



INTROCAN SAFETY[®]



INTROCAN SAFETY®

IV CATHETER

Passive Safety Technology that Reduces Needlestick Injuries

Passive Safety Technology – Established worldwide:

B. Braun has minimised the risk of accidental needle-stick injuries globally with more than 1 billion B. Braun Safety IV Catheters in use.

- 1,000,000,000 times protection against sharps injuries
- 1,000,000,000 times protection against infections like HIV
- 1,000,000,000 times protection against fear and uncertainty

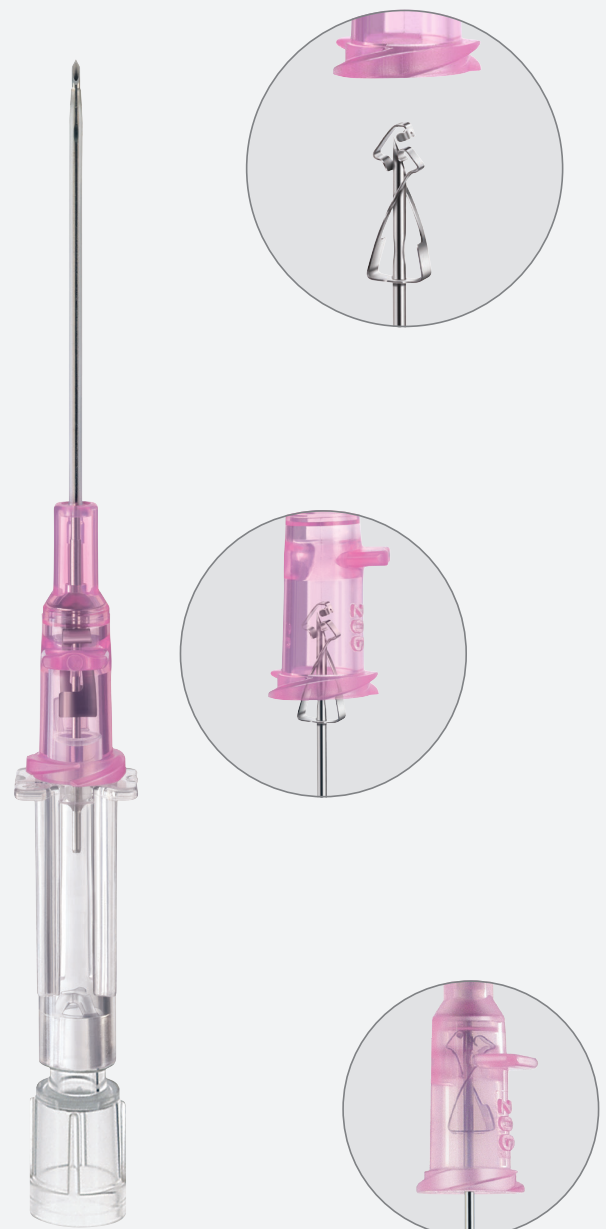
Passive Safety Technology is incorporated into the Introcan Safety® IV Catheter via an integrated fully automatic Safety Shield which protects the needle tip to prevent needlestick injuries.

A recent study has clinically proven that passive safety engineered devices provide healthcare workers better protection when compared to devices that require the user to activate the safety feature.¹

This study concluded that passive safety devices were associated with the lowest needlestick injury rates and are most effective against needlestick injury prevention.¹

The Passive Safety Shield of Introcan Safety®

- Requires no user activation – no button, twists or clicks
- Automatically covers needle tip upon needle withdrawal, without additional steps
- Cannot be bypassed
- Eliminates risk of inadvertent activation during handling
- Stays in place through disposal

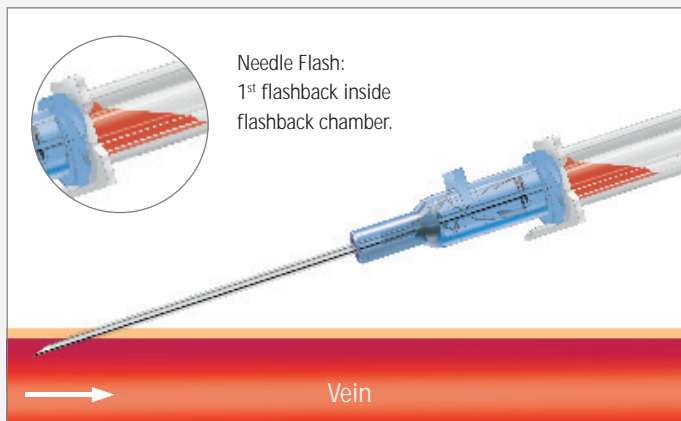


Improves First Stick Success

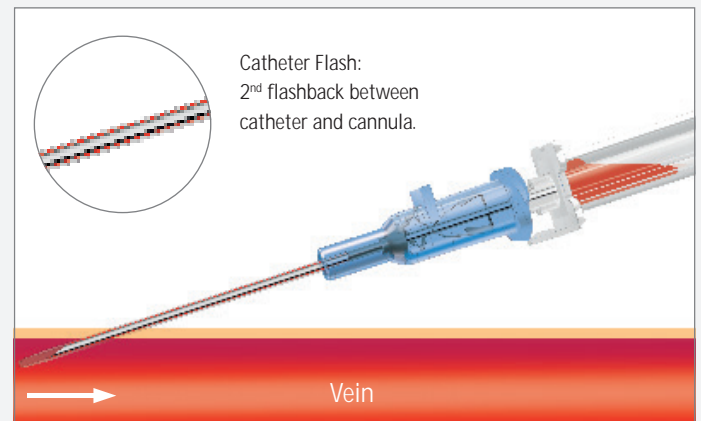
Double Flashback Technology:

- Helps ensure first stick success and patient comfort through quick visualisation of both needle and catheter flashback
- Promotes best practices by reducing the need to remove and reinsert the needle in order to confirm catheter placement, as may occur with other needles and crimped needle systems

Double Flashback Technology clearly indicates correct needle and catheter placement and the success of the venipuncture. This safe confirmation maximises your confidence!



Needle Flash: 1st flashback confirms the needle is in the vein



Catheter Flash: 2nd flashback confirms the catheter is in the vein

User benefits:

Self-activating Safety Shield – covers needle tip automatically after use

Universal back cut needle offers flexibility of needle insertion at a wide range of angles

The double flash back technology ensures first stick success

Simplicity – looks and feels like a standard cannula

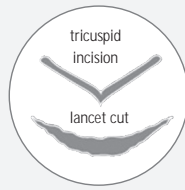
Ensures Best Practice

Every product detail is designed for Best Practice:

Easy to use:
No extra steps needed to prepare the catheter for insertion



Universal Back Cut Bevel

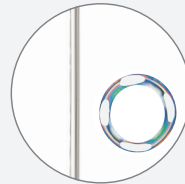


Universal Back Cut Bevel

- Wide choice of insertion angles aids in accessing difficult veins
- Super-sharp needle bevel offers pain reduction due to lower forces required to puncture skin and vein
- Creates a V-shaped, tricuspid incision versus a lancet cut for easier catheter insertion, less tissue tearing, faster healing and reduced risk of infection



Catheter Material



Catheter Material

- Polyurethane (PUR) is softer, more comfortable and provides longer in-dwelling performance
- Fluorinated ethylene propylene (FEP) has firmer construction for arterial access
- All catheters are PVC-, DEHP- and Latex-free
- Radiopaque stripes provides good visibility under X-rays

Push-Off Plate



Push-Off Plate

- Facilitates one-handed catheter advancement
- Minimises incidence of catheter hub touch contamination
- Indicates needle bevel orientation

Flashback Chamber



Flashback Chamber

- Transparent flashback chamber allows quick visualisation of blood
- Rapid confirmation of vein access

Removable Flash Plug



Removable Vented Flash Plug

- Avoids blood exposure
- Permits attachment of a syringe for aspiration or other special procedures

PREVENTS THE RISK OF ACCIDENTAL INJURIES

Have you or a colleague ever been stuck by a contaminated needle? The chances are high that you have!

At an average hospital, workers suffer from approximately 30 needlestick injuries per 100 hospital beds per year.²

These factors cannot be controlled. Accidental needlestick injuries can happen to anyone!

These injuries may cause a number of serious and potentially fatal transmissions of hepatitis B or C viruses (HBV, HCV), or human immunodeficiency virus (HIV).^{3,5}

In fact, nearly 90,000 healthcare workers worldwide contract blood-borne infections annually (HBV, HCV, HIV).⁴

Most common causes of sharp injuries are unexpected patient reactions, shortage of staff, rushing, distraction, collision with another healthcare worker and passing sharp equipment from hand to hand.^{3,4}

Consider – not all safety devices can protect you!

Main reasons why a needlestick injury can occur with other safety devices:¹

- User has to do something to activate the safety mechanism
- Safety activation procedure is risky
- Safety mechanism is not activated completely
- User noncompliance

These risks can be prevented by using a Passive Safety device such as Introcan Safety®



Needlestick Injury Rates According to Different Types of Safety-Engineered Devices: Results of a French Multicenter Study

Tosini W, et al. Needlestick Injury Rates According to Different Types of Safety-Engineered Devices: Results of a French Multicenter Study. *Infect Control and Hosp Epidemiol* April 2010; 31:402-407.

The author concluded:

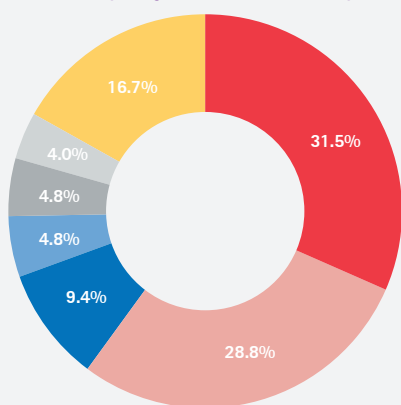
“We provide clear evidence that passive SEDs are more effective than active SEDs for NSI prevention. Passive devices require no input from the user, and this is particularly important when healthcare personnel are working long hours or night shifts, as well as in emergency situations, all of which are associated with a higher rate of NSIs. Passive devices eliminate the need for elaborate training. The cost of fully automated SEDs might be offset by lesser training requirements and by cost savings associated with a reduction in NSIs (eg, serological tests, counseling, postexposure prophylaxis, time off work, and treatment).”

NEEDLESTICK IN AUSTRALIA

At least 18,000 healthcare professionals suffer from a needle stick every year.⁶

Numerous studies have shown that under reporting of NSIs range between 30%-80%, and thus the likely number of NSIs in Australia could be over 30,000 every year.⁶

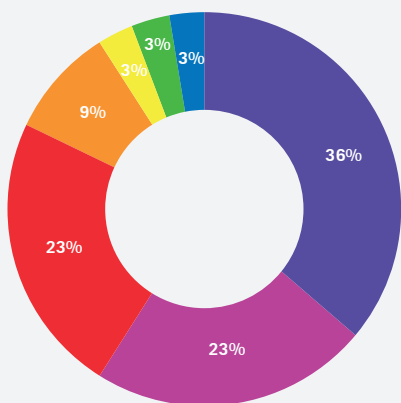
Areas where sharp injuries most frequently occur⁷



- Patient room
- Operating room
- Emergency department
- Outpatient clinic / office
- Intensive / Critical care unit
- Procedure room
- Others

Under Reporting

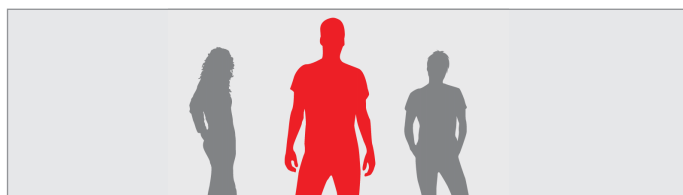
Despite the dangers of needle stick injury, up to 90% of all needle stick injuries remain unreported, reasons are stated below.⁸



- Too busy
- Follow up time takes too long
- Afraid of consequences to job
- Others
- Afraid of reporting to health insurance
- Forgetfulness
- Don't know NSI should be reported

Risk of being infected from a contaminated needlestick injury

Hepatitis B – 1 in 3



In Australia

- An estimated 200,000 people have chronic hepatitis B
- It is estimated that Hep B induced liver cancers and the deaths attributed to Hep B will increase by 2 to 3 fold by 2017⁶

Hepatitis C – 1 in 30



In Australia

- More than 300,000 people are infected with HCV, around 226,700 cases develop into chronic hepatitis
- Approximately 11,000 new cases of chronic hepatitis C are diagnosed every year
- Around 75-85% of individuals with HCV develop chronic liver disease
- Hepatitis C is the leading cause of liver transplant, with 1 in 10 patients with chronic hepatitis C requiring a liver transplant⁶

HIV – 1 in 300



In Australia

- At least 17,000 individuals are living with AIDS
- Around 1,000 people are diagnosed with HIV each year
- Approximately 75 people die every year from illnesses related to HIV infection⁶

TREATMENT COSTS OF NSIS TO THE AUSTRALIAN HEALTHCARE SYSTEM:

- \$173,000 - estimated lifetime treatment costs of a newly HIV-infected person in Australia.
- \$252 million per year - annual treatment cost of HCV or \$1.5 billion in the next 5 years.
- \$13.6 billion - lifetime cost of currently HCV infected group (maximum of 60 years).
- \$47.9 million - public hospital expenditure on hepatitis C treatment drugs excluding non-pharmaceutical costs.
- \$177,000 per procedure - cost of liver transplants with a long term follow up cost ranging between \$10,000-20,000 per year. Around 200 people receive liver transplants each year.

Australia has yet to adopt a nationally consistent approach to the use of Safety Engineered Medical Devices (SEMDs) in healthcare settings either through prescriptive legislation or policy.

Australian hospitals could gain an average cost savings of \$18.6 million per year. This estimate is very conservative and did not include treatment of chronic HCV and HIV. The cost savings would increase to at least \$36.8 million per year if costs of post-exposure prophylaxis (PEP) treatment and HCV treatment are taken into consideration.⁶

SUMMARY:

The usefulness of Safety Engineered Medical Devices (SEMDs) is well established and healthcare organisations are encouraged to consider their use. (NSW Government. NSW Health Policy Directive: Sharps Injuries –Prevention in the NSW Public Health System 2007).

Post-implementation of SEMDs can reduce NSIs by over 80%, and, in conjunction with training and guidelines can reduce injuries by over 90%.

When accounting for the high risks of needle sticks injuries, Safety Engineered Medical Devices (SEMDs) prove to be extremely cost-effective.¹⁰

Cost saving factors of SEMDs include:

- Decreased nursing time as a result of product use
- Decreased 'downstream' costs (e.g. costs of sharps disposal)
- Avoidance of NSIs and associated costs, including direct and indirect costs of post-exposure treatment and management
 - Costs associated with psychological impact (mental and emotional distress suffered by injured individuals and families)
 - Reduced Quality of life
 - Other costs such as compensation claims and loss of productivity

Further to cost savings, the use and provision of SEMDs should be considered as an ethical issue of "who has the right to decide healthcare workers should risk injury".¹¹

References

1. Tosini W., et al. Needlestick Injury Rates According to Different Types of Safety-Engineered Devices: Results of a French Multicenter Study. *Infect Control and Hosp Epidemiol* April 2010; 31:402-407.
2. NIOSH ALERT: Preventing Needlestick Injuries in Health Care Settings. Cincinnati, OH: National Institute for Occupational Safety and Health; 1999. US Dept of Health and Human Services (NIOSH) publication 2000-108.
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7. Perry J, Jagger J. Healthcare worker blood exposure risks: correcting some outdated statistics. *Advances in Exposure Prevention*. 2003. Available at: www.healthsystem.virginia.edu/internet/epinet/HCW-risk-update-AEP.pdf. Accessed on January 14, 2013.
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PRODUCT SPECIFICATIONS

Easy Identification

The clearly visible colour code on the packaging provides identification of the suitable gauge size and quick differentiation between product variations.



Environmentally Friendly

- Smaller device size reduces overall waste disposal

Introcan Safety®

Size	Catheter Length Inch	Catheter Length mm	Flow Rate ml/min	Product Code
24G	3/4"	19	22	4251601-03
22G	1 3/4"	45	26	4252520-01
22G	1"	25	35	4251628-03
20G	1 3/4"	45	57	4252527-03
20G	1 1/4"	32	60	4251644-03
20G	1"	25	65	4251652-03
18G	1 3/4"	45	100	4251679-03
18G	1 1/4"	32	105	4251687-03
16G	2"	50	210	4251695-03
16G	1 1/4"	32	215	4251709-03
14G	2"	50	345	4251717-03
14G	1 1/4"	32	350	4251890-03

Box quantity: 50 pcs | Carton quantity: 200 pcs (4x50pcs)