History of Daniels SharpSmart

- Established 1986 in Melbourne, Australia
- Primary focus is on safety and ecology
- Core Product: Sharpsmart reusable sharps container system
- Now in 6 countries & over 4,800 HCF
- In Canada since 2000
- Daniels diverted over 850 tonnes of plastic from landfill last year and will be increasing this diversion total dramatically.
Four Pillars of Daniels Sharpsmart

- Safety
- Efficiency
- Sustainability
- Service
Summary of Canadian Customers

Sharpsmart:
• 175 HCF in Ontario, 400 LTC and RH
• 85% of market, over 65,000 containers in use.
• Recent additions → Quebec, Nova Scotia, Ottawa and Montreal.
• Medbuy & HealthPro contract for reusable sharps containers

Medical Waste
• Entire WRHA and Over 60 HCF in Ontario
• All Hospitals in New Brunswick
Sharpsmart Safety

Construction

• The Sharpsmart is three times thicker and resistant to puncture and breakage than leading disposable brands.

Fill Level

• The Sharpsmart “clear view” window allows the user to see fill level without viewing entire messy contents. When filled, the container opening remains closed. The word FULL will be visible on the tray indicating the Sharpsmart container should be exchanged.

Ease of Disposal

• Sharpsmart features a large “target” area and the tray reduces the opportunity for unauthorized hand access.
• Sharpsmart meets the UN and DOT requirement for transport of medical waste (1.2 meter drop at -18°C & without additional packaging)

• Sharpsmart meets all regulatory requirements including:
  – CSA standard Z316.6-07 for evaluation of sharps containers
  – C4 Guidelines governing biomedical waste in Ontario
  – CCME: Guidelines for the Management of Biomedical Waste in Canada

• Sharpsmart containers are leak proof and tamper proof

• Clinically proven to reduce needle stick injuries by 33%
Sharps Injuries – 28 Hospital Study

SI – Sharps Injury
CASI – Container Associated Sharps Injury
FTE – Full Time Equivalent
Sharpsmart Efficiency

✓ No assembly required
✓ Minimal warehousing
✓ Lower cost per sharp container
✓ One company for product and service
✓ Reduced labour hours associated with sharps
Sharpsmart & Sustainability

- Sharpsmart containers are reusable and on average have been shown to reduce plastic waste generated by hospital by more than 30%.

- Sharpsmart containers come preassembled greatly reducing the amount of packaging required.

- The use of Sharpsmart contributes to significant reduction of a hospitals carbon footprint.
  - Life Cycle Analysis study comparing disposables vs Sharpsmart showed an 81% reduction in carbon emissions.
Carbon Footprint Study

850 bed Northwestern Memorial Hospital, Chicago

## Sharpsmart & Sustainability

<table>
<thead>
<tr>
<th></th>
<th>Disposable</th>
<th>Sharpsmart</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plastic containers</td>
<td>1.1 mill</td>
<td>0</td>
</tr>
<tr>
<td>landfilled</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weight of plastic to</td>
<td>1.6 mill lbs</td>
<td>0</td>
</tr>
<tr>
<td>landfill</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weight of cardboard</td>
<td>162,000 lbs</td>
<td>0</td>
</tr>
<tr>
<td>packaging</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Sharpsmart Service

• One company, Daniels Sharpsmart Canada Ltd. Provides sanitized Sharpsmart containers for use and collects full containers for processing.

• Daniels provides this service on a mutually agreed upon schedule.

• In addition, one audit per year provided at no charge.
  – Analysis of the contents in your containers to determine how effectively staff are using Sharpsmart.
<table>
<thead>
<tr>
<th>Location</th>
<th>Feature Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient Room</td>
<td>3 Tamper proof sizes</td>
</tr>
<tr>
<td>Operating room, Laboratory</td>
<td>2 large sizes with direct drop openings for Pharmacy supervised locations</td>
</tr>
<tr>
<td>Carts / Countertops</td>
<td>Applications for specific needs</td>
</tr>
<tr>
<td>Chemotherapy</td>
<td>Leak proof &amp; hands free foot pedal design available</td>
</tr>
<tr>
<td>Pharmaceutical</td>
<td>Tamper proof design</td>
</tr>
</tbody>
</table>
The Sharpsmart Family

HOW TO USE THIS POWERPOINT TEMPLATE SET:
There are 15 different templates in this Daniels PowerPoint Presentation Set which can be appropriated to content.

To change the template of any slide to suit your presentation, follow these instructions:
1. Click on the 'home' tab on the top menu bar
2. In the 'Slides' section on the toolbar click on the 'layout' dropdown menu
3. Click on the 'Title Slide' of the slide layout of your choice
4. When you add a new slide, this will default to the layout of the slide before it. To change, simply follow the process outlined in step 1 – 3.
Labour Study – 11 Hospitals

Large, efficient volume (11 ltr vs 14 ltr)

Reduction in Container exchanges

Container exchanges Per 100 Occ Bed/yr

- 32%

Disposable Sharpsmart

Sharpsmart Service

Top Line Cost

- Cost of containers, includes disposal

Cost Savings

- Labour: minimal packaging to prepare for disposal and transport
- No assembly / faster container exchange
- Storage / Warehousing
Washsmart System
Weight Registry
Bar Code Scan
Robotics Opening Sharps Container
Robotics Dumping Sharps Container
Container Wash Cycle
Washsmart Bacteria Challenge Test

Normal bioburden on Sharpsmart

6 Log Challenge in blood
- *Staphylo. Aureus*
- *Entero. faecalis*
- *Mycobacterium phlei*

After Washsmart (No Growth)
Transporters

Delivering to site

Medium - 38 X 47 X 74

Small - 26 X 48 X 72
Transporters

Large - 37” W  48” D  80” H

Holds on average 50 containers
Next Steps of Process

- Facility tour by Daniels personnel
- Removal of old system and install Sharpsmart.
- On going in-service training (E-Learning)
- Logistics of internal container movement.
- Coordinate service schedule and prepare staff for ordering Sharpsmart containers
Thank you

Questions?

*Remedy - Global Television Network

*Saving Hope - CTV Television Network