



Delivery of Pharmaceutical Products via the Pneumatic Tube System Procedure

1. Guiding Principles

A pneumatic tube is used to convey specific items in a fast, safe and efficient manner. Not all items are suitable to send via the pneumatic tube and this procedure outlines what pharmaceuticals **are not** to be sent.

This procedure is to be read in conjunction with the general rules of use for the pneumatic tube and only after a staff member has been orientated to the use of the equipment.

2. Procedure

Medications are to be packed into the canister with adequate packing to prevent breakage, and sealed according to the manufacturer's instruction.

Some products are unsuitable for transport via pneumatic tube system. The following are reasons they may be deemed unsuitable (1-3):

- Effect on agent being transported
 - Alteration of active ingredient from shaking
 - Breakage
 - Products that fizz or foam
 - Delayed retrieval will cause a cold chain breach
- Potential loss
 - Recordable medications (Schedule 8 and Schedule 4 Restricted – refer to the Operational Directives [OD 0141/08](#) and [OD 528/14](#))
 - High cost medications
- Potential harm to tube system
 - Excess weight leading to tube breakdown
 - Other damage to tube system such as staining or broken glass / liquid spills
- Potential to harm environment or personnel
 - Cytotoxic agents
 - Flammable or explosive agents.

The following items are not suitable to be sent via a pneumatic tube (also see [Appendix 1](#)):

- Recordable medications include Schedule 8 and Schedule 4 recordable medications.
- Cytotoxic medications (including oral medications)
- Heavy items (maximum limit is 500g / 500ml to allow for total maximum of 1kg)

- Items requiring refrigeration such as vaccines
- Any item the company lists as 'Not to be shaken' e.g. Tenecteplase
- Protein products which may be damaged by shaking e.g. insulin, albumin.
- Inhaled anaesthetics
- Carbonated substances
- Dyes such as Indian ink.
- Living items e.g. probiotics
- Glass items unable to be adequately protected to avoid breakage e.g. 10ml Adrenaline amps
- Expensive items.

3. Definitions

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|------------------------|---|
| Expensive items | includes any medication with a cost greater than \$500.00 |
|------------------------|---|

4. Roles and Responsibilities

4.1 Pharmacy Department

The pharmacy department is to ensure agents are packed suitably and are appropriate before sending them to the ward.

4.2 Ward Staff

Ward staff are to ensure alternative delivery arrangements are made for items deemed unsuitable for transport via the pneumatic tube.

5. Compliance

Failure to comply with this procedure may constitute a breach of the WA Health Code of Conduct (Code). The Code is part of the [Integrity Policy Framework](#) issued pursuant to section 26 of the [Health Services Act 2016](#) (HSA) and is binding on all WACHS staff which for this purpose includes trainees, students, volunteers, researchers, contractors for service (including all visiting health professionals and agency staff) and persons delivering training or education within WACHS.

WACHS staff are reminded that compliance with all policies is mandatory.

6. Records Management

All WACHS corporate records must be stored in the approved Electronic Documents and Records Management System.

[Records Management Policy](#)

Clinical:

[Health Record Management Policy](#)

7. Evaluation

Monitoring of compliance with this document is to be carried out by the monitoring of incidents reported in regard to:

- spillage in the system
- destruction of product due transport in the system
- loss of product in the system.

8. Standards

[National Safety and Quality Health Service Standards](#) – Standard 4

9. References

1. Peak. A, Fleming. M, Rykovich. L. Medications that should not be transported via pneumatic tube system. Butler University Drug Information Service.
2. Perth Children’s Hospital Pneumatic Tube system Policy
3. Sir Charles Gairdner Hospital Pneumatic Tube System Policy.

10. Related Policies

WA Heath [Operational Directive OD 0141/08 Code of practice for the handling of Schedule 8 medicines \(drugs of addiction\) in hospitals and nursing posts](#)

WA Heath [Operational Directive OD 0528/14 Storage and recording of Restricted Schedule 4 \(S4R\) medicines](#)

11. Policy Framework

[Public Health](#)

12. Appendices

Appendix 1 - Some pharmaceuticals don't mix with a pneumatic tube poster (see over)

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on request for a person with a disability**

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|---------------------|---|------------------------|----------------|
| Contact: | WACHS Great Southern Chief Pharmacist (M. Clay) | | |
| Directorate: | Medical Services | TRIM Record # | ED-CO-13-27355 |
| Version: | 3.00 | Date Published: | 23 April 2020 |

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Appendix 1

Some pharmaceuticals don't mix with a pneumatic tube



Products damaged by shaking



Heavy items (more than 500g)



Cold Chain items stored in the fridge



Recordable medications



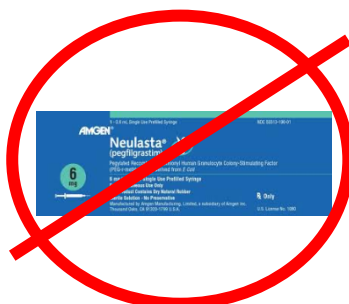
Cytotoxic medications



Protein based products like insulin



Items that break easily



Expensive items



Things too large for the tube