

SentraCath Closed System IV Safety Cannula

Integrated closed system to minimise CRBSIs
and ensure safety for healthcare professionals
from blood borne pathogen exposure



Catheter related blood stream
infections (CRBSIs) and patient
safety



Needle stick injuries and exposure
to blood borne pathogens



Prevalence and risk factors of
difficult venous access



IV catheter dislodgement and
associated complications

Challenges faced during patient care



Catheter related blood stream infections (CRBSIs) and patient safety goals

Peripheral vascular catheter bloodstream infections are a significant cause of health care associated infection. Patients require intensive and long-term care, along with lengthy durations of drug treatment, due to haematogenous complications. Such infections may even be fatal.¹

It may continue to place a heavy burden on patients and healthcare providers.

87% of bloodstream infections are associated with the presence of an intravascular device.²



Needle stick injuries and exposure to blood borne pathogens

Needle stick injuries (NSIs) are one of the most anxiety-provoking occupation-related work hazards, due to a risk of exposure to blood borne pathogens in patient blood.

The World Health Organisation (WHO) estimates that each year, 3 million HCP experience percutaneous exposure to bloodborne pathogens (2 million to HBV, 0.9 million to HCV, and 170,000 to HIV).³



Prevalence and risk factors of difficult venous access

Difficult peripheral intravenous cannulation may produce pain and delay the start of treatment. Repeated punctures can degrade vascular walls, complicating subsequent approaches.^{4,5}

The first attempt at peripheral intravenous catheterisation fails in 12-26% of adults and 24-54% of children.⁶



IV catheter dislodgement and associated complications

Accidental dislodgement leads to PIVC restarts, treatment interruptions and delays, costs, staff time, patient anxiety and increased risk of bleeding, haematoma, infection and trauma.⁷

Dislodgement or accidental removal is stated to be the cause behind 6%-20% of catheter failures.⁸

Increased peripheral IV catheter complications, leads to increased cost of care^{9,10}

PIVC technology - multiple components, integrated into one system

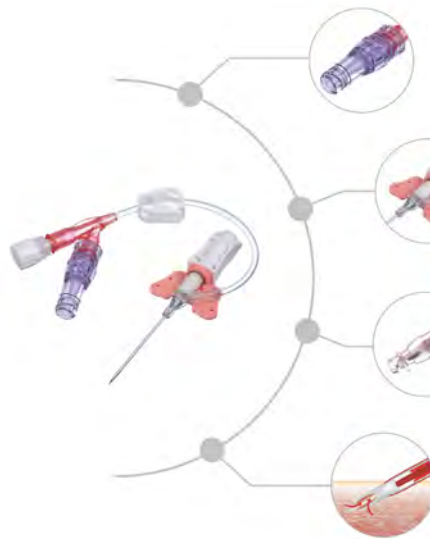
- Reducing microbial contamination
- Enhancing patient and healthcare worker safety
- Reducing insertion discomfort, compared with conventional catheters
- Time saving
- Cost saving

An integration of multiple stand alone technologies

- An all-in-one integrated closed system catheter requires less setup time, fewer connections, and minimises touch contamination
- Advanced biocompatible polyurethane catheter
- Blood control mechanism to prevent accidental blood spillage whilst withdrawing the needle after venipuncture
- Compatible with power injectors up to 300 PSI

SentraCath Closed System IV Safety Cannula

An integrated system, consisting of individual components that are usually assembled by the user during the insertion of a peripheral IV catheter. The Peripheral IV catheter insertion is an aseptic procedure - the pre-assembly of these components as a closed IV catheter system, helps in reducing the risk of accidental contamination of the device during the process, which may otherwise lead to bloodstream infections.



Needle-free valve reduces the risk of catheter related bloodstream infections (CRBSIs)

Ultra-soft, large perforated wings for better catheter stabilisation and skin ventilation

User friendly, self-activating passive safety mechanism, prevents needle stick injuries

Quick flashback needle technology ensures successful venipuncture

1



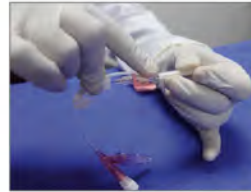
Prepare equipment

2



Ultra-soft, large perforated wings provide a better stabilisation platform, which minimises catheter dislocation

3



Withdraw the needle slightly and place it back to the original place, to ensure smooth functioning

4



Quick flashback observed in the catheter itself, advance it further into the vein. Helps in minimising the chances of multiple venipuncture and in accessing difficult veins

5



Secondary flash back in extension tubing

6



Close clamp

7



While removing needle, safety guard activates passively, helping minimise accidental needle stick injuries

8



Blood control mechanism helps in preventing blood spillage during procedure

9



Use transparent dressing for fixation

10



Prime additional needle-free valve

11



Attach additional needle-free valve

12



Clear extension tubing, using a pre-filled saline syringe and secure extension tubing securely onto patient hand

Ordering information

Product group	Product code	Colour	Product description	Units per box	NHSSC code
Y site	SML/1923/18/P	18G	SentraCath closed system IV safety cannula with extension, wings, Y site, 32mm, 18G	20	FSP85100
	SML/1924/20/P	20G	SentraCath closed system IV safety cannula with extension, wings, Y site, 32mm, 20G	20	FSP85097
	SML/1925/22/P	22G	SentraCath closed system IV safety cannula with extension, wings, Y site, 25mm, 22G	20	FSP85111
	SML/1926/24/P	24G	SentraCath closed system IV safety cannula with extension, wings, Y site, 19mm, 24G	20	FSP85119
	SML/1927/26/P	26G	SentraCath closed system IV safety cannula with extension, wings, Y site, 19mm, 26G	20	FSP85108
Straight	SML/1931/18/P	18G	SentraCath closed system IV safety cannula with extension, wings, straight, 32mm, 18G	20	FSP85127
	SML/1955/18/P	18G	SentraCath closed system IV safety cannula with extension, wings, straight, 45mm, 18G	20	FSP85117
	SML/1932/20/P	20G	SentraCath closed system IV safety cannula with extension, wings, straight, 32mm, 20G	20	FSP85125
	SML/1933/22/P	22G	SentraCath closed system IV safety cannula with extension, wings, straight, 25mm, 22G	20	FSP85126
	SML/1934/24/P	24G	SentraCath closed system IV safety cannula with extension, wings, straight, 19mm, 24G	20	FSP85107
Y Site, needle-free valve	SML/1935/26/P	26G	SentraCath closed system IV safety cannula with extension, wings, straight, 19mm, 26G	20	FSP85124
	SML/1989/18/P	18G	SentraCath closed system IV safety cannula with extension, wings, Y site, needle-free valve, 32mm, 18G	20	FSP85112
	SML/1990/18/P	18G	SentraCath closed system IV safety cannula with extension, wings, Y site, needle-free valve, 45mm, 18G	20	FSP85110
	SML/1991/20/P	20G	SentraCath closed system IV safety cannula with extension, wings, Y site, needle-free valve, 32mm, 20G	20	FSP85109
	SML/1992/22/P	22G	SentraCath closed system IV safety cannula with extension, wings, Y site, needle-free valve, 25mm, 22G	20	FSP85129
Straight 3-way	SML/1993/24/P	24G	SentraCath closed system IV safety cannula with extension, wings, Y site, needle-free valve, 19mm, 24G	20	FSP85128
	SML/1994/26/P	26G	SentraCath closed system IV safety cannula with extension, wings, Y site, needle-free valve, 19mm, 26G	20	FSP5032
	SML/1946/18/P	18G	SentraCath closed system IV safety cannula with extension, wings, straight, 3-way connector, 45mm, 18G	20	
	SML/1947/18/P	18G	SentraCath closed system IV safety cannula with extension, wings, straight, 3-way connector, 32mm, 18G	20	FSP85241
	SML/1948/20/P	20G	SentraCath closed system IV safety cannula with extension, wings, straight, 3-way connector, 32mm, 20G	20	FSP85238
Straight 3-way, needle-free valve	SML/1949/22/P	22G	SentraCath closed system IV safety cannula with extension, wings, straight, 3-way connector, 25mm, 22G	20	FSP85239
	SML/1950/24/P	24G	SentraCath closed system IV safety cannula with extension, wings, straight, 3-way connector, 19mm, 24G	20	FSP85240
	SML/1951/26/P	26G	SentraCath closed system IV safety cannula with extension, wings, straight, 3-way connector, 19mm, 26G	20	FSP85231
	SML/1937/18/P	18G	SentraCath closed system IV safety cannula with extension, wings, straight, needle-free valve, 3-way connector, 45mm, 18G	20	FSP85123
	SML/1938/18/P	18G	SentraCath closed system IV safety cannula with extension, wings, straight, needle-free valve, 3-way connector, 32mm, 18G	20	FSP85122
Y site, 2 needle-free valves	SML/1939/20/P	20G	SentraCath closed system IV safety cannula with extension, wings, straight, needle-free valve, 3-way connector, 32mm, 20G	20	FSP85121
	SML/1940/22/P	22G	SentraCath closed system IV safety cannula with extension, wings, straight, needle-free valve, 3-way connector, 25mm, 22G	20	FSP85120
	SML/1941/24/P	24G	SentraCath closed system IV safety cannula with extension, wings, straight, needle-free valve, 3-way connector, 19mm, 24G	20	FSP85118
	SML/1942/26/P	26G	SentraCath closed system IV safety cannula with extension, wings, straight, needle-free valve, 3-way connector, 19mm, 26G	20	FSP85106
	SML/1980/16/P	16G	SentraCath closed system IV safety cannula with extension, wings, Y site, two needle-free valves, 32mm, 16G	20	FSP85232
	SML/1981/18/P	18G	SentraCath closed system IV safety cannula with extension, wings, Y site, two needle-free valves, 32mm, 18G	20	FSP85105
	SML/1982/18/P	18G	SentraCath closed system IV safety cannula with extension, wings, Y site, two needle-free valves, 45mm, 18G	20	FSP85104
	SML/1983/20/P	20G	SentraCath closed system IV safety cannula with extension, wings, Y site, two needle-free valves, 32mm, 20G	20	FSP85115
	SML/1984/22/P	22G	SentraCath closed system IV safety cannula with extension, wings, Y site, two needle-free valves, 25mm, 22G	20	FSP85113
	SML/1985/24/P	24G	SentraCath closed system IV safety cannula with extension, wings, Y site, two needle-free valves, 19mm, 24G	20	FSP85101
	SML/1986/26/P	26G	SentraCath closed system IV v cannula with extension, wings, Y site, two needle-free valves, 19mm, 26G	20	FSP85099

1. Sato, Akihiro et al. "Peripheral venous catheter-related bloodstream infection is associated with severe complications and potential death: a retrospective observational study." BMC infectious diseases vol. 17:1 434. 17 Jun. 2017. doi:10.1186/s12879-017-2536-0 Ordering Information R
2. Charnete Casimero, Todd Ruddock, Catherine Hegarty, Robert Barber, Amy Devine, James Davis. Minimising Blood Stream Infection: Developing New Materials for Intravascular Catheters. PMID: 32858838, PMCID: PMC7554993, DOI: 10.3390/medicines7090049.
3. Rapiti, Elisabetta, and Yvan JF Hutin. "Sharps Injuries: Global burden of disease from sharps injuries to health-care workers." 2003).
4. Rodriguez-Calero MA, Fernandez-Fernandez I, MoleroBallester LJ, et al. Risk factors for difficult peripheral venous cannulation in hospitalised patients. Protocol for a multicentre case-control study in 48 units of eight public hospitals in Spain. BMJ Open 2018;8:e020420. doi:10.1136/bmjopen-2017-020420.
5. Miguel Angel Rodríguez-Calero, et al. Defining risk factors associated with difficult peripheral venous Cannulation: A systematic review and meta-analysis. Heart & Lung 49 (2020) 273-286.
6. Sabri, Armin, et al. "Failed attempts and improvement strategies in peripheral intravenous catheterization." Bio[1]medical materials and engineering 23:1-2 (2013): 93-108.
7. News from PACC Excellence: Patients are at Risk for Accidental Dislodgement of IV Catheters, study shows, Vascular access survey documents prevalence of often unrecognized patient safety issue. HARTWELL, Ga., Jan. 9, 2019 /PRNewswire/.
8. Fadziruddin, Zubair Faramir Zainul, Adi Azriff Basri, and Ernie Illyani Basri. "Review on Dislodgement & Securement Risk of Peripheral Intravenous Catheter/Cannula and The Needs of PIVC Securement Device.
9. López, JL González, et al. "Indwell times, complications and costs of open vs closed safety peripheral intravenous catheters: a randomized study." Journal of Hospital Infection 86.2 (2014): 117-126.
10. Kleven, R. Monina, et al. "Estimating health care-associated infections and deaths in US hospitals, 2002." Public health reports 122.2 (2007): 160-166.