Use this user guide carefully before you use your NovoPen® 4 for insulin delivery.

Find a quick guide at the back of this user guide.
**Single-use needle (example)**

- Outer needle cap
- Inner needle cap
- Needle
- Paper tab

**Insulin cartridge (Penfill® cartridge 3 mL)**

- Threaded end (for needle attachment)
- Coloured band
- Glass ball (in white and cloudy insulin suspension only)
- Piston
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Introduction

Thank you for choosing NovoPen® 4. NovoPen® 4 is a reusable insulin pen.

You should read this guide carefully before you use your pen – even if you have used NovoPen® 4 or similar Novo Nordisk delivery systems before. It will tell you all you need to know about your pen and how to use it.

Do not use NovoPen® 4 without proper training from your healthcare professional. Make sure you are confident in making an injection with the pen before you start your treatment with it.

NovoPen® 4 is a reusable pen injector designed for single patient use by diabetes patients for the self-injection of insulin. The pen injector uses Penfill® 3 mL cartridges of Novo Nordisk insulin and single-use disposable needles (supplied separately). The pen injector allows the user to dial required doses from 1 to 60 units in 1-unit increments.

The pen is durable, which means that you can reuse it. When you have used all the insulin in the cartridge, you simply replace the cartridge with a new one.

If you use more than one type of insulin, it is highly recommended that you use a different NovoPen® 4 for each insulin type.

NovoPen® 4 is available in silver and blue.

Always remember to check the name and colour of the cartridge to make sure it contains the correct type of insulin before every injection.

About this user guide:
Throughout this guide, instructions on how to use your pen are presented step by step. Important information and additional information are clearly marked by the symbols you see below:

⚠️ Important information
Pay special attention to these notes as they are important for safe use of the pen. If you do not follow the instructions carefully, you may get too little or too much insulin, or no insulin at all.

ℹ️ Additional information
Important notes

- If you are blind or have severe visual problems, do not use NovoPen® 4 without help. Get help from a person with good eyesight who is trained to use NovoPen® 4.
- ALWAYS test the insulin flow before each injection. Do not use the pen if insulin does not squirt from the needle tip when you test the flow. If you do not test the insulin flow, you may get too little insulin, or no insulin at all.
- If you drop your pen, check the insulin cartridge for damages, for example cracks. Replace the cartridge with a new one if necessary.
- If you accidentally twist your pen apart between injections, it is important to test the flow of insulin before your next injection. You may need to test it several times before insulin squirts from the needle tip. If insulin does not appear, you may get no insulin at all.
- NovoPen® 4 is designed to be used with Penfill® cartridge 3 mL and NovoFine® or NovoTwist® single-use disposable needles up to a length of 8 mm.

**Novo Nordisk is not responsible** for harm due to using NovoPen® 4 with products other than these.

- Always check the name and colour of the cartridge to make sure that it contains the type of insulin you need. If you inject an incorrect type of insulin, your blood sugar level may get too high or too low.
- Always carry a spare pen, extra insulin of the same type(s) you use, and new needles with you in case of loss or damage.
- Never share your pen, insulin cartridges and needles with other people. They are for your use, only.
- Always keep your pen, insulin cartridges and needles out of sight and reach of others, especially children.
- Always keep your pen with you. Do not leave it in a car or other place where it can get too hot or too cold.
- Caregivers must be very careful when handling used needles to reduce the risk of needle sticks and cross-infection.
Insert an insulin cartridge

1. Pull off the pen cap.

2. Twist off the cartridge holder. Put it to one side for later use.

3. The piston rod may stick out of your pen. If so, push it completely in until it stops.

The piston rod and the piston rod head may be loose and move on their own. This is normal and does not affect the function of the pen.
Take a new insulin cartridge. Hold the black cartridge holder and let the cartridge slide in with the threaded end first as illustrated. The colour of your cartridge may differ from the one shown in the illustration. It depends on the type of insulin you use.

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Check the name and colour of the cartridge to make sure that it contains the type of insulin you need. If you inject an incorrect type of insulin, your blood sugar level may get too high or too low.

Check that the cartridge is not damaged, for example by cracks. See how to do this in the Penfill® cartridge 3 mL leaflet that comes with the Penfill® cartridge 3 mL package.

Check that the insulin looks the way it should. The Penfill® cartridge 3 mL leaflet will tell you how your type of insulin should look.

NovoPen® 4 is designed to be used with Penfill® cartridge 3 mL and NovoFine® or NovoTwist® single-use disposable needles up to a length of 8 mm.

 Twist the cartridge holder back on, as illustrated, until you hear or feel a click.
If you use a white and cloudy insulin suspension

If you use an insulin cartridge with white and cloudy insulin suspension, always resuspend this right before injection. See the Penfill® cartridge 3 mL leaflet on how to resuspend your type of insulin.

Make sure there is enough space in the cartridge before you resuspend the insulin:
The piston must be above the white line on the cartridge holder when you hold the pen as illustrated. This is necessary to allow the glass ball inside the cartridge to move freely to resuspend the insulin.

If the piston is below the white line, replace the insulin cartridge with a new one, see pages 20-21.
Attach a new needle

1. Take a new needle, and tear off the paper tab.
2. Push the needle straight onto the pen. Turn until it is on tight.
3. Pull off the outer needle cap and save it. You will need it after the injection, to safely remove the needle from the pen.

⚠️ Always use a new needle for each injection. This reduces the risk of blocked needles, contamination, infection and inaccurate dosing.

Never use a bent or damaged needle.

Do not attach a new needle to your pen until you are ready for your next injection.
• Carefully pull off the inner needle cap and throw it away. A drop of insulin may appear at the needle tip. This is normal, but you must **still test the insulin flow.**

NovoPen® 4 is designed to be used with Penfill® cartridge 3 mL and NovoFine® or NovoTwist® single-use disposable needles up to a length of 8 mm.
**ALWAYS test the insulin flow before you inject**

**ALWAYS test the flow before you inject.**
Keep testing until insulin squirts from the needle tip. This ensures that any gap and air bubbles are removed and that insulin is getting through the needle.

1. **Pull out the dose button**, if it is not already out.

2. **Turn the dose button** to select **2 units**.

3. **Press the dose button** until the dose counter shows “0”. The “0” must line up with the dose pointer.
   **Check that insulin squirts** from the needle tip.
   **If no insulin appears**, repeat steps 1-3 until insulin squirts from the needle tip.
If no insulin appears after several attempts, check the insulin window to see if there is a gap between the black piston rod head and the piston, *see illustrations 3A and 3B*. If you do not see any gap, change the needle and test the insulin flow again.

The insulin flow test is complete when you see insulin squirt from the needle tip.

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**Do not try to inject if no insulin appears.** You may not receive any insulin, even though the dose counter may move. This could lead to too high blood sugar levels (hyperglycaemia).

**If insulin does not appear after testing the flow repeatedly,** do not use the pen. Contact your supplier to get a new pen.
Select your dose

1. **Pull out the dose button**, if it is not already out.
2. **Make sure the dose counter shows “0” before you start.** The “0” must line up with the dose pointer.

3. **Turn the dose button to select the dose you need.** You can turn the dose button forwards or backwards to adjust the dose.

The dose button changes the number of units selected. Only the dose counter and the dose pointer will show how many units you select per dose.
You can select up to 60 units per dose.

⚠️ Always look through the insulin window to **make sure that the insulin in your pen looks the way it should.** The Penfill® cartridge 3 mL leaflet will tell you how your type of insulin should look.

**Always use the dose counter and the dose pointer to see how many units you select.**
Do not use the insulin scale on the cartridge holder to measure your dose. It only shows approximately how much insulin is left in your pen.
Do not count the pen clicks to select your dose.
If you select and inject an incorrect dose, your blood sugar level may get too high or too low.
If you need more than 60 units, you may choose to use another Novo Nordisk insulin delivery device with a higher maximum dose.

The dose button should turn easily. Do not force it to turn.

When your cartridge contains less than 60 units, the dose counter stops at the number of units left. If you need more insulin than what is left in the cartridge, see pages 18-19.
Inject your dose

ALWAYS test the flow before you inject.

- **Check the name and colour** of the cartridge to make sure that it contains the type of insulin you need. If you inject an incorrect type of insulin, your blood sugar level may get too high or too low.
- **Insert the needle into your skin** as your healthcare professional has shown you.
- **Make sure you can see the dose counter.**
- **Press the dose button** until the dose counter shows “0”. The “0” must line up with the dose pointer. You may then hear or feel a click.

- **Wait and count slowly 1-2-3-4-5-6**

- **Keep the needle in your skin after** the dose counter has returned to “0” and **count slowly to 6**. If the needle is removed earlier, you may see a squirt of insulin coming from the needle tip. If so, the full dose will not be delivered and you should increase the frequency of checking your blood sugar levels.

- **Remove the needle from your skin.**
Always inject by pressing the dose button. Do not turn it. If you turn the dose button, you will not inject insulin.

Always watch the dose counter to know how many units you inject. Do not count the pen clicks. The dose counter will show the exact number of units.

If the dose button stops before the dose counter shows ”0”, the needle may be blocked. Turn the dose counter back to “0” and replace the needle with a new one. Test the insulin flow and inject your full dose.

You may see a drop of insulin at the needle tip after injecting. This is normal and does not affect your dose.
After your injection

- Remove the needle right away by unscrewing it in a sharps container.

- If you do not have a sharps container, follow a one-handed needle recapping method. Lead the needle tip into the outer needle cap on a flat surface without touching the needle. Do not touch the outer needle cap before it covers the needle.

- Once the needle is covered, carefully push the outer needle cap completely on.

.warning

Never try to put the inner needle cap back on the needle.
You may stick yourself with the needle.

- Hold the black cartridge holder and unscrew the needle. Throw the used needle away carefully as your healthcare professional has instructed you.
• **Put the pen cap on** your pen after each use to protect the insulin from light.
• Store your pen carefully. The pen should be **out of sight and reach of others, especially children**, see page 23 on how to store the pen.

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**Always hold the black cartridge holder when you unscrew the needle.** Otherwise you may twist your pen apart. If this happens, twist the pen together again. Replace the needle and test the insulin flow just before your next injection to make sure you get your full dose.

**Always remove and throw away the used needle safely, for example in a sharps container, as instructed by your healthcare professional.** This reduces the risk of blocked needles, contamination, infection and inaccurate dosing. Do not store your pen with a needle attached.
How to check how much insulin is left

The dose counter will show exactly how much insulin is left in the cartridge when there are less than 60 units left.

- Turn the dose button until it stops.
- Check the dose counter:
  - If it shows “60”: **60 units or more** are left in the cartridge.
  - If it shows less than “60”: It is showing the **number of units left** in the cartridge.
- Turn the dose button back until the dose counter shows “0”.

- Use the **insulin scale** to see **approximately** how much insulin is left in the insulin cartridge.

If you need more insulin than what is left in the cartridge, take your full dose from a new cartridge, see page 18.
If you need more than 60 units

If you need a dose of more than 60 units, you will need to **split your dose into two injections**. The pen will only inject a maximum of 60 units at a time.

**Example**
If you need to inject 90 units:

1. Test the insulin flow.
2. Select the first dose of **60 units**.
3. Inject the 60 units.

To get your full dose of 90 units, **you need to inject 30 more units**.

4. Select the second dose of **30 units**.
5. Inject the 30 units.

You will now have injected the full dose of 90 units.

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**Be extra careful to work out your correct dose** if you split it into two injections. If you split the dose wrong, you will inject too much or too little insulin. This will make your blood sugar level too low or too high.
If you need more insulin than what is left in the cartridge

1. If you need more insulin than what is left in the cartridge, **take your full dose from a new cartridge**.
   - Safely remove the needle. Twist off the cartridge holder and throw away the used cartridge and needle.
   - Insert a new cartridge, *see pages 2-4*.

2. Attach a new needle and **test the insulin flow**, *see pages 6-9*.

3. Select and inject your **full dose with the new cartridge**, *see pages 10-13*.

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**Only if trained or advised by your healthcare professional**, you may split your dose between two cartridges.

If you become distracted, make a miscalculation or forget to test the flow, you may get a single under- or overdose, which may lead to too high or too low blood sugar levels.

**If you feel unwell** after splitting the dose, check your blood sugar level and/or contact your healthcare professional.
If you do split your dose:

1 **Test the insulin flow.**

2 Find out exactly how much insulin is left and make a note of it. Turn the dose button until it stops. The dose counter then shows you the number of units left in the cartridge.

3 Inject all the insulin left in the cartridge.

4 Work out how many more units you need to complete your dose.

5 Remove the used needle and cartridge.

6 Insert and prepare a new cartridge for injection.

7 Attach a new needle and **test the insulin flow.**

8 Select and inject the rest of your dose with the new cartridge.
How to replace a used insulin cartridge

1. **Remove and throw away the needle** from your pen if the needle is still on, see pages 14-15.

2. Twist off the cartridge holder.

When you twist off the cartridge holder, the piston rod sticks out of your pen. It may move back or forth on its own. Push it back as instructed on page 2.

3. Tilt the black cartridge holder and let the cartridge slide out. Throw it away as your healthcare professional has instructed you.

   Push the piston rod back in. Then **insert a new cartridge** and twist the cartridge holder back on. Attach a new needle and test the insulin flow, see pages 6-9.
How to care for your pen

Care

- **Only use your NovoPen® 4** as described in this guide.
- **Do not drop your pen** or knock it against hard surfaces. If you drop it or suspect a problem, check the insulin cartridge for damages, for example cracks. Replace the cartridge with a new one if necessary.
- **Keep your pen away** from direct sunlight, and do not expose it to dust, dirt, liquid or extreme temperatures.
- **Do not try to repair your pen** or pull it apart.

Cleaning

- **Only clean your pen** with a cloth moistened with water.
- **Do not wash, soak or lubricate your pen**, and do not use products containing bleaching agents, such as chlorine, iodine or alcohol to clean your pen. This may damage it.
- If there is insulin on the outside of your pen, **clean it before it dries up** with a cloth moistened with water.

Storage

- With an insulin cartridge inserted, please see the storage instructions in the Penfill® cartridge leaflet that comes with the Penfill® cartridge package.
- **Do not store your pen with a needle attached.**
- **Do not freeze your pen** or store it in a refrigerator or next to a cooling element.
- **Store the insulin cartridges** as instructed in the Penfill® cartridge 3 mL leaflet. There you will also find information about expiry date. The expiry date printed on the cartridge is for unused cartridges under refrigeration. Never use the cartridge after the expiry date on the cartridge or its box.
- **Store your pen in its case** when possible.

Disposal

- **Do not throw the pen out** with your household waste.
- **Throw away your pen as instructed by your healthcare professional, pharmacist or local authorities.** Consider the environment when you throw away your pen as it contains recyclable materials. Also make sure to remove the insulin cartridge and needle before you throw away the pen.
Warranty

NovoPen® 4 comes with a 3-year guarantee.

The NovoPen® 4 life expectancy is five years when the pen is used for three daily injections.

If you find that your NovoPen® 4 is faulty, Novo Nordisk will replace it. Return it to your supplier for inspection within three years of receiving it. Enclose the receipt you were given when you received your NovoPen® 4.

The manufacturer cannot be held responsible for any problems with your NovoPen® 4 if the instructions have not been followed.

If you need your pen’s LOT number, you will find it on the dose button as shown in the diagram on the inside cover.

NovoPen® 4, Penfill®, NovoFine® and NovoTwist® are registered trademarks owned by Novo Nordisk A/S, Denmark.

The CE mark on a medical device indicates that the product conforms with the provisions in the EC Directive for Medical Devices 93/42/EEC. NovoPen® 4 fulfils the specification limits for dose accuracy according to ISO 11608-1. Pen-Injectors for Medical use, Part 1: Requirements and test methods.
Quick guide

Important:
Read the complete user guide before you use your pen for insulin delivery.
Insert an insulin cartridge

1. Pull off the pen cap.
2. Twist off the cartridge holder.
3. The piston rod may stick out of your pen. If so, push it in until it stops.

4. Take a new insulin cartridge and check that:
   - It contains the correct insulin, which looks as it should.
   - It has no cracks or damage.
5. Slide the cartridge into the cartridge holder with the threaded end first.
6. Twist the cartridge holder back on.

Attach a new needle

1. Take a new needle, and tear off the paper tab.
2. Push the needle straight onto the pen. Turn until it is on tight.
3. Pull off the outer needle cap and save it.
4. Pull off the inner needle cap and throw it away.

   Do not share your pen and needles. Use a new needle for each injection.
ALWAYS test the insulin flow

ALWAYS test the flow before you inject. Keep testing until insulin squirts from the needle tip. This makes sure that any gap and air bubbles are removed and that insulin is getting through the needle.

- Select 2 units and press the dose button until the dose counter shows “0”.
- If no insulin appears or there is a gap in the insulin window, repeat the insulin flow test. The insulin flow test is complete when you see insulin squirt and there is no longer a gap between the piston rod head and the piston.

Select your dose

- Pull out the dose button, if it is not already out.
- Make sure the dose counter shows “0” before you start.
- Turn the dose button to select the dose you need. You can turn forwards or backwards.

Inject your dose

- Insert the needle into your skin and press the dose button until the dose counter shows “0”.
- Then wait and count slowly to 6 before you remove the needle from your skin.
- Safely remove and throw away the needle.
  
  Put the pen cap back on.

  Do not store your pen with a needle attached.