

# SOP: Administration Route-Specific Procedures

This SOP details **administration route-specific procedures** for medications and treatments, covering oral, intravenous (IV), intramuscular (IM), subcutaneous, and other administration methods. It ensures proper preparation, dosage calculation, administration techniques, patient safety, and documentation to optimize therapeutic efficacy and minimize risks associated with each route.

## 1. Purpose

To standardize and ensure the safe, effective administration of medications and treatments based on route, minimizing errors and optimizing patient care.

## 2. Scope

This SOP applies to all healthcare personnel authorized to administer medications via oral, intravenous, intramuscular, subcutaneous, or any other specified routes.

## 3. Responsibilities

- **Authorized clinical staff:** Follow route-specific procedures, maintain competency, and promptly report any errors or adverse events.
- **Supervisors:** Ensure staff are trained and competent in all administration procedures.
- **Pharmacy:** Ensure medications are properly labeled and dispensing instructions are clear.

## 4. Procedures by Administration Route

Route	Preparation	Administration	Post-Administration & Documentation
Oral (PO)	<ul style="list-style-type: none"><li>• Verify patient identity and allergies</li><li>• Check medication, expiry date, and dosage</li><li>• Confirm patient can swallow safely</li></ul>	<ul style="list-style-type: none"><li>• Administer with/without food as ordered</li><li>• Provide water, unless contraindicated</li><li>• Observe ingestion if required</li></ul>	<ul style="list-style-type: none"><li>• Document dose, time, and any reactions</li><li>• Monitor for therapeutic/adverse effects</li></ul>
Intravenous (IV)	<ul style="list-style-type: none"><li>• Aseptic preparation and equipment check</li><li>• Confirm IV access patency</li><li>• Prepare correct diluent and infusion rate</li></ul>	<ul style="list-style-type: none"><li>• Clean site and connect as per protocol</li><li>• Administer via infusion or IV push as ordered</li><li>• Observe for infiltration, phlebitis, and adverse reactions</li></ul>	<ul style="list-style-type: none"><li>• Document site, dose, rate, and observations</li><li>• Monitor for complications post-administration</li></ul>
Intramuscular (IM)	<ul style="list-style-type: none"><li>• Select appropriate muscle site</li><li>• Assess for contraindications (infections, trauma)</li><li>• Prepare correct volume/syringe/needle</li></ul>	<ul style="list-style-type: none"><li>• Clean site, stretch skin, and inject at 90°</li><li>• Aspirate as required</li><li>• Administer dose slowly</li></ul>	<ul style="list-style-type: none"><li>• Document site, medication, and response</li><li>• Observe for pain, swelling, or adverse effects</li></ul>

Route	Preparation	Administration	Post-Administration & Documentation
<b>Subcutaneous (SC)</b>	<ul style="list-style-type: none"> <li>Choose a suitable injection site</li> <li>Check for lipodystrophy/scarring</li> <li>Prepare correct syringe/needle</li> </ul>	<ul style="list-style-type: none"> <li>Pinch skin, insert needle at 45-90°</li> <li>Administer medication slowly</li> </ul>	<ul style="list-style-type: none"> <li>Record site, dose, and timing</li> <li>Monitor for local/systemic reactions</li> </ul>
<b>Other (specify)</b>	<ul style="list-style-type: none"> <li>Follow medication-specific guidance</li> <li>Use route-appropriate equipment</li> </ul>	<ul style="list-style-type: none"> <li>Administer as per protocol</li> </ul>	<ul style="list-style-type: none"> <li>Complete documentation as required</li> </ul>

## 5. Dosage Calculation & Verification

- Verify orders and calculate dosages accurately
- Double-check high-alert or weight-based medications
- Use two-verifier system where required

## 6. Patient Education & Consent

- Explain procedure, medication, and expected effects/side effects
- Obtain and document informed consent as required
- Address patient questions or concerns

## 7. Safety Precautions

- Employ hand hygiene and aseptic techniques
- Use PPE as appropriate
- Ensure safe disposal of sharps and medication waste

## 8. Documentation

- Record route, dose, time, site (if applicable), batch/lot number, and patient response
- Report and document any adverse events or errors per policy

## 9. References

- Institutional policies and procedures
- Manufacturer & medication guidelines
- Relevant national and international standards