THE PROBLEMS

Nosocomial Infections/Vascular Line Sepsis
Stopcocks (used for injection of medications, administration of IV infusions, and collection of blood samples) represent a potential portal of entry for microorganisms into vascular access catheters and IV fluids.

Needlesticks and Exposure
OSHA estimates that 5.6 million workers in the health care industry and related occupations are at risk of exposure to blood-borne pathogens, including HIV, Hepatitis B, and Hepatitis C.

OSHA’s Compliance Directive¹ states that:
“All procedures involving blood or other potentially infectious materials shall be performed in such a manner as to minimize the splashing, spraying, spattering, and generation of droplets of these substances.”

The Directive further states:
“Employers who have employees with occupational exposure to blood-borne pathogens must consider and, where appropriate, use effective engineering controls, including safer medical devices, in order to reduce the risk of injury from needlesticks and from other sharp medical instruments.”

THE SOLUTION

DELTRAN PLUS, Utah Medical Products, Inc.’s (UTMD’s) closed needleless arterial blood collection system, was designed to offer increased protection to patients and healthcare workers. The integrated reservoir syringe and needleless sampling port provide significant benefits:

• Closed sampling system reduces the risk of nosocomial infection or line sepsis.
• Closed sampling system reduces the splashing and spraying of blood during sampling.
• Integrated reservoir syringe conserves precious blood volume of the patient (small volume blood loss can be critical for neonatal patients).
• Needleless sampling system reduces potential exposure from needlesticks.
• A clear, saline-free blood sample can be easily drawn for accurate lab analysis.
• Accurate blood pressure measurements with components that simplify set-up.
• One-handed operation of reservoir syringe makes the system easy to use.

¹OSHA 1910-1030
Closed Needleless Arterial Blood Collection System

**Single-Line Pole Mount Set**
- ABC-248 48" Line with Micro Drip Chamber, 3cc Reservoir
- ABC-260 60" Line with Micro Drip Chamber, 3cc Reservoir
- ABC-248A 48" Line with Macro Drip Chamber, 3cc Reservoir
- ABC-260A 60" Line with Macro Drip Chamber, 3cc Reservoir

**Single-Line ABC Sampling Set**
Single ABC line without transducer
Add closed-system sampling to any transducer
- ABC-048 48" ABC Line, 3cc Reservoir

**ABC Needleless Sampling Cannula**
- ABC-100 Protective Safety Cannula
- ABC-105 Protective Safety Cannula for Vacuum Collection

Multiple line configurations are available upon request.
UTMD applied its industry-accepted disposable blood pressure monitoring technology to the special needs of the NICU. UTMD’s Deltran® disposable pressure transducer expertise is integrated into a closed blood collection system¹ that is designed specifically to conserve blood and protect the neonatal patient from infection.

- Closed sampling system reduces risk of sepsis.
- Conserves precious blood volume of the neonatal patient.
- Needleless sampling system to avoid potential exposure and cross-contamination.
- Clear, saline-free blood sample for accurate lab analysis.
- Accurate blood pressure measurements with components that simplify setup.

**Deltran II Neonatal Transducer**
- Yellow markings identify neonatal/pediatric application
- Deltran Plus accuracy and reliability
- Up to 30cc/hr flow rate

DPT-300 Deltran II Neonatal Transducer

**Single-Line Neonatal/Pediatric Set**
- Yellow markings identify neonatal/pediatric application
- Facilitates blood sampling
- Up to 30cc/hr flow rate

DPT-324 24" Line

**Single-Line Closed Sampling Set**
- Designed specifically for neonatal application
- Preserves precious neonatal blood volume
- Up to 30cc/hr flow rate

ABC-328NP Neonatal ABC Kit, 6cc reservoir

¹U.S. Patent 5,759,160

**Deltran® II Closed Sampling Procedure:**

1. Open reservoir syringe stopcock (‘off’ to transducer).
2. Draw fluid from catheter-tubing system into reservoir syringe (pulls pure blood into access port).
3. Close one-way anti-backflow stopcock.
4. Insert blunt cannula into access port to draw blood into sampling syringe.

**Now reverse steps 1 through 3:**
- Open one-way anti-backflow stopcock.
- Re-infuse fluid from reservoir syringe to the patient.
- Close reservoir syringe stopcock to resume blood pressure monitoring (‘off’ to reservoir).
Custom Monitoring Kits
Every clinical requirement — for any situation — can be designed into a single system. Contact your local UTMD distributor for more information.

Delta-Flow™
Clinical dynamic response assessment by square wave testing may be performed quickly and accurately at the bedside with the Snap-Tab™ flush device. This device provides the spike to the system which is necessary to evaluate waveform damping.

Organizers
Three and four place Organizers with color coded labels provide easy identification of various components and can be easily adapted to mount to the bedside or an IV pole.

Delta-Cal™
A unique, hand-held transducer tester, DELTA-CAL provides a known pressure value to eliminate use of mercury manometers and allows verification of proper function and accuracy of the DELTRAN pressure transducer system. A pneumatic port and monitor connector port provide methods for determining the source of a problem, whether it be in the monitor, cable, or transducer. The device may also be used with most other blood pressure transducer systems.

Monitor Cables
UTMD cables provide the interface between Deltran transducers and virtually all monitor models, ensuring that Deltran accurately monitors patient vitals. Contact UTMD with your monitor model for product information.
Since 1978, UTMD has been a leader in disposables for blood pressure monitoring. By continually striving to anticipate the critical needs of clinicians, UTMD is constantly refining technology to develop transducer products of the highest value to clinicians and patients.

DELTRAN pressure transducers reflect 20 years of experience in critical care monitoring. During that time the DELTRAN transducer has been established as the standard for safety and accuracy.

In addition, UTMD’s DELTRAN PLUS needleless arterial blood collection system extends the DELTRAN family of products to include protection from exposure to blood-borne pathogens.

UTMD’s goal is to continually seek ways to improve accuracy and safety.

**DELTRAN**
Technology for Critical Care

**DELTRAN I**
Stand Alone Disposable Pressure Transducer

**DELTRAN II**
Pressure Transducer With Integral Stopcock and Flush Device

**Deltran Provides:**
- Consistent and accurate readings during monitoring.
- Components that simplify set-up.
- A closed sampling system which reduces risk of sepsis.
- Conservation of precious blood volume which can be critical in small patients.
- A needleless sampling system to avoid potential exposure and cross-contamination.
- A fully integrated flow-thru component design that simplifies priming and de-bubbling.
- The versatile, dual function Snap-Tab which allows for dynamic response testing.
- 3cc or 30cc per hour flow rates.
- Compatibility with most types of monitors.
Single-Line Arm Mount Set
DPT-212  Micro Drip Chamber
DPT-212A  Macro Drip Chamber

Single-Line Pole Mount Set
DPT-248  48” Line with Micro Drip Chamber
DPT-248A  48” Line with Macro Drip Chamber
DPT-260  60” Line with Micro Drip Chamber
DPT-260A  60” Line with Macro Drip Chamber

Dual-Line Pole Mount Set
Color coded lines for accurate identification
Scalable — easily add a third line
DP2-400  48” Lines with Micro Drip Chamber
DP2-400A  48” Lines with Macro Drip Chamber

Bifurcated Single Transducer Pole Mount Set
Enables monitoring of either of two lines with a single transducer
Color coded lines for accurate identification
DPT-248DL  48” Lines with Micro Drip Chamber
DPT-260DL  60” Lines with Micro Drip Chamber

Triple-Line Pole Mount Set
Color coded lines for accurate identification
Preassembled triple line set
DP3-400  48” Lines with Micro Drip Chamber
DP3-400A  48” Lines with Macro Drip Chamber
**ORDERING INFORMATION**

Deltran® Transducers and Kits

**Transducers**

- DPT-100 Deltran Disposable Pressure Transducer 25/bx
- DPT-200 Deltran II Disposable Pressure Transducer, 3cc/hr flow 25/bx
- DPT-300 Deltran II Disposable Pressure Transducer, 30cc/hr flow for Neonatal Use 25/bx

**Assembled Transducer Kits**

<table>
<thead>
<tr>
<th>Transducers</th>
<th>Line Length</th>
<th>Package</th>
<th>Micro Drip</th>
<th>Macro Drip</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deltran II Arm Mount Kit</td>
<td>12&quot;</td>
<td>25/bx</td>
<td>DPT-212</td>
<td>DPT-212A</td>
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<tr>
<td>Deltran II Pole Mount Kit</td>
<td>48&quot;</td>
<td>25/bx</td>
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<td>DPT-248A</td>
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<tr>
<td>Deltran II Pole Mount Kit</td>
<td>60&quot;</td>
<td>25/bx</td>
<td>DPT-260</td>
<td>DPT-260A</td>
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<tr>
<td>Deltran II '2x1' Pole Mount System</td>
<td>2 x 48&quot;</td>
<td>10/bx</td>
<td>DPT-248DL</td>
<td>--</td>
</tr>
<tr>
<td>Deltran II '2x1' Pole Mount System</td>
<td>2 x 60&quot;</td>
<td>10/bx</td>
<td>DPT-260DL</td>
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<tr>
<td>Deltran II Pole Mount Kit</td>
<td>2 x 48&quot;</td>
<td>10/bx</td>
<td>DP2-400</td>
<td>DP2-400A</td>
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<tr>
<td>Deltran II Pole Mount Kit</td>
<td>3 x 48&quot;</td>
<td>10/bx</td>
<td>DP3-400</td>
<td>DP3-400A</td>
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</table>

Deltran Plus Transducers and Closed, Needleless Arterial Blood Collection (ABC) Kits

**Assembled Kit for Existing Transducers**

<table>
<thead>
<tr>
<th>Transducers</th>
<th>Reservoir</th>
<th>Package</th>
<th>Line Length</th>
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</thead>
<tbody>
<tr>
<td>ABC System Only</td>
<td>3cc</td>
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<td>48&quot;</td>
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**Assembled Transducer Kits**

<table>
<thead>
<tr>
<th>Transducers</th>
<th>Line Length</th>
<th>Package</th>
<th>Micro Drip</th>
<th>Macro Drip</th>
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<tbody>
<tr>
<td>Deltran II ABC Pole Mount Kit</td>
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<td>ABC-248A</td>
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<tr>
<td>Deltran II ABC Pole Mount Kit</td>
<td>60&quot;</td>
<td>25/bx</td>
<td>ABC-260</td>
<td>ABC-260A</td>
</tr>
</tbody>
</table>

Neonatal Systems and Kits

For use with syringe pumps. Allows for up to 30cc/hr flow rates.

**Assembled Transducer Kits**

<table>
<thead>
<tr>
<th>Transducers</th>
<th>Reservoir</th>
<th>Package</th>
<th>Line Length</th>
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</thead>
<tbody>
<tr>
<td>Deltran II Standard Kit</td>
<td>--</td>
<td>25/bx</td>
<td>24&quot;</td>
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<tr>
<td>Deltran Plus Closed, Needleless ABC Kit</td>
<td>6cc</td>
<td>10/bx</td>
<td>ABC-328NP</td>
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</tbody>
</table>

Accessories: Organizers, Pole Mounts & Monitor Cables

- ABC-100 Protective Cannula for ABC Systems 100/bx
- ABC-105 Protective Cannula with Vacuum Collection Assembly for ABC Systems 50/bx
- 650-100 Deltran Three Position Organizer 5/bx
- 650-105 Deltran Four Position Organizer 5/bx
- 650-125 Velcro Strap and Adhesive Pad for Patient Mount 25/bx
- 650-150 Pole Mount Unit for Organizers 1 ea
- 650-XXX Reusable Monitor Interface Cables 1 ea

**Transducer Calibration Systems**

- 650-950 Delta-Cal™ Transducer Simulator/Tester 1 ea
- 650-900 Veri-Cal™ Transducer Tester 1 ea
- 650-905 48" Connecting Tube and Four-Way Stopcock (non-sterile) 1 ea

**Delta-Flow™ Flush Devices with Snap-Tab™**

<table>
<thead>
<tr>
<th>Length</th>
<th>Male-Female</th>
<th>Male-Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>6&quot;</td>
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</tr>
<tr>
<td>84&quot;</td>
<td>300-084</td>
<td>310-084</td>
</tr>
</tbody>
</table>

**Fluid Administration Sets, Caps, and Stopcocks**

- 600-122 Fluid Administration Set, 60", Macro Drip Trifurcated 25/bx
- 600-400 Universal Caps (package of two) 50/bx
- 400-351 3-Way Luer Lock Stopcock 50/bx

**Luer-Lock Pressure Tubing** Packaged 50/box.

- 600-122 Fluid Administration Set, 60", Macro Drip Trifurcated 25/bx
- 600-400 Universal Caps (package of two) 50/bx
- 400-351 3-Way Luer Lock Stopcock 50/bx

Deltran® is a registered trademark of and Delta-Cal™, Delta-Flow™, Snap-Tab™ and Veri-Cal™ are trademarks of Utah Medical Products, Inc.