

This booklet acknowledges the following publications:

BPEX - 'The Safe Use of Veterinary Medicines – Administration'
www.bpex.org.uk

The Pig Site - 'Pig Health'
www.thepigsite.com/pighealth/article/84/sites-of-injection

This booklet contains general guidance on good practice. Always consult the product information for specific guidance and seek the advice of your veterinary surgeon or SQP

Use medicines responsibly
www.noah.co.uk/responsible

For further information please contact your veterinary surgeon
or Zoetis UK Ltd, Walton Oaks, Tadworth, Surrey KT20 7NS.

www.zoetis.co.uk.

Customer Support: 0845 300 8034

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Dosing Guidance

Injection and oral dosing
techniques in pigs and
injector maintenance

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Selecting the right administration route and equipment

Once you have selected the most suitable product to treat or vaccinate your pigs, it is also very important to select the correct equipment for its administration.

Guidance on administration route, dose volume, etc. can be found on product data sheets and also from your veterinary surgeon or Suitably Qualified Person (SQP).

Selecting the correct equipment will help to both ensure maximum efficacy of the product and minimise secondary problems such as carcase damage. Correct equipment selection will also help to reduce potential needle-stick injuries.

Injections given to individual pigs are best administered via single-use needles and syringes. Injections for large numbers of pigs are often given via multi-dose injectors which may be bottle-mounted or tube-fed. Oral treatments can be administered via specially designed applicators.

For many medicines and vaccines, injection is the best method of administration to an animal.

It is essential that injections are carried out properly to ensure efficacy and to avoid potential harm to the pig:

- Poorly injected products may not be well absorbed and may not work.
- If not carried out correctly, the injection could create drug residues, scar tissue, abscesses and/or reduced carcase value.

Your vet can instruct you on fine-tuning your injection techniques.



Preparing for injection

Injectables should be given according to the manufacturer's instructions at the recommended injection site.

- Accurate injection technique helps to ensure the effectiveness of the product and reduces the risk of carcase damage.
- Before injecting, check the expiry date and read the directions of the product to be used, including dose rates. Some products need to be shaken before use.
- Check the product information or with your vet for the specific needle size and any specific hygiene procedures required.
- Underestimating the weight of animals is a common cause of underdosing.
- Ensure the pig is adequately restrained before attempting the injection.
- Always use a clean, sterile syringe and needle. If using a multi-dose injector, ensure it is cleaned and disinfected between injection sessions.
- Ensure the skin at the injection site is clean and dry.
- Choose the correct needle length for intramuscular or subcutaneous injections.

- Following injection sessions, dispose of single use needles and syringes in appropriate clinical waste and sharps containers. Clean, disinfect and lubricate multi-dose injectors.
- Take care to avoid self-injury with needles and dosing equipment.

Certain treatments may require specific injection sites – **ensure that you read, understand and follow the manufacturer's instructions and guidance on the correct administration technique.**

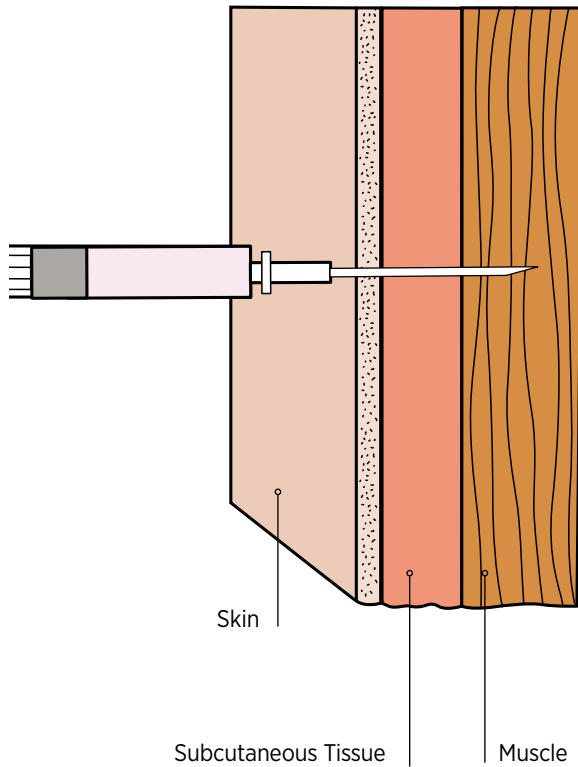
Ensure that you keep clear and accurate records.

Where to Inject Pigs¹



1. Site for subcutaneous or intramuscular injection
2&3. Sites for intramuscular injections (piglets only)

Intramuscular injection



Intramuscular injections are made into muscle. Care is needed to ensure that the product is deposited into muscle and not just under the skin.

Follow the manufacturer's advice on the precise site for injection. The deep muscle of the neck behind the ear is an ideal site for an injection in pigs.

Subcutaneous injection

Rarely, some products are injected subcutaneously. In this case, a shorter needle is usually required.

Correct injection technique is very important as the needle must run under the skin.

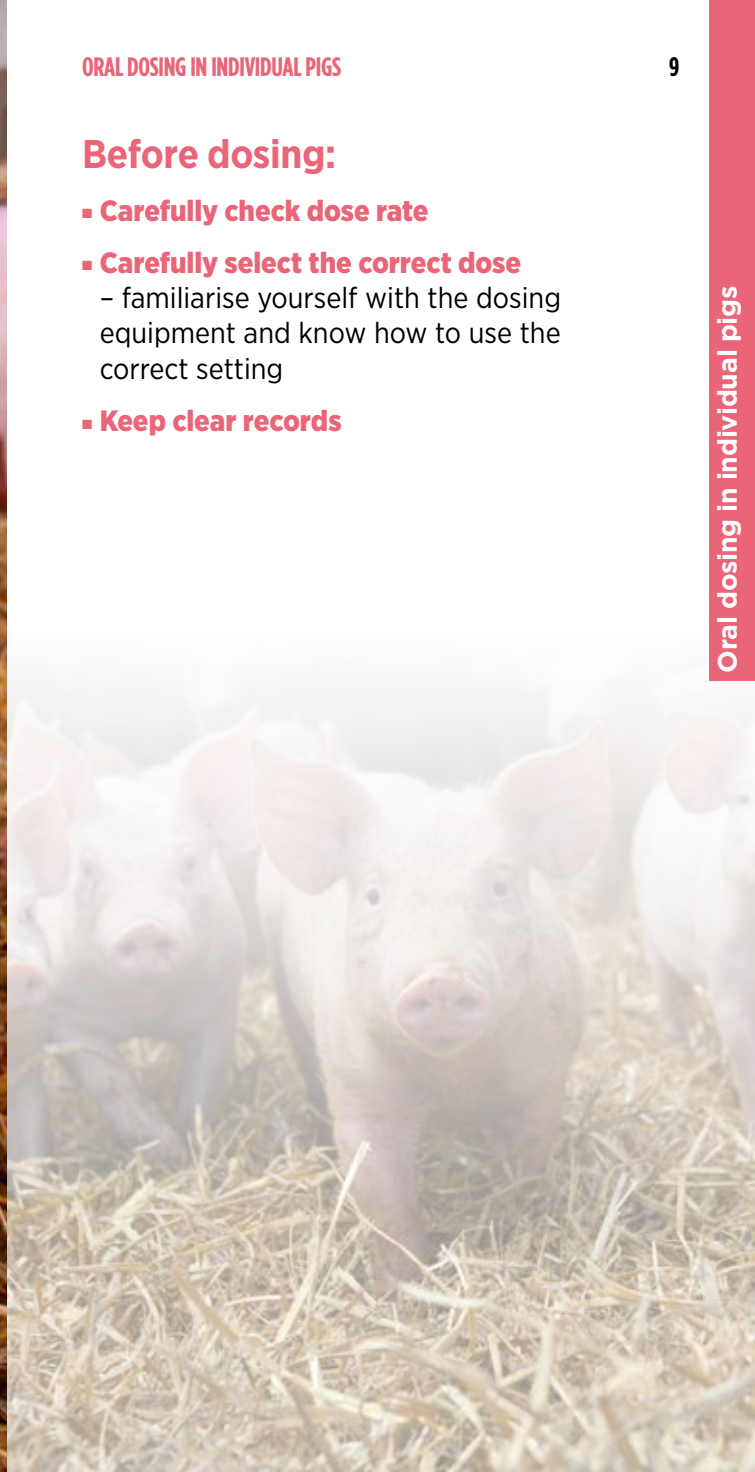
Advice from your veterinary surgeon is advisable.





Before dosing:

- **Carefully check dose rate**
- **Carefully select the correct dose**
 - familiarise yourself with the dosing equipment and know how to use the correct setting
- **Keep clear records**



Oral dosing technique

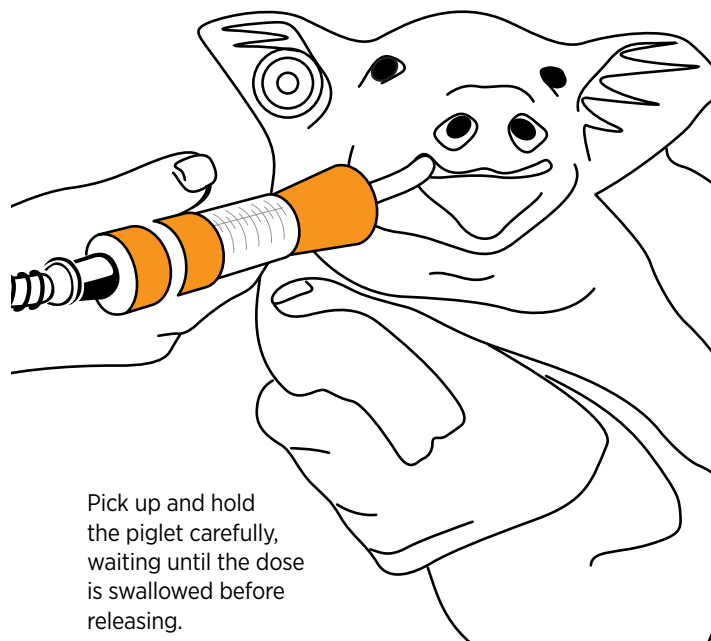
Correct dosing technique is a vital part of ensuring that the product does its job effectively.

Oral dosing applicators are designed to deliver the treatment over the back of the tongue so that the entire dose is swallowed. Make sure animals are properly restrained so that they swallow the whole amount and to avoid the risk of damage to the back of the mouth.

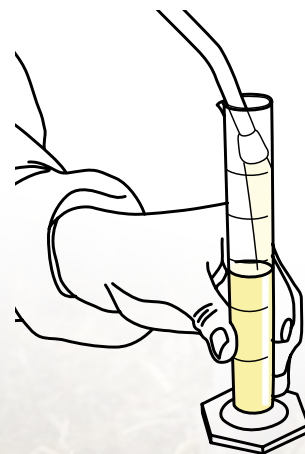
Bad dosing technique may reduce the likelihood that the whole dose is swallowed.

Oral dosing equipment must be correctly calibrated and in good working order. Test it with product just before treatment starts by delivering two or more doses into a graduated measuring cylinder. Do not use water as this will give a false result.

Faulty equipment, or attempting to dose too quickly, may prevent the barrel of the applicator from filling or introduce bubbles into the product.



Pick up and hold the piglet carefully, waiting until the dose is swallowed before releasing.



Oral dosing equipment must be correctly calibrated. Use a measuring cylinder to test using the actual product.

How to clean the multi-dose injectors and applicators

Flush through with hot, soapy water. The barrels and some other components can be unscrewed, removed and cleaned. Next, flush through with clean water; ideally, this should be cooled, boiled water. This helps prevent contamination of the product you are next administering.

Alternatively, you can use cold water sterilizing tablets (the type used for babies' bottles) to clean the devices; again, flush through with clean water afterwards.

Do not steam, boil or microwave plastic multi-dose injectors or applicators as they may be damaged, affecting the function of the devices.



Use cold water sterilizing tablets to clean devices and then flush with water



After flushing and cleaning, rinse with cooled, boiled water

Lubricate the O-ring

Unscrew the barrel and add a couple of drops of vegetable (NOT mineral) oil onto the plunger O-ring to re-lubricate it.

Storage

Reassemble the device, pack into a bag and seal to prevent contamination.

Store in a safe, cool, dry place away from direct sunlight.

Before use

Re-clean, re-lubricate and check the function and cleanliness of the device before use. If you are in doubt as to the cleanliness or function of your equipment, it should not be used.

Dispose of all items in accordance with local regulations.



Maintenance of multi-dose injectors and applicators

Always ensure that the equipment you are using is either new or clean. Dirty equipment may cause infections in your pigs or reduce the effectiveness of the product you are administering.

Ensure that multi-dose injectors and applicators are cleaned immediately and thoroughly after use. It is essential to do this before the product dries out and damages the barrel and valves.



Before dosing, ensure that equipment is either new or clean and dry



Use only hot, soapy water to flush through components, then rinse

