in children. Cochrane Database of Systematic Reviews 2008, Issue 2. Art. No.: CD004576.</p>   |

## Physical trauma (excluding fractures)

Fluid resuscitation – [colloids versus crystalloids](#)

Brain injury – [corticosteroids](#), [hypothermia](#), [mannitol](#), [psychological treatment for anxiety](#)

Spinal cord injury – [steroids](#), [gangliosides](#)

| <b>Fluid resuscitation</b>  |   |   |
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| <p><b>Colloids versus crystalloids for fluid resuscitation in critically ill patients</b></p> <p>“There is no evidence from randomised trials that resuscitation with colloids reduces the risk of death, compared to resuscitation with crystalloids, in patients with trauma, burns or following surgery. As colloids are not associated with an improvement in survival, and as they are more expensive than crystalloids, it is hard to see how their continued use in these patients can be justified outside the context of randomised trials.”</p> | <p>Cochrane Review, Perel 2007</p> <p><a href="#">Abstract and review</a></p> <p>En español: <a href="#">resumen</a></p>    | <p>Perel P, Roberts I, Pearson M. Colloids versus crystalloids for fluid resuscitation in critically ill patients. Cochrane Database of Systematic Reviews 2007, Issue 4. Art. No.: CD000567.</p> |
| <b>Brain injury</b>   |   |   |
| <p><b>Corticosteroids for acute traumatic brain injury</b></p> <p>“The increase in mortality with steroids in this trial suggest that steroids should no longer be routinely used in people with traumatic head injury.”</p>  | <p>Cochrane Review, Alderson 2005</p> <p><a href="#">Abstract and review</a></p> <p>En español: <a href="#">resumen</a></p> | <p>Alderson P, Roberts I. Corticosteroids for acute traumatic brain injury. Cochrane Database of Systematic Reviews 2005, Issue 1. Art. No.: CD000196.</p>  |
| <p><b>Hypothermia for traumatic head injury</b></p> <p>“There is no evidence that hypothermia is beneficial in the treatment of head injury. Hypothermia should not be used except in the context of a high quality randomised controlled trial with good allocation concealment.”</p>  | <p>Cochrane Review, Sydenham 2009</p> <p><a href="#">Abstract and review</a></p> <p>En español: <a href="#">resumen</a></p> | <p>Sydenham E, Roberts I, Alderson P. Hypothermia for traumatic head injury. Cochrane Database of Systematic Reviews 2009, Issue 2. Art. No.: CD001048.</p>                                       |
| <p><b>Mannitol for acute traumatic brain injury</b></p> <p>“Mannitol therapy for raised intracranial pressure (ICP) may have a beneficial effect on mortality when compared to pentobarbital treatment, but may have a detrimental effect on mortality when compared to hypertonic saline. ICP-directed treatment shows a small beneficial effect compared to treatment directed by neurological signs and physiological indicators.”</p>   | <p>Cochrane Review, Wakai 2007</p> <p><a href="#">Abstract and review</a></p> <p>En español: <a href="#">resumen</a></p>    | <p>Wakai A, Roberts IG, Schierhout G. Mannitol for acute traumatic brain injury. Cochrane Database of Systematic Reviews 2007, Issue 1. Art. No.: CD001049.</p>                                   |
| <p><b>Psychological treatment for anxiety in people with traumatic brain injury</b></p> <p>“This review provides some evidence for the effectiveness of cognitive behavioural therapy (CBT) for treatment of acute stress disorder following mild traumatic brain injury (TBI) and CBT combined with neurorehabilitation for</p>  | <p>Cochrane Review, Soo 2007</p> <p><a href="#">Abstract and review</a></p> <p>En español: <a href="#">resumen</a></p>      | <p>Soo C, Tate R. Psychological treatment for anxiety in people with traumatic brain injury. Cochrane Database of Systematic Reviews 2007, Issue 3. Art. No.: CD005239.</p>                       |

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| targeting general anxiety symptomatology in people with mild to moderate TBI.”   |  |  |
| <b>Spinal cord injury</b>  |  |  |
| <b>Steroids for acute spinal cord injury</b><br>“High-dose methylprednisolone steroid therapy is the only pharmacologic therapy shown to have efficacy in a phase three randomized trial when administered within eight hours of injury. One trial indicates additional benefit by extending the maintenance dose from 24 to 48 hours, if start of treatment must be delayed to between three and eight hours after injury.” | Cochrane Review, Bracken 2002<br><a href="#">Abstract and review</a><br>En español: <a href="#">resumen</a>  | Bracken MB. Steroids for acute spinal cord injury. Cochrane Database of Systematic Reviews 2002, Issue 2. Art. No.: CD001046.                |
| <b>Gangliosides for acute spinal cord injury</b><br>“The evidence available does not support the use of ganglioside treatment to reduce the death rate in spinal cord injury patients. No evidence has yet emerged that ganglioside treatment improves recovery or quality of life in survivors.”  | Cochrane Review, Chinnock 2005<br><a href="#">Abstract and review</a><br>En español: <a href="#">resumen</a> | Chinnock P, Roberts I. Gangliosides for acute spinal cord injury. Cochrane Database of Systematic Reviews 2005, Issue 2. Art. No.: CD004444. |

## Blood transfusion

Minimizing peri-operative allogeneic blood transfusion – [anti-fibrinolytics](#), [cell salvage](#), [desmopressin](#), [fibrin sealant](#)

Prevention of bleeding – [recombinant factor VIIa](#)

[Transfusion thresholds and other strategies](#)

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| <b>Anti-fibrinolytic use for minimising perioperative allogeneic blood transfusion</b><br>“Anti-fibrinolytic drugs provide worthwhile reductions in blood loss and the need for allogeneic red cell transfusion. In most circumstances the lysine analogues are probably as effective as aprotinin and are cheaper; the evidence is stronger for tranexamic acid than for aminocaproic acid.” | Cochrane Review, Henry 2007<br><a href="#">Abstract and review</a><br>En español: <a href="#">resumen</a>   | Henry DA, Carless PA, Moxey AJ, O’Connell D, Stokes BJ, McClelland B, Laupacis A, Fergusson DA. Anti-fibrinolytic use for minimising perioperative allogeneic blood transfusion. Cochrane Database of Systematic Reviews 2007, Issue 4. Art. No.: CD001886. |
| <b>Cell salvage for minimising perioperative allogeneic blood transfusion</b><br>“The results suggest cell salvage is efficacious in reducing the need for allogeneic red cell transfusion in adult elective surgery.”  | Cochrane Review, Carless 2006<br><a href="#">Abstract and review</a><br>En español: <a href="#">resumen</a> | Carless PA, Henry DA, Moxey AJ, O’Connell D, Brown T, Fergusson DA. Cell salvage for minimising perioperative allogeneic blood transfusion. Cochrane Database of Systematic Reviews 2006, Issue 4. Art. No.: CD001888.                                      |
| <b>Desmopressin use for minimising perioperative allogeneic blood transfusion</b><br>“There is no convincing evidence that desmopressin (DDAVP) minimises peri-operative allogeneic RBC transfusion in patients who do not have congenital bleeding disorders. Based on the currently available evidence, the use of DDAVP  | Cochrane Review, Carless 2004<br><a href="#">Abstract and review</a>  | Carless PA, Stokes BJ, Moxey AJ, Henry DA. Desmopressin use for minimising perioperative allogeneic blood transfusion. Cochrane Database of Systematic Reviews 2004, Issue 1. Art. No.: CD001884.   |

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| to reduce peri-operative blood loss or allogeneic RBC transfusion cannot be supported.”  | En español: <a href="#">resumen</a>   |  |
| <b>Fibrin sealant use for minimising peri-operative allogeneic blood transfusion</b><br>“The results suggest that fibrin sealants are efficacious in reducing both post-operative blood loss and peri-operative exposure to allogeneic RBC transfusion.”   | Cochrane Review, Carless 2003<br><a href="#">Abstract and review</a><br>En español: <a href="#">resumen</a> | Carless PA, Henry DA, Anthony DM. Fibrin sealant use for minimising peri-operative allogeneic blood transfusion. Cochrane Database of Systematic Reviews 2003, Issue 1. Art. No.: CD004171.  |
| <b>Recombinant factor VIIa for the prevention and treatment of bleeding in patients without haemophilia</b><br>“The effectiveness of rFVIIa as a more general haemostatic drug, either prophylactically or therapeutically, remains unproven. The use of rFVIIa outside its current licensed indications should be restricted to clinical trials.”   | Cochrane Review, Lin 2007<br><a href="#">Abstract and review</a><br>En español: <a href="#">resumen</a>     | Lin Y, Stanworth S, Birchall J, Doree C, Hyde C. Recombinant factor VIIa for the prevention and treatment of bleeding in patients without haemophilia. Cochrane Database of Systematic Reviews 2007, Issue 2. Art. No.: CD005011.                          |
| <b>Transfusion thresholds and other strategies for guiding allogeneic red blood cell transfusion</b><br>“The limited published evidence supports the use of restrictive transfusion triggers in patients who are free of serious cardiac disease. In countries with inadequate screening of donor blood, the data may constitute a stronger basis for avoiding transfusion with allogeneic red cells.” | Cochrane Review, Hill 2000<br><a href="#">Abstract and review</a><br>En español: <a href="#">resumen</a>    | Hill S, Carless PA, Henry DA, Carson JL, Hebert PPC, Henderson KM, McClelland B. Transfusion thresholds and other strategies for guiding allogeneic red blood cell transfusion. Cochrane Database of Systematic Reviews 2000, Issue 1. Art. No.: CD002042. |

## Post-traumatic stress disorder

[Psychological treatment](#), [psychological debriefing](#)

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| <b>Psychological treatment of post-traumatic stress disorder (PTSD)</b><br>“There was evidence individual Trauma-focused cognitive behavioural therapy/exposure therapy (TFCBT), eye movement desensitisation and reprocessing (EMDR), stress management and group TFCBT are effective in the treatment of PTSD. Other non-trauma focused psychological treatments did not reduce PTSD symptoms as significantly. There was some evidence that individual TFCBT and EMDR are superior to stress management in the treatment of PTSD at between 2 and 5 months following treatment, and also that TFCBT, EMDR and stress management were more effective than other therapies. There was insufficient evidence to determine whether psychological treatment is harmful. There was some evidence of greater drop-out in active treatment groups.” | Cochrane Review, Bisson 2007<br><a href="#">Abstract and review</a><br>En español: <a href="#">resumen</a> | Bisson J, Andrew M. Psychological treatment of post-traumatic stress disorder (PTSD). Cochrane Database of Systematic Reviews 2007, Issue 3. Art. No.: CD003388. |
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| <p><b>Psychological debriefing for preventing post traumatic stress disorder (PTSD)</b></p> <p>“There is no evidence that single session individual psychological debriefing is a useful treatment for the prevention of post traumatic stress disorder after traumatic incidents. Compulsory debriefing of victims of trauma should cease. A more appropriate response could involve a 'screen and treat' model.”</p> | <p>Cochrane Review, Rose 2002</p> <p><a href="#">Abstract and review</a></p> <p>En español: <a href="#">resumen</a></p> <p><a href="#">Evidence Update summary</a></p> | <p>Rose SC, Bisson J, Churchill R, Wessely S. Psychological debriefing for preventing post traumatic stress disorder (PTSD). Cochrane Database of Systematic Reviews 2002, Issue 2. Art. No.: CD000560.</p> |
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## Renal

[Hyperkalaemia](#), [renal replacement therapy](#)

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| <p><b>Emergency interventions for hyperkalaemia</b></p> <p>“Nebulised or inhaled salbutamol, or IV insulin-and-glucose are the first-line therapies for the management of emergency hyperkalaemia that are best supported by the evidence. Their combination may be more effective than either alone, and should be considered when hyperkalaemia is severe. When arrhythmias are present, a wealth of anecdotal and animal data suggests that IV calcium is effective in treating arrhythmia.”</p>  | <p>Cochrane Review, Mahoney 2005</p> <p><a href="#">Abstract and review</a></p> <p>En español: <a href="#">resumen</a></p>      | <p>Mahoney BA, Smith WAD, Lo D, Tsoi K, Tonelli M, Clase C. Emergency interventions for hyperkalaemia. Cochrane Database of Systematic Reviews 2005, Issue 2. Art. No.: CD003235. DOI: 10.1002/14651858.CD003235.pub2.</p>   |
| <p><b>Intermittent versus continuous renal replacement therapy for acute renal failure in adults</b></p> <p>“In patients who are haemodynamically stable, the renal replacement therapy (RRT) modality does not appear to influence important patient outcomes, and therefore the preference for continuous RRT (CRRT) over intermittent RRT (IRRT) in such patients does not appear justified in the light of available evidence. CRRT was shown to achieve better haemodynamic parameters such as mean arterial pressure. Future research should focus on factors such as the dose of dialysis and evaluation of newer promising hybrid technologies such as sustained low-efficiency dialysis (SLED). Triallists should follow the recommendations regarding clinical endpoints assessment in randomised trials in acute renal failure made by the Working Group of the Acute Dialysis Quality Initiative Working Group.”</p> | <p>Cochrane Review, Rabindranath 2007</p> <p><a href="#">Abstract and review</a></p> <p>En español: <a href="#">resumen</a></p> | <p>Rabindranath KS, Adams J, MacLeod AM, Muirhead N. Intermittent versus continuous renal replacement therapy for acute renal failure in adults. Cochrane Database of Systematic Reviews 2007, Issue 3. Art. No.: CD003773. DOI: 10.1002/14651858.CD003773.pub3.</p> |

## Sickle cell disease

[Preoperative blood transfusions](#); [preventing red blood cell dehydration](#); [hydroxyurea](#)

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| <p><b>Preoperative blood transfusions for sickle cell disease</b></p> <p>“While in general, conservative therapy appears to be as effective as aggressive therapy in preparation for surgery in people with sickle cell disease, further research is needed to examine the optimal regimen for different surgical types, and to address whether preoperative transfusion is needed in all surgical situations.”</p>  | <p>Cochrane Review, Hirst 2001</p> <p><a href="#">Abstract and review</a></p> <p>En español: <a href="#">resumen</a></p> | <p>Hirst C, Williamson L. Preoperative blood transfusions for sickle cell disease. <i>Cochrane Database of Systematic Reviews</i> 2001, Issue 3. Art. No.: CD003149. DOI: 10.1002/14651858.CD003149.</p>                                |
| <p><b>Drugs for preventing red blood cell dehydration in people with sickle cell disease</b></p> <p>“While the results of zinc for reducing sickle-related crises are encouraging, larger and longer-term multicentre studies are needed to evaluate the effectiveness of this therapy for people with sickle cell disease.</p> <p>Though the phase II study of senicapoc showed that the drug improved red cell survival, depending on dose, this did not lead to fewer painful crises; a subsequent phase III study was terminated prematurely for this reason.”</p> | <p>Cochrane Review, Nagalla 2010</p> <p><a href="#">Abstract and review</a></p>  | <p>Nagalla S, Ballas SK. Drugs for preventing red blood cell dehydration in people with sickle cell disease. <i>Cochrane Database of Systematic Reviews</i> 2010, Issue 1. Art. No.: CD003426. DOI: 10.1002/14651858.CD003426.pub3.</p> |
| <p><b>Hydroxyurea for sickle cell disease</b></p> <p>“While hydroxyurea appears both effective and safe in severely affected SS adults over a two-year period; further studies are required to elucidate its role in other patient groups and for other conditions.”</p>   | <p>Cochrane Review, Jones 2001</p> <p><a href="#">Abstract and review</a></p> <p>En español: <a href="#">resumen</a></p> | <p>Jones AP, Davies SC, Olujohungbe A. Hydroxyurea for sickle cell disease. <i>Cochrane Database of Systematic Reviews</i> 2001, Issue 2. Art. No.: CD002202. DOI: 10.1002/14651858.CD002202.</p>                                       |

What’s new in version 5.4? Hyperlinks updated.