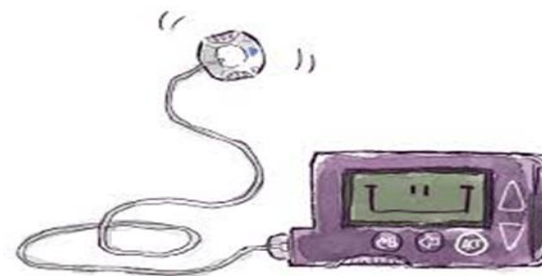


What are Insulin Pump Consumables?

Learning objectives

This session will provide you with some helpful information on:

1. understanding what Insulin Pump Consumables (IPCs) are used for
2. how to determine the correct IPC product
3. troubleshooting brands and IPCs



What does IPC mean?

IPCs are the equipment used with the pump to deliver insulin and consist of three parts. The cannula and tubing are sold together as an infusion set.

Infusion set: Includes the cannula and the tubing:

» **Cannula:** is a very soft flexible tube or a steel needle that is inserted into the subcutaneous fat on the stomach, thigh or outer buttocks for 2 – 3 days

» **Tubing:** connects the cannula to the pump's reservoir

Reservoir: cartridge of insulin changed every 2 -3 days



What goes with which pump?

Always check with the person ordering their IPCs which pump they are using

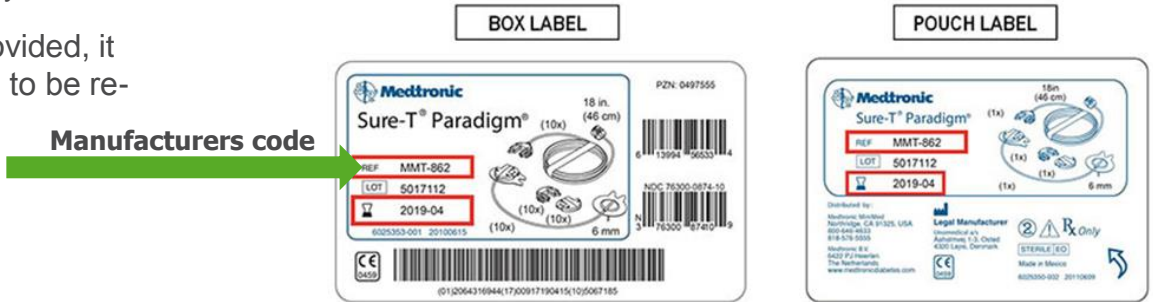
- » the reservoir (cartridge) must match the brand of the pump as they are **NOT** interchangeable
- » check the box for the correct cannula and tubing length
- » all infusion set boxes display the cannula and tubing length and the gauge of the needle
- » check the box for the correct type of lock (the end that connects to the pump) – proprietary lock or luer lock
- » there are two codes found on the box – the NDSS code used in NDSS Connect and the manufacturer's code

NDSS Connect can help you to make sure your customer orders and receives the right products, by showing you the customer's previous purchase history. More information is provided later in this section.

Some boxes look similar

To ensure you have the correct product, note the following:

- ✓ all brands of infusion sets will have some boxes that all look the same – however the difference will be the manufacturer's number
- ✓ it is important to know the needle length, tubing length and whether they need a luer or proprietary lock
- ✗ if an infusion set with the wrong lock is provided, it means the set can't be used and will need to be re-ordered



Infusion sets



- » Cannulas come in different types including the angle and length of the cannula.
- » Tubing comes in various lengths and will either have a luer lock or a proprietary lock to connect the tubing to the pump or the pump reservoir depending on the model.

Type	Description	Advantages
Angled	Inserted at 30 to 45 degrees Usually comes in 13 to 17 mm lengths	<ul style="list-style-type: none">• Stable, less risk of accidental removal• Less likely to sit up against the muscle in slender people
90 degree	Cannula is perpendicular to the skin	Easy to insert and has shorter cannula
Stainless steel needle	Stainless steel needle that is inserted at 90 degrees and remains under the skin for 2-3 days	<ul style="list-style-type: none">• Frequently used by people with allergies to the plastic cannula• Easy to insert as similar to a pen needle• Doesn't kink and less risk of blockages

Discontinued pumps that may still be in use

There are a number of models of insulin pumps that are still used however are no longer available to purchase, such as:

- » Roche Spirit
- » Deltec (MSA) Cosmo
- » Medtronic 507, 507C and 508

As some people still use these insulin pumps, the IPCs for these products are available for purchase through NDSS.

Pumps currently on the market

Main Brands:

- » **AMSL Diabetes:** Animas Vibe Pump (image 1)
- » **Medtronic:** Paradigm, Veo & 640G (image 3 and 5)
- » **Roche:** Accu Chek Combo (image 4)
- » **Dana Pump** (not common in Australia) (image 2)



Medtronic pumps



Currently the main pumps are the Paradigm Real-Time or Veo and the newest 640G. These pumps use a proprietary connection for the tubing to the pump reservoir.

Medtronic Paradigm Reservoirs

- » NDSS code 705 or MMT-326A: 1.8ml
- » NDSS code 706 or MMT-332A: 3.0ml
- » Minimed reservoir is still available for the older Medtronic Pumps – 704 or MMT-103A

Medtronic pumps

People using a Medtronic pump will test with a Contour or Contour Next blood glucose test meter.

They may purchase strips (Contour (NDSS number 140) or Contour Next (NDSS number 195)) with their order.

You may need to supply these strips for customers using a Medtronic pump.

Please note: continuous glucose monitoring is not covered in this training.

Note: The following Medtronic pumps have been discontinued: 507/507C/508.



Medtronic pumps

Infusion sets vary:

- » angled – Paradigm Silhouettes
- » 90 Degrees – Paradigm Quick Set or Paradigm Mio
- » steel needle at 90 degrees - Sure-T
- » come in different lengths from 6mm to 17 mm
- » each type of infusion set will have either a different needle length or tubing length and the boxes all look the same

Refer to the NDSS code and manufacturer's code to identify the correct product



Sure-T



Quick Set



Silhouette



Mio with disposable inserter

Medtronic pumps

Propriety Cannulas for the 640G and the Paradigm Real-Time and Veo

NDSS Code	Description	Needle length & Gauge	Tubing Length	NDSS Code	Description	Needle length & Gauge	Tubing Length
561	Paradigm Quick Set	9mm, 25G	110cms	640	Paradigm Silhouette	13mm, 25G	45cms
562	Paradigm Quick Set	9mm, 25G	60cms	641	Paradigm Silhouette	13mm, 25G	80cms
563	Paradigm Quick Set	6mm, 25G	110cms	642	Paradigm Silhouette	17mm, 25G	80cms
564	Paradigm Quick Set	6mm, 25G	60cms	643	Paradigm Mio PINK	6mm, 27G	45cms
568	Paradigm Silhouette	17mm, 25G	110cms	643.1	Paradigm Mio BLUE	6mm, 27G	45cms
569	Paradigm Silhouette	17mm, 25G	60cms	644	Paradigm Mio PINK	6mm, 27G	60cms
588	Paradigm Silhouette	13mm, 25G	60cms	644.1	Paradigm Mio BLUE	6mm, 27G	60cms
589	Paradigm Silhouette	13mm, 25G	110cms	645	Paradigm Mio PINK	6mm, 27G	80cms

Medtronic pumps

Propriety Cannulas for the 640G and the Paradigm Real-Time and Veo

NDSS Code	Description	Needle length & Gauge	Tubing Length
645.1	Paradigm Mio BLUE	6mm, 27G	80cms
645.2	Paradigm Mio Clear	6mm, 27G	80cms
646	Paradigm Mio Clear	9mm, 27G	80cms
647	Paradigm Sure-T	6mm, 29G	60cm
648	Paradigm Sure-T	8mm, 29G	60cm
649	Paradigm Sure-T	10mm, 29G	60cm
650	Paradigm Sure-T	6mm, 29G	80cm
651	Paradigm Sure-T	8mm, 29G	80cm
652	Paradigm Sure-T	10mm, 29G	80cm
659	Paradigm Quickset	6mm, 25G	80cm
660	Paradigm Quickset	9mm, 25G	80cm



Animas (AMSL) pumps

Currently the main Animas pump is the Vibe.

(Note: The IR1200/2020 were recalled by the AMSL in consultation with the TGA due to software problems, with all pumps replaced by January 2016)

Animas Reservoirs

» NDSS code 710 or AN100-124-01: 2.0ml

All Animas infusion sets come with a luer lock.



Animas pumps

Infusion Sets for the Animas Pumps use a luer lock.

In the Animas Comfort Range there are two types of boxed sets, one with 10 sets in a box and one with 10 cannulas and 5 tubing for those who wish to change their cannula more frequently than they re-fill their reservoir. People who use only small amounts of insulin may choose to do this.

Insulin sets (10 per box)

NDSS Code	Description	Needle length & Gauge	Tubing Length
541	Aminas Comfort	17mm, 27G	60cm
543	Aminas Comfort	17mm, 27G	110cm
549	Aminas Comfort	13mm, 27G	60cm
551	Aminas Comfort	13mm, 27G	110cm

Cannulas (10 per box) and tubing (5 per box)

NDSS Code	Description	Needle length & Gauge	Tubing Length
542	Aminas Comfort	17mm, 27G	60cms
544	Aminas Comfort	17mm, 27G	110cm
552	Aminas Comfort	13mm, 27G	60cm
553	Aminas Comfort	13mm, 27G	110cm

Roche pumps

Currently the main Roche pump is the Accu-Chek Combo System

(Note: The Accu Check Spirit/Spirit Combo was recalled by the AMSL in consultation with the TGA in 2014)

Roche Reservoirs

- » NDSS code 713 or 5206073001: 3.15ml (25)
- » NDSS code 714 or 4949935001: 3.15ml (5)

Infusion Sets

NDSS Code	Description	Needle length & Gauge	Tubing Length	NDSS Code	Description	Needle length & Gauge	Tubing Length
513	FlexLink	8mm	30cm	592	TenderLink 1	13mm	30cms
514	FlexLink	8mm	60cm	593	TenderLink 1	13mm	60cms
515	FlexLink	8mm	80cm	594	TenderLink 1	13mm	80cms
516	FlexLink	10mm	30cm	595	TenderLink 1	17mm	30cms
517	FlexLink	10mm	60cm	596	TenderLink 1	17mm	60cms
518	FlexLink	10mm	80cm	597	TenderLink 1	17mm	80cms

Roche pumps

Roche provides infusion sets, sold with various tubing and cannula combinations:

- » Cannulas only
- » Tubing only

Infusion Sets

NDSS Code	Description	Needle length & Gauge	Tubing Length
677	FlexLink	6mm	30cm
678	FlexLink	6mm	60cm
679	FlexLink	6mm	80cm



Dana pumps – managing diabetes

Currently there is one model of the Dana pump

Dana Reservoirs:

- NDSS code 709.1 or DAC0021: 3.0ml (25)

Infusion Sets:

NDSS Code	Description	Needle length & Gauge	Tubing Length
115	Soft Release O	6mm, 26G	60cm
116	Soft Release O	6mm, 26G	80cm
117	Soft Release O	9mm, 26G	60cm
118	Soft Release O	9mm, 26G	80cm
603	Soft Release ST	19mm, 26G	70cm
611	Superline Easy Release 2	7mm, 17G	70cm



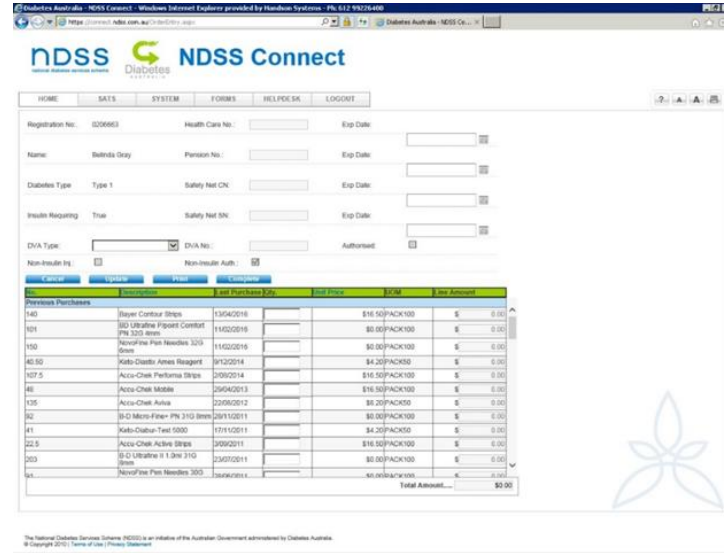
Generic sets

All generic sets use a luer lock

- » **Inset 30** – has a luer lock and comes in pink or grey, 13mm needle and 60cm tubing
- » **Inset 11** – includes the disposable insertion device, has a luer lock, comes in pink, blue or grey, 6mm and 9mm needle lengths, 60cm or 110cm tubing
- » **Medtronic Quick Sets** – has a luer lock, comes in 6mm, 9mm or 17mm needle and 60cm or 110cm tubing
- » **Medtronic Silhouette** – has a luer lock, comes in 17mm needle and 60cm or 110cm tubing
- » **Medtronic Sure-T** – has a luer lock, comes in 6mm, 8mm or 10mm 29 gauge needle and 60cm or 110 cm tubing
- » **Contact Detach Infusion Set** - has a luer lock, comes in 6mm or 8mm 29 gauge needle and 60cm or 110 cm tubing
- » **Cleo 90** – has a luer lock and comes in 6mm and 9mm needle lengths, 61cm or 79 cm tubing

Finding purchase history

- » The main step in helping a customer with their IPC purchases is to ensure you have the correct codes for the products they require.
- » You can use NDSS Connect to look up their previous purchases.
- » If you need further support please refer to the NDSS Connect Training guide on “looking up a previous purchase”.



The screenshot shows the NDSS Connect web application interface. At the top, there are navigation tabs: HOME, DATA, SYSTEM, FORMS, HELP/FAQ, and LOGOUT. Below the navigation is a patient information form with fields for Registration No., Health Care No., Exp Date, Name, Pension No., Diabetes Type, Safety Net CN, Insulin Requiring, and DVA Type. Below the form is a table titled "Previous Purchases" with columns for Item No., Description, Expiry Date, Unit Price, Total, and Total Amount. The table lists various medical supplies such as Bayer Contour Strips, Librathe Inpoint Control PM 300 Strips, and Accu-Chek Active Strips.

Item No.	Description	Expiry Date	Unit Price	Total	Total Amount
140	Bayer Contour Strips	13/04/2016	\$16.50/PACK100		\$ 0.00
101	30 Librathe Inpoint Control PM 300 Strips	11/02/2016	\$0.00/PACK100		\$ 0.00
100	Nervofine Pen Needles 30's (Box)	11/02/2016	\$0.00/PACK100		\$ 0.00
40.50	Kabi-Diabet Arnes Reagent	31/12/2014	\$4.20/PACK50		\$ 0.00
107.5	Accu-Chek Performa Strips	30/09/2014	\$16.50/PACK100		\$ 0.00
41	Accu-Chek Aviva	29/04/2013	\$16.50/PACK100		\$ 0.00
105	Accu-Chek Aviva	22/05/2012	\$4.20/PACK50		\$ 0.00
52	3-D Micro-Fine Pen 310 (Box)	28/11/2011	\$0.00/PACK100		\$ 0.00
41	Kabi-Diabet Test 1000	17/11/2011	\$4.20/PACK50		\$ 0.00
22.5	Accu-Chek Active Strips	20/09/2011	\$16.50/PACK100		\$ 0.00
203	3-D Librathe II 1.5m 310 (Box)	23/07/2011	\$0.00/PACK100		\$ 0.00
41	Nervofine Pen Needles 30's	20/04/2011	\$0.00/PACK100		\$ 0.00
				Total Amount:	\$0.00

What to do when a product is not available?

- » Often there are no substitutes, especially for reservoirs.
- » For infusion sets the only substitution can be the length of the tubing or the length of the needle within the same brand, however it is the person's choice whether they are willing to accept this.
- » If they cannot get their usual IPC products, please refer them to their pump back up plan. If they don't already have a personalised back up plan, advise them to contact their diabetes team for a personalised plan.
- » Please remember type 1 diabetes is life-threatening without insulin.

Accessories

Insertion devices are available to ease the insertion of the cannula:

- » They can be a stand alone device (multiple use) or a disposable part of the infusion set (single use)
- » They are spring loaded, hiding the needle from view and are similar to a lancing device

Many of the insulin pump suppliers provide cases for easy wearing of the pump.
Please refer to the insulin pump suppliers websites for more information.



Points to remember

- » There are **NO** substitutes for the pump reservoir, so it is important to order the correct one.
- » Many pump boxes look the same and may only vary in needle or tubing length – **please ensure** you check that the pump user has the product they ordered.
- » NDSS Connect can provide previous purchase history for IPCs to help you in providing the correct IPC products for your customers.
- » Everyone on a pump should have a back up plan and carry the essential supplies as outlined in their plan, in case their pump is not working. This includes:
 - » testing equipment for blood glucose levels (BGLs) & ketones
 - » spare insulin and insulin pens
 - » a plan of management from their diabetes team.
- » If your customer is purchasing a different infusion set than previously purchased (as seen in NDSS Connect under previously purchased products) ensure your customer has sought advice from their diabetes team.

Pump company contact details

Medtronic Australia: 24 hour phone support on **1800 777 808**, www.medtronic-diabetes.com.au

AMSL (Animas): 24 hour phone support on **1300 851 056**, www.amsldiabetes.com.au

Roche: 24 hour phone support on **1800 251 816**, www.accu-chek.com.au

Manage Diabetes: 24 hour phone support on **1800 823 203**, www.managingdiabetes.com.au

Additional information

Visit www.ndss.com.au to download the NDSS IPC Order Form for all products, details, codes and prices.

Please call **1300 136 588** for further support.

NDSS IPC Order Form										
Product Description	Supplier Code	Supplier Reference No.	Form*	Concentration	Sample volume (mg/ml)	No. Per box*	Price \$	No. Boxes	Assess* (per box)	Assess* (per box)
Infection Tests										
15 Soft Resazurin O (30mm, 250, 800m)	Meruga	98801	None	Fluorescence	AT	10 tests	18.20			
16 Soft Resazurin O (30mm, 250, 800m)	Meruga	98801	None	Fluorescence	AT	10 tests	18.20			
17 Soft Resazurin O (30mm, 250, 800m)	Meruga	98801	None	Fluorescence	AT	10 tests	18.20			
18 Soft Resazurin O (30mm, 250, 800m)	Meruga	98801	None	Fluorescence	AT	10 tests	18.20			
19 Class 90 (30mm, 250, 800m)	Meruga	9711200-04	None	Colour	AT	10 tests	18.20			
20 Class 90 (30mm, 250, 800m)	Meruga	9711200-04	None	Colour	AT	10 tests	18.20			
21 Class 90 (30mm, 250, 800m)	Meruga	9711200-04	None	Colour	AT	10 tests	18.20			
22 Class 90 (30mm, 250, 800m)	Meruga	9711200-04	None	Colour	AT	10 tests	18.20			
23 Class 90 (30mm, 250, 800m)	Meruga	9711200-04	None	Colour	AT	10 tests	18.20			
24 Accu-Check PhosLine (30mm, 800m)	Roche	409807001	HardTop® 4 Control/Reagent	Colour	AT	10 tests	18.20			
25 Accu-Check PhosLine (30mm, 800m)	Roche	409807001	HardTop® 4 Control/Reagent	Colour	AT	10 tests	18.20			
26 Accu-Check PhosLine (30mm, 800m)	Roche	409807001	HardTop® 4 Control/Reagent	Colour	AT	10 tests	18.20			
27 Accu-Check PhosLine (30mm, 800m)	Roche	409807001	HardTop® 4 Control/Reagent	Colour	AT	10 tests	18.20			
28 Accu-Check PhosLine (30mm, 800m)	Roche	409807001	HardTop® 4 Control/Reagent	Colour	AT	10 tests	18.20			
29 Accu-Check PhosLine Catalyst (30mm)	Roche	409807001	HardTop® 4 Control/Reagent	Colour	AT	10 (Control)	17.30			
30 Accu-Check PhosLine Catalyst (100mm)	Roche	409807001	HardTop® 4 Control/Reagent	Colour	AT	10 (Control)	17.30			
31 Inzeal 30 Infection test (13mm, 1100m) grey	Meruga	1001060-02	None	Colour	AT	10 tests	18.20			
32 Inzeal 30 Infection test (13mm, 800m) blue	Meruga	1001060-01	None	Colour	AT	10 tests	18.20			
33 Inzeal 30 Infection test (13mm, 800m) grey	Meruga	1001060-02	None	Colour	AT	10 tests	18.20			
34 Inzeal 30 Infection test (13mm, 800m) grey	Meruga	1001060-02	None	Colour	AT	10 tests	18.20			
35 Andromed Combust (17mm, 270, 800m)	Meruga	1001010-01	None	Colour	AT	10 (Control) + 10 (Test)	13.50			
36 Andromed Combust (17mm, 270, 800m)	Meruga	1001010-01	None	Colour	AT	10 tests	18.20			
37 Andromed Combust (17mm, 270, 1100m)	Meruga	1001010-02	None	Colour	AT	10 (Control) + 10 (Test)	13.50			
38 Inzeal II - Inhibase Infection test (30mm, 270, 800m) grey	Meruga	1001010-01	None	Colour	AT	10 tests	18.20			
39 Inzeal II - Inhibase Infection test (30mm, 270, 800m) blue	Meruga	1001010-02	None	Colour	AT	10 tests	18.20			
40 Inzeal II - Inhibase Infection test (30mm, 270, 800m) grey	Meruga	1001010-01	None	Colour	AT	10 tests	18.20			
41 Inzeal II - Inhibase Infection test (30mm, 270, 800m) grey	Meruga	1001010-01	None	Colour	AT	10 tests	18.20			
42 Inzeal II - Inhibase Infection test (30mm, 270, 800m) grey	Meruga	1001010-01	None	Colour	AT	10 tests	18.20			
43 Inzeal II - Inhibase Infection test (30mm, 270, 800m) grey	Meruga	1001010-01	None	Colour	AT	10 tests	18.20			
44 Inzeal II - Inhibase Infection test (30mm, 270, 800m) grey	Meruga	1001010-01	None	Colour	AT	10 tests	18.20			

Disclaimer: The information in this resource is intended as a guide only. It should not replace individual medical advice. If your customer has any concerns about their health or further questions, they should be raised with their doctor.