




ADULT MEDICATION GUIDELINE	
Digoxin	
Scope (Staff):	All WNHS Staff
Scope (Area):	Obstetrics and Gynaecology
This document should be read in conjunction with the Disclaimer .	

Quick Links

Dose	Administration	Monitoring	Pregnancy and Breastfeeding
----------------------	--------------------------------	----------------------------	---

Restrictions

Formulary: Unrestricted
HIGH RISK Medication 

Medication Class

Cardiac glycoside

Presentation

Tablet: 62.5 micrograms (Blue)
Tablet: 250 micrograms (White)
Ampoule: 500 micrograms/2mL

Storage

Store at room temperature, below 25°C
Ampoule: protect from light

Dose

<i>These doses are intended as a guide only</i>
<u>Atrial Fibrillation/Flutter, Heart Failure</u>
Loading dose
Oral/IV:

Adult: 250 to 500 micrograms every 4 to 6 hours according to response, up to a total of 1.5mg.

Elderly: 125 to 250 micrograms every 4 to 6 hours according to response, up to a total of 500 micrograms.

CrCl <60mL/minute: Reduce loading dose by half.

Maintenance dose

Oral:

Adult: 125 to 250 micrograms once daily (rarely increased up to 500 micrograms daily).

Elderly: 62.5 to 125 micrograms once daily.

CrCl 30-60 mL/minute: 62.5 to 250 micrograms once daily.

CrCl 10-30 mL/minute: 62.5 to 125 micrograms once daily.

CrCl < 10 mL/minute: 62.5 micrograms once daily or on alternate days.

Fetal Supraventricular Tachyarrhythmias

SEEK PHYSICIAN ADVICE in all circumstances

Loading dose:

Oral:

375microg to 625microgram three times a day for 24 hours.

Maintenance dose

Oral:

125microg to 250microgram three times a day, titrated to the fetal response over several days.

Administration

IV Injection

Step 1 Dilution: Dilute 2mL ampoule with at least 8mL of sodium chloride 0.9% or glucose 5%

Step 2 Administration: Inject over 5 to 10 minutes. May be injected undiluted over 5 to 10 minutes in fluid restricted patients. Do not flush the syringe after administration if given undiluted.

IV Infusion

Step 1 Dilution: Dilute the dose in 50 to 100mL of sodium chloride 0.9% or glucose 5%

Step 2 Administration: Infuse over 2 hours. Loading doses can be infused over 10 minutes.

Monitoring**Therapeutic Drug Monitoring:**

- Steady state is reached in about 7 days in patients with normal renal function (half-life is 36 hours) – this may be prolonged in renal impairment
- Take blood sample at least 6 hours after last dose
- Therapeutic range: 0.5-2 microgram/L (0.6-2.6 nanomol/L) although toxic effects may occur at lower concentrations
- Consider maintaining lower concentrations of 0.5 – 0.8microgram/L (0.6 – 1 nanomol/L) in patients with AF and in those with heart failure who are in sinus rhythm

Check renal function and electrolyte concentrations (particularly potassium) before starting digoxin.

Ongoing heart monitoring

Pregnancy

1st Trimester: Safe to use

2nd Trimester: Safe to use

3rd Trimester: Safe to use

Breastfeeding

Safe to use

Related Policies, Procedures & Guidelines**WNHS Clinical Practice Guidelines:**

O&G: [Cardiac Disease](#)

O&G: [Perioperative Preparation and Management](#)

WNHS Pharmaceutical and Medicines Management Guidelines:

[High Risk Medicines \(Intranet\)](#)

References

Australian Medicines Handbook. Digoxin. In: Australian Medicines Handbook [Internet]. Adelaide (South Australia): Australian Medicines Handbook; 2022 [cited 2022 Mar 10]. Available from: <https://amhonline.amh.net.au/>









Therapeutic Guidelines. Atrial fibrillation: Rate control for atrial fibrillation. In: eTG complete [Internet]. West Melbourne (Victoria): Therapeutic Guidelines; 2022 [cited 2022 Mar 10]. Available from: <https://tgldcdp-tg-org-au.kelibresources.health.wa.gov.au/etgAccess>

Therapeutic Guidelines. Heart Failure: Other drug therapies for HFrEF. In: eTG complete [Internet]. West Melbourne (Victoria): Therapeutic Guidelines; 2022 [cited 2022 Mar 10]. Available from: <https://tgldcdp-tg-org-au.kelibresources.health.wa.gov.au/etgAccess>

The Royal Women's Hospital. Digoxin. In: Pregnancy and Breastfeeding Medicines Guide [Internet]. Parkville (Victoria): The Royal Women's Hospital; 2022 [cited 2022 Mar 10]. Available from: <https://thewomenspbmg.org.au/>

Society of Hospital Pharmacists of Australia. Digoxin. In: Australian Injectable Drugs Handbook [Internet]. [St Leonards, New South Wales]: Health Communication Network; 2022 [cited 2022 Mar 15]. Available from: <http://aidh.hcn.com.au>

Veduta A, Panaitescu AM, Ciobanu AM, Neculcea D, Popescu MR, Peltecu G, Cavoretto P. Treatment of Fetal Arrhythmias. J. Clin. Med [JCM | Treatment of Fetal Arrhythmias | HTML \(mdpi.com\)](https://doi.org/10.3390/jcm10112510). 2021;10(11):2510.

Keywords	Digoxin, sigrmaxin, heart failure, atrial fibrillation, atrial flutter, supraventricular tachyarrhythmia,				
Document Owner:	Chief Pharmacist				
Author/ Reviewer	KEMH Pharmacy Department				
Version Info:					
Date First Issued:	06/2015	Last Reviewed:	08/2018	Review Date:	15/03/2022
Endorsed by:	Medicines and Therapeutics Committee			Date:	04/05/2022
NSQHS Standards Applicable:	<input checked="" type="checkbox"/>  Std 1: Clinical Governance <input type="checkbox"/>  Std 2: Partnering with Consumers <input type="checkbox"/>  Std 3: Preventing and Controlling Healthcare Associated Infection <input checked="" type="checkbox"/>  Std 4: Medication Safety		<input type="checkbox"/>  Std 5: Comprehensive Care <input type="checkbox"/>  Std 6: Communicating for Safety <input type="checkbox"/>  Std 7: Blood Management <input checked="" type="checkbox"/>  Std 8: Recognising and Responding to Acute Deterioration		
Printed or personally saved electronic copies of this document are considered uncontrolled. Access the current version from WNHS HealthPoint.					

The health impact upon Aboriginal people has been considered, and where relevant incorporated and appropriately addressed in the development of this document (insert ISD Number). (Please refer to the Aboriginal Health Impact Statement and Declaration for Department of Health and Health Service Provider Guidelines – please delete once you have completed this).

This document can be made available in alternative formats on request for a person with a disability.

© Women and Newborn Health Service 2022

Copyright of this material is vested in the State of Western Australia unless otherwise indicated. Apart from any fair dealing for the purposes of private study, research, criticism or review, as permitted under the provisions of the Copyright Act 1968, no part may be reproduced or re-used for any purposes whatsoever without written permission of the State of Western Australia.