Pegg Leditschke Children’s Burns Centre is the referral centre of QLD, northern NSW and surrounding islands.

We see over 900 new burns annually.

We are a MDT consisting of:
- Medical
- Nursing
- Occupational therapy
- Physiotherapy
- Social work
- Music therapy
- Research to name a few
# MECHANISMS - TOP RESULTS

<table>
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<tr>
<th>MOI type</th>
<th>Sub type</th>
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<tr>
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<td>Food - noodles</td>
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<td>7.3</td>
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<tr>
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<td>Water from saucepan / kettle</td>
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<td>7.0</td>
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<td>Hotplate on stove</td>
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<tr>
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<td>Vehicle exhaust - motorbike</td>
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<tr>
<td>Scald</td>
<td>Water from bucket / container</td>
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<td>4.4</td>
<td></td>
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<tr>
<td>Contact</td>
<td>Heater</td>
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<td>3.3</td>
<td></td>
</tr>
<tr>
<td>Contact</td>
<td>Stove / oven door</td>
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<td>Contact</td>
<td>Iron</td>
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<td>2.8</td>
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<tr>
<td>Contact</td>
<td>BBQ</td>
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<td>2.6</td>
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<td>Friction</td>
<td>Treadmill</td>
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<td>2.3</td>
<td></td>
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<td>Radiant heat</td>
<td>Solar (sunburn)</td>
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<td>2.1</td>
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<tr>
<td>Contact</td>
<td>Hair straightener</td>
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</table>
GENDER DISTRIBUTION

[Bar chart showing gender distribution by year for the years 2013 to 2015. The chart indicates the number of males, females, and indeterminate cases for each year.]
BURNS DEPTH

• Burns are described as the following
  • Superficial (Erythema)
  • Superficial Partial thickness
  • Deep Partial thickness
  • Full Thickness
SUPERFICIAL BURNS

- Characteristics
  - Pink
  - Blanches
  - No blisters present
  - Sun burn
SUPERFICIAL PARTIAL THICKNESS

• Characteristics
  • Blister
  • Blanch
  • Painful
  • Usually heal within 14 days
DEEP PARTIAL THICKNESS

- Deep Partial
  - Contains some pale/white areas
  - Can often have the cherry red colour
  - Some areas will require skin grafting
  - Scar management will be required
FULL THICKNESS

- Full thickness
  - White
  - Leathery
  - Thick
  - Will require skin graft
  - Scar management
ESTIMATING TBSA

- While the Rule of Nines is the most well known tool to estimate TBSA, it is not as accurate in children.
- Using the Lund and Browder will give a more accurate estimation.
- For small burns the palmer surface area can be used. Palm and fingers = 1%.
- Apps such as ITIM, can assist with calculations.
TBSA

Lund and Browder

Rule of Nines
FIRST AID

- Cold running water is the most effective first aid
- Effective for 3hrs post burn
- Once first aid is completed
  - Cover with cling film
  - Administer pain relief
  - Contact burns registrar
  - Keep patient warm
BLISTERS

• Debriding blisters has always been quite controversial
• Consensus amongst Burns experts is that you DO debride blisters
• Allows penetration of the silver to the affected area
• Visualise the wound
• Debride within a controlled environment with pain relief
BLISTERS
DRESSINGS

• Dressings have changed greatly over the last decade
• Flamazine is no longer used in the paediatric population
• Most common dressings used are
  • Mepilex Ag
  • Mepitel and Acticoat
MEPILEX AG

- Used in burns < 10%, superficial partial after clean first aid (as per flow chart)
- Mepilex Ag is a soft and highly conformable antimicrobial foam dressing that absorbs exudate and maintains a moist wound environment.
- The Safetac layer ensures that the dressing can be changed without damaging the wound or surrounding skin.
- Contains silver sulphate
- Changed every 3 days
MEPITEL

- Uses safetac technology
- Used under acticoat as an interface which enables ease of dressing removal and reduced damage to healing epithelial cells
- The open mesh design allows good penetration of silver from acticoat.
- Also used to minimize discomfort after acticoat application and during ongoing moistening
ACTICOAT

- Acticoat (with Nanocrystalline Silver) is an effective antimicrobial barrier dressing. Kills a broad spectrum of bacteria in as little as 30 minutes while maintaining a moist environment optimal for wound healing
- Effective barrier to over 150 pathogens
- Helps prevent infection and reduces risk of colonization
- Effective barrier to bacterial penetration
- Helps maintain a moist wound environment
- Must be kept moist- use water only NOT saline
- Can be applied to unaffected skin- some staining may occur but this fades quickly
MEPITEL AND ACTICOAT DRESSINGS
MEPILEX AG DRESSING
WHAT NOT TO DO
• Due to the introduction of silver based dressings, need for prophylactic Ab treatment has decreased
• As a general rule, Ab’s are not used in the paediatric setting unless they are symptomatic
• The silver within the dressing provides an antimicrobial affect
REFERRING A PATIENT

- LCCH offers 24hr on call service
- Contact (07) 3068 1111, ask for the burns Registrar
- Email address: burns-opd@health.qld.gov.au
- Ph: (07) 3068 2830
- Fax: (07) 3068 2829
- Referral form must be completed and sent through to either email address or Fax number