

First name:		Surname:	
Hospital No:	NHS No:	DOB:	
Consultant:		Ward:	Hosp:
Use addressograph label			

Patient weight: kg

It is mandatory to complete this section	
<b>ALLERGY STATUS:</b> Medicine / Substance	Reaction
Sign (NAME)	Date

## Intravenous Naloxone for use in adults with known or suspected opioid overdose

### IV Bolus Dose:

- 400 mcg diluted with normal saline to make a 10mls solution with a concentration of 40mcg/ml
- Give by slow titrated IV injection in boluses of 40-80mcg, repeated at intervals of 1 to 3 minutes, up to 10mg.
- Aim for reversal of respiratory depression (respiratory rate > 8), a GCS of 12-13/15, not full reversal of unconsciousness.
- Failure of a definite opioid overdose to respond to large doses of naloxone suggests that another CNS depressant drug or brain damage is present.

### An IV infusion is indicated when:

- Previous effective bolus doses of naloxone have been given and symptoms of opioid toxicity have recurred.
- The opioid taken has a long half life (methadone, MST)
- If it is suspected that a large quantity of opioid has been taken.
- Consider infusion if opiate toxicity occurs in the context of renal failure

### Preparation of infusion 200 micrograms/mL solution:

- A solution of 10mg (25 x 400 microgram amps) naloxone made up to 50mL with sodium chloride 0.9% or glucose 5% can be prepared.

The initial hourly rate for infusion (second column) is set at 60% of the cumulative bolus doses needed to obtain a response and may be further adjusted according to clinical response:

Initial bolus dose giving response	Initial hourly rate of infusion	Volume per hour (of 200 micrograms/mL solution)
400 micrograms	240 micrograms/hr	1.2 mL/hour
600 micrograms	360 micrograms/hr	1.8 mL/hour
800 micrograms	480 micrograms/hr	2.4 mL/hour
1000 micrograms	600 micrograms/hr	3.0 mL/hour
1200 micrograms	720 micrograms/hr	3.6 mL/hour
1400 micrograms	840 micrograms/hr	4.2 mL/hour
1600 micrograms	960 micrograms/hr	4.8 mL/hour
1800 micrograms	1080 micrograms/hr	5.4 mL/hour
2000 micrograms	1200 micrograms/hr	6.0 mL/hour

If symptoms of opiate toxicity worsen (decreasing respiratory rate or level of consciousness) while the patient is on the IV infusion; then a bolus should be given and the baseline infusion rate increased as required.

The infusion rate should be titrated to achieve a GCS of 12-13/15 and an adequate respiratory rate and oxygenation saturation levels.

### Monitoring:

Every 15 minutes including blood pressure, pulse, respiratory rate, oxygen saturation and level of consciousness.

Patients should be observed for a minimum of six hours after the last dose of naloxone.

Drug: <b>Naloxone (200micrograms/ml)</b>		Route: <b>IV</b>	Date:				
Dilution: <b>10mg (25 x 400 microgram amps) naloxone made up to 50mL with sodium chloride 0.9% or glucose 5%</b>		Start date:	Time:				
Rate: <b>0-18 ml /hr</b>		Stop date:	Sign:				
Signature:	Pharm	Stop sign:	Witness:				