



Portsmouth Hospitals  
University  
NHS Trust

# Theatres Paediatric Calculation Handbook

# **Disclaimer**

This handbook is intended as a guide for healthcare professionals involved in the care of paediatric patients. While every effort has been made to ensure the accuracy of the information contained herein, the authors and publishers accept no responsibility for any errors, omissions, or outcomes resulting from the use of this material.

Clinical judgment, institutional protocols, and individual patient considerations must always take precedence. It is the responsibility of the healthcare provider to verify drug dosages, contraindications, interactions, and calculations with up-to-date references and official prescribing information before administering any medication.

This handbook is not a substitute for professional training or medical advice and should not be used as the sole resource for patient care decisions.

# Doses

## Energy

4 J/kg rounded to the nearest increment<sup>(1)</sup>.  
10, 20, 30, 50, 75, 100, 120

## ETT

See chart on the back

## LMA Ambu AuraGain

As per Ambu™ Data Sheet<sup>(2)</sup>

## Atropine

600 mcg/ml

Minimum dose: 100 mcg<sup>(3)</sup> 20 mcg/kg<sup>(4)</sup>  
Maximum dose: 600 mcg<sup>(3)</sup>

## Glycopyrrolate

200 mcg/ml

10 mcg/kg<sup>(5)</sup>

## Sux

50 mg/ml

2 mg/kg IV  
4 mg/ml IM<sup>(6)</sup>

## Adrenaline

10 mcg/kg<sup>(7)</sup>

## Fluid

10-20 ml/kg<sup>(8)</sup>

## Glucose 10%

3 ml/kg<sup>(9)</sup>

Concentrations in *italics* are at the upper or lower dosage limit for that drug.

Rocuronium  
Standard - 0.6  
mg/kg  
RSI - 1 mg/kg<sup>(10)</sup>

Ketamine  
RSI - 1-2 mg/kg<sup>(11)</sup>

Fentanyl  
1-3 mcg/kg<sup>(12)</sup>

# 2 kg



**Energy** 4 J/kg

**8 J**

**ETT** (Check against age)

**2 - 3 mm**

**LMA** Ambu AuraGain

**Size 1**

**Atropine**

100 mcg = 0.17 ml of  
600mcg/ml. Dilution is  
recommended

**0.17 ml**

**Glycopyrrolate**

**0.1 ml**

**Sux** **0.08 ml IV | 0.16 ml IM**

**Adrenaline** 1:10,000  
(Cardiac Arrest)

**0.2 ml**

**Fluid** 10-20ml/kg

**20 - 40 ml**

**Glucose 10%**

**6 ml**

**Anaphylaxis**

Take 0.2 ml of 1:10,000 - dilute to 10ml with saline.  
use 0.5 - 1 ml IV boluses to treat hypotension

**Rocuronium**  
Standard - 0.1 ml  
RSI - 0.2 ml

**Ketamine**  
RSI - 0.2-0.4 ml  
of 10 mg/ml

**Fentanyl**  
1-3 mcg/kg  
2-6 mcg

# 3 kg



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**Energy** 4 J/kg

**10 J**

**ETT** (Check against age)

**2 - 3 mm**

**LMA** Ambu AuraGain

**Size 1**

**Atropine**

100 mcg = 0.17 ml of  
600mcg/ml. Dilution is  
recommended

**0.17 ml**

**Glycopyrrolate**

**0.15 ml**

**Sux 0.12 ml IV | 0.25 ml IM**

**Adrenaline** 1:10,000  
(Cardiac Arrest)

**0.3 ml**

**Fluid** 10-20ml/kg

**30 - 60 ml**

**Glucose 10%**

**9 ml**

**Anaphylaxis**

Take 0.3 ml of 1:10,000 - dilute to 10ml with saline.  
use 0.5 - 1 ml IV boluses to treat hypotension

**Rocuronium**  
Standard - 0.2 ml  
RSI - 0.3 ml

**Ketamine**  
RSI - 0.3-0.6 ml  
of 10 mg/ml

**Fentanyl**  
1-3 mcg/kg  
3-9 mcg

# 4 kg



**Energy** 4 J/kg

**20 J**

**ETT** (Check against age)

**2 - 3.5 mm**

**LMA** Ambu AuraGain

**Size 1**

**Atropine**

100 mcg = 0.17 ml of  
600mcg/ml. Dilution is  
recommended

**0.17 ml**

**Glycopyrrolate**

**0.2 ml**

**Sux** **0.16 ml IV | 0.3 ml IM**

**Adrenaline** 1:10,000  
(Cardiac Arrest)

**0.4 ml**

**Fluid** 10-20ml/kg

**40 - 80 ml**

**Glucose 10%**

**12 ml**

**Anaphylaxis**

Take 0.4 ml of 1:10,000 - dilute to 10ml with saline.  
use 0.5 - 1 ml IV boluses to treat hypotension

**Rocuronium**  
Standard - 0.25 ml  
RSI - 0.4 ml

**Ketamine**  
RSI - 0.4-0.8 ml  
of 10 mg/ml

**Fentanyl**  
1-3 mcg/kg  
4-12 mcg

# 5 kg



**Energy** 4 J/kg

20 J

**ETT** (Check against age)

2 - 3.5 mm

**LMA** Ambu AuraGain

Size 1 - 1½

**Atropine**

0.17 ml

**Glycopyrrolate**

0.25 ml

**Sux** 0.2 ml IV | 0.4 ml IM

**Adrenaline** 1:10,000 (Cardiac Arrest)

0.5 ml

**Fluid** 10-20ml/kg

50 - 100 ml

**Glucose 10%**

15 ml

**Anaphylaxis**

Take 0.5 ml of 1:10,000 - dilute to 10ml with saline.  
use 0.5 - 1 ml IV boluses to treat hypotension

**Rocuronium**

Standard - 0.3 ml

RSI - 0.5 ml

**Ketamine**

RSI - 0.5-1 ml

of 10 mg/ml

**Fentanyl**

1-3 mcg/kg

5-15 mcg

# 6 kg



**Energy** 4 J/kg **20 J**

**ETT** (Check against age) **2 - 3.5 mm**

**LMA** Ambu AuraGain **Size 1 - 1½**

**Atropine** **0.2 ml**

**Glycopyrrolate** **0.3 ml**

**Sux** **0.25 ml IV | 0.5 ml IM**

**Adrenaline** **0.6 ml**  
1:10,000 (Cardiac Arrest)

**Fluid** **10-20ml/kg** **60 - 120 ml**

**Glucose 10%** **18 ml**

**Anaphylaxis** Take 0.6 ml of 1:10,000 - dilute to 10ml with saline.  
use 0.5 - 1 ml IV boluses to treat hypotension

**Rocuronium**  
Standard - 0.4 ml  
RSI - 0.6 ml

**Ketamine**  
RSI - 0.6-1.2 ml  
of 10 mg/ml

**Fentanyl**  
1-3 mcg/kg  
6-18 mcg

**7 kg**



**Energy** 4 J/kg

**30 J**

**ETT** (Check against age)

**2 - 3.5 mm**

**LMA** Ambu AuraGain

**Size 1½**

**Atropine**

**0.25 ml**

**Glycopyrrolate**

**0.35 ml**

**Sux** **0.3 ml IV | 0.6 ml IM**

**Adrenaline** 1:10,000 (Cardiac Arrest)

**0.7 ml**

**Fluid** 10-20ml/kg

**70 - 140 ml**

**Glucose 10%**

**21 ml**

**Anaphylaxis**

Take 0.7 ml of 1:10,000 - dilute to 10ml with saline.  
use 0.5 - 1 ml IV boluses to treat hypotension

**Rocuronium**  
Standard - 0.4 ml  
RSI - 0.7 ml

**Ketamine**  
RSI - 0.7-1.4 ml  
of 10 mg/ml

**Fentanyl**  
1-3 mcg/kg  
7-21 mcg

# 8 kg



**Energy** 4 J/kg **30 J**

**ETT** (Check against age) **2 - 3.5 mm**

**LMA** Ambu AuraGain **Size 1½**

**Atropine** **0.25 ml**

**Glycopyrrolate** **0.4 ml**

**Sux** **0.3 ml IV | 0.6 ml IM**

**Adrenaline** 1:10,000  
(Cardiac Arrest) **0.8 ml**

**Fluid** 10-20ml/kg **80 - 160 ml**

**Glucose 10%** **24 ml**

**Anaphylaxis** Take 0.8 ml of 1:10,000 - dilute to 10ml with saline.  
use 0.5 - 1 ml IV boluses to treat hypotension

**Rocuronium**  
Standard - 0.5 ml  
RSI - 0.8 ml

**Ketamine**  
RSI - 0.8-1.6 ml  
of 10 mg/ml

**Fentanyl**  
1-3 mcg/kg  
8-24 mcg

**9 kg**



**Energy** 4 J/kg

**30 J**

**ETT** (Check against age)

**2 - 3.5 mm**

**LMA** Ambu AuraGain

**Size 1½**

**Atropine**

**0.3 ml**

**Glycopyrrolate**

**0.45 ml**

**Sux** **0.35 ml IV | 0.7 ml IM**

**Adrenaline** 1:10,000 (Cardiac Arrest)

**0.9 ml**

**Fluid** 10-20ml/kg

**90 - 180 ml**

**Glucose 10%**

**27 ml**

**Anaphylaxis**

Take 0.9 ml of 1:10,000- dilute to 10ml with saline.  
use 0.5 - 1 ml IV boluses to treat hypotension

**Rocuronium**  
Standard - 0.5 ml  
**RSI - 0.9 ml**

**Ketamine**  
RSI - 0.9-1.8 ml  
of 10 mg/ml

**Fentanyl**  
1-3 mcg/kg  
9-27 mcg

# 10 kg



**Energy** 4 J/kg **30 J**

**ETT** (Check against age) **3.5 - 4 mm**

**LMA** Ambu AuraGain **Size 1½ - 2**

**Atropine** **0.3 ml**

**Glycopyrrolate** **0.5 ml**

**Sux** **0.4 ml IV | 0.8 ml IM**

**Adrenaline** (Cardiac Arrest) 1:10,000 **1 ml**

**Fluid** 10-20ml/kg **100 - 200 ml**

**Glucose 10%** **30 ml**

**Anaphylaxis** Take 1 ml of 1:10,000- dilute to 10ml with saline.  
use 0.5 - 1 ml IV boluses to treat hypotension

**Rocuronium**  
Standard - 0.6 ml  
**RSI - 1 ml**

**Ketamine**  
RSI - 1-2ml  
of 10 mg/ml

**Fentanyl**  
1-3 mcg/kg  
10-30 mcg

# 11 kg



**Energy** 4 J/kg

50 J

**ETT** (Check against age)

3.5 - 4 mm

**LMA** Ambu AuraGain

Size 1½ - 2

**Atropine**

0.4 ml

**Glycopyrrolate**

0.6 ml

**Sux** 0.4 ml IV | 0.9 ml IM

**Adrenaline** 1:10,000 (Cardiac Arrest)

1.1 ml

**Fluid** 10-20ml/kg

110 - 220 ml

**Glucose 10%**

33 ml

**Anaphylaxis**

Take 1.1 ml of 1:10,000 - dilute to 10ml with saline.  
use 0.5 - 1 ml IV boluses to treat hypotension

**Rocuronium**  
Standard - 0.7 ml  
RSI - 1.1 ml

**Ketamine**  
RSI - 1.1-2.2 ml  
of 10 mg/ml

**Fentanyl**  
1-3 mcg/kg  
11-33 mcg

# 12 kg



**Energy** 4 J/kg **50 J**

**ETT** (Check against age) **3.5 - 4 mm**

**LMA** Ambu AuraGain **Size 2**

**Atropine** **0.4 ml**

**Glycopyrrolate** **0.6 ml**

**Sux** **0.5 ml IV | 1 ml IM**

**Adrenaline** 1:10,000  
(Cardiac Arrest) **1.2 ml**

**Fluid** 10-20ml/kg **120 - 240 ml**

**Glucose 10%** **36 ml**

**Anaphylaxis** Take 1.2 ml of 1:10,000- dilute to 10ml with saline.  
use 0.5 - 1 ml IV boluses to treat hypotension

**Rocuronium**  
Standard - 0.7 ml  
RSI - 1.2 ml

**Ketamine**  
RSI - 1.2-2.4 ml  
of 10 mg/ml

**Fentanyl**  
1-3 mcg/kg  
12-36 mcg

# 13 kg



**Energy** 4 J/kg

50 J

**ETT** (Check against age)

3.5 - 4 mm

**LMA** Ambu AuraGain

Size 2

**Atropine**

0.45 ml

**Glycopyrrolate**

0.65 ml

**Sux**

0.5 ml IV | 1 ml IM

**Adrenaline**

1:10,000  
(Cardiac Arrest)

1.3 ml

**Fluid**

10-20ml/kg

130 - 260 ml

**Glucose 10%**

39 ml

**Anaphylaxis**

Take 1.3 ml of 1:10,000 - dilute to 10ml with saline.  
use 0.5 - 1 ml IV boluses to treat hypotension

**Rocuronium**

Standard - 0.8 ml  
RSI - 1.3 ml

**Ketamine**

RSI - 1.3 - 2.6 ml  
of 10 mg/ml

**Fentanyl**

1-3 mcg/kg  
13 - 39 mcg

# 14 kg



**Energy** 4 J/kg **50 J**

**ETT** (Check against age) **3.5 - 4 mm**

**LMA** Ambu AuraGain **Size 2**

**Atropine** **0.5 ml**

**Glycopyrrolate** **0.7 ml**

**Sux** **0.6 ml IV | 1.1 ml IM**

**Adrenaline** 1:10,000  
(Cardiac Arrest) **1.4 ml**

**Fluid** 10-20ml/kg **140 - 280 ml**

**Glucose 10%** **42 ml**

**Anaphylaxis** Take 1.4 ml of 1:10,000 - dilute to 10ml with saline.  
use 0.5 - 1 ml IV boluses to treat hypotension

**Rocuronium**  
Standard - 0.8 ml  
RSI - 1.4 ml

**Ketamine**  
RSI - 1.4 -2.8 ml  
of 10 mg/ml

**Fentanyl**  
1-3 mcg/kg  
14 - 42 mcg

# 15 kg



**Energy** 4 J/kg

50 J

**ETT** (Check against age)

4 - 4.5 mm

**LMA** Ambu AuraGain

Size 2

**Atropine**

0.5 ml

**Glycopyrrolate**

0.8 ml

**Sux** 0.6 ml IV | 1.2 ml IM

**Adrenaline** 1:10,000  
(Cardiac Arrest)

1.5 ml

**Fluid** 10-20ml/kg

150 - 300 ml

**Glucose 10%**

45 ml

**Anaphylaxis**

Take 1.5 ml of 1:10,000 - dilute to 10ml with saline.  
use 0.5 - 1 ml IV boluses to treat hypotension

**Rocuronium**  
Standard - 0.9 ml  
RSI - 1.5 ml

**Ketamine**  
RSI - 1.5-3ml  
of 10 mg/ml

**Fentanyl**  
1-3 mcg/kg  
15-45 mcg

# 16 kg



**Energy** 4 J/kg **75 J**

**ETT** (Check against age) **4 - 4.5 mm**

**LMA** Ambu AuraGain **Size 2**

**Atropine** **0.5 ml**

**Glycopyrrolate** **0.8 ml**

**Sux** **0.6 ml IV | 1.3 ml IM**

**Adrenaline** 1:10,000 (Cardiac Arrest) **1.6 ml**

**Fluid** 10-20ml/kg **160 - 320 ml**

**Glucose 10%** **48 ml**

**Anaphylaxis** Take 1.6 ml of 1:10,000 - dilute to 10ml with saline.  
use 0.5 - 1 ml IV boluses to treat hypotension

**Rocuronium**  
Standard - 1 ml  
RSI - 1.6 ml

**Ketamine**  
RSI - 1.6-3.2 ml  
of 10 mg/ml

**Fentanyl**  
1-3 mcg/kg  
16-48 mcg

# 17 kg



**Energy** 4 J/kg

**75 J**

**ETT** (Check against age)

**4 - 4.5 mm**

**LMA** Ambu AuraGain

**Size 2**

**Atropine**

**0.6 ml**

**Glycopyrrolate**

**0.9 ml**

**Sux** **0.7 ml IV | 1.4 ml IM**

**Adrenaline** 1:10,000 (Cardiac Arrest)

**1.7 ml**

**Fluid** 10-20ml/kg

**170 - 340 ml**

**Glucose 10%**

**51 ml**

**Anaphylaxis**

Take 1.7 ml of 1:10,000- dilute to 10ml with saline.  
use 0.5 - 1 ml IV boluses to treat hypotension

**Rocuronium**  
Standard - 1 ml  
**RSI - 1.7 ml**

**Ketamine**  
RSI - 1.7-3.4 ml  
of 10mg/ml

**Fentanyl**  
1-3 mcg/kg  
17-51 mcg

# 18 kg



**Energy** 4 J/kg **75 J**

**ETT** (Check against age) **4 - 4.5 mm**

**LMA** Ambu AuraGain **Size 2**

**Atropine** **0.6 ml**

**Glycopyrrolate** **0.9 ml**

**Sux** **0.7 ml IV | 1.4 ml IM**

**Adrenaline** 1:10,000  
(Cardiac Arrest) **1.8 ml**

**Fluid** 10-20ml/kg **180 - 360 ml**

**Glucose 10%** **54 ml**

**Anaphylaxis** Take 1.8 ml of 1:10,000 - dilute to 10ml with saline.  
use 0.5 - 1 ml IV boluses to treat hypotension

**Rocuronium**  
Standard - 1.1 ml  
RSI - 1.8 ml

**Ketamine**  
RSI - 1.8-3.6 ml  
of 10 mg/ml

**Fentanyl**  
1-3 mcg/kg  
18-54 mcg

# 19 kg



**Energy** 4 J/kg

**75 J**

**ETT** (Check against age)

**4.5 - 5 mm**

**LMA** Ambu AuraGain

**Size 2**

**Atropine**

**0.6 ml**

**Glycopyrrolate**

**0.9 ml**

**Sux** **0.8 ml IV | 1.5 ml IM**

**Adrenaline** 1:10,000 (Cardiac Arrest)

**1.9 ml**

**Fluid** 10-20ml/kg

**190 - 380 ml**

**Glucose 10%**

**57 ml**

**Anaphylaxis**

Take 1.9 ml of 1:10,000- dilute to 10ml with saline.  
use 0.5 - 1 ml IV boluses to treat hypotension

**Rocuronium**  
Standard - 1.1 ml  
**RSI - 1.9 ml**

**Ketamine**  
RSI - 1.9-3.8 ml  
of 10 mg/ml

**Fentanyl**  
1-3 mcg/kg  
19-57 mcg

# 20 kg



**Energy** 4 J/kg **75 J**

**ETT** (Check against age) **4.5 - 5 mm**

**LMA** Ambu AuraGain **Size 2 / 2½**

**Atropine** **0.7 ml**

**Glycopyrrolate** **1 ml**

**Sux** **0.8 ml IV | 1.6 ml IM**

**Adrenaline** 1:10,000 (Cardiac Arrest) **2 ml**

**Fluid** 10-20ml/kg **200 - 400 ml**

**Glucose 10%** **60 ml**

**Anaphylaxis** Take 2.0 ml of 1:10,000 - dilute to 10ml with saline.  
use 0.5 - 1 ml IV boluses to treat hypotension

**Rocuronium**  
Standard - 1.2 ml  
RSI - 2 ml

**Ketamine**  
RSI - 2-4 ml  
of 10 mg/ml

**Fentanyl**  
1-3 mcg/kg  
20-60 mcg

# 21 kg



**Energy** 4 J/kg

**75 J**

**ETT** (Check against age)

**4.5 - 5 mm**

**LMA** Ambu AuraGain

**Size 2 / 2½**

**Atropine**

**0.7 ml**

**Glycopyrrolate**

**1 ml**

**Sux**

**0.8 ml IV | 1.7 ml IM**

**Adrenaline**

1:10,000  
(Cardiac Arrest)

**2.1 ml**

**Fluid**

10-20ml/kg

**210 - 420 ml**

**Glucose 10%**

**63 ml**

**Anaphylaxis**

Take 2.1 ml of 1:10,000 - dilute to 10ml with saline.  
use 0.5 - 1 ml IV boluses to treat hypotension

**Rocuronium**

Standard - 1.3 ml  
RSI - 2.1 ml

**Ketamine**

RSI - 2.1-4.2 ml  
of 10 mg/ml

**Fentanyl**

1-3 mcg/kg  
21-63 mcg

# 22 kg



**Energy** 4 J/kg **100 J**

**ETT** (Check against age) **4.5 - 5 mm**

**LMA** Ambu AuraGain **Size 2½**

**Atropine** **0.7 ml**

**Glycopyrrolate** **1 ml**

**Sux** **0.9 ml IV | 1.8 ml IM**

**Adrenaline** **2.2 ml**  
1:10,000 (Cardiac Arrest)

**Fluid** **10-20ml/kg** **220 - 440 ml**

**Glucose 10%** **66 ml**

**Anaphylaxis** Take 2.2 ml of 1:10,000 - dilute to 10ml with saline.  
use 0.5 - 1 ml IV boluses to treat hypotension

**Rocuronium**  
Standard - 1.3 ml  
RSI - 2.2 ml

**Ketamine**  
RSI - 2.2-4.4 ml  
of 10 mg/ml

**Fentanyl**  
1-3 mcg/kg  
22-66 mcg

# 23 kg



**Energy** 4 J/kg

**100 J**

**ETT** (Check against age)

**4.5 - 5 mm**

**LMA** Ambu AuraGain

**Size 2½**

**Atropine**

**0.8 ml**

**Glycopyrrolate**

**1 ml**

**Sux** **0.9 ml IV | 1.8 ml IM**

**Adrenaline** 1:10,000 (Cardiac Arrest)

**2.3 ml**

**Fluid** 10-20ml/kg

**230 - 460 ml**

**Glucose 10%**

**69 ml**

**Anaphylaxis**

Take 2.3 ml of 1:10,000 - dilute to 10ml with saline.  
use 0.5 - 1 ml IV boluses to treat hypotension

**Rocuronium**

Standard - 1.4 ml

RSI - 2.3 ml

**Ketamine**

RSI - 2.3-4.6 ml

of 10mg/ml

**Fentanyl**

1-3 mcg/kg

23-69 mcg

# 24 kg



**Energy** 4 J/kg **100 J**

**ETT** (Check against age) **4.5 - 5 mm**

**LMA** Ambu AuraGain **Size 2½**

**Atropine** **0.8 ml**

**Glycopyrrolate** **1 ml**

**Sux** **1 ml IV | 1.9 ml IM**

**Adrenaline** 1:10,000 (Cardiac Arrest) **2.4 ml**

**Fluid** 10-20ml/kg **240 - 480 ml**

**Glucose 10%** **72 ml**

**Anaphylaxis** Take 2.4 ml of 1:10,000 - dilute to 10ml with saline.  
use 0.5 - 1 ml IV boluses to treat hypotension

**Rocuronium**  
Standard - 1.4 ml  
RSI - 2.4 ml

**Ketamine**  
RSI - 2.4-4.8 ml  
of 10 mg/ml

**Fentanyl**  
1-3 mcg/kg  
24-72 mcg

# 25 kg



**Energy** 4 J/kg

**100 J**

**ETT** (Check against age)

**4.5 - 5 mm**

**LMA** Ambu AuraGain

**Size 2½**

**Atropine**

**0.8 ml**

**Glycopyrrolate**

**1 ml**

**Sux**

**1 ml IV | 2 ml IM**

**Adrenaline**

1:10,000  
(Cardiac Arrest)

**2.5 ml**

**Fluid**

10-20ml/kg

**250 - 500 ml**

**Glucose 10%**

**75 ml**

**Anaphylaxis**

Take 2.5 ml of 1:10,000 - dilute to 10ml with saline.  
use 0.5 - 1 ml IV boluses to treat hypotension

**Rocuronium**

Standard - 1.5 ml  
RSI - 2.5 ml

**Ketamine**

RSI - 2.5-5 ml  
of 10 mg/ml

**Fentanyl**

1-3 mcg/kg  
25-75 mcg

# 26 kg



**Energy** 4 J/kg **100 J**

**ETT** (Check against age) **4.5 - 5 mm**

**LMA** Ambu AuraGain **Size 2½**

**Atropine** **0.9 ml**

**Glycopyrrolate** **1 ml**

**Sux** **1 ml IV | 2.1 ml IM**

**Adrenaline** 1:10,000 (Cardiac Arrest) **2.6 ml**

**Fluid** 10-20ml/kg **260 - 520 ml**

**Glucose 10%** **78 ml**

**Anaphylaxis** Take 2.6 ml of 1:10,000- dilute to 10ml with saline.  
use 0.5 - 1 ml IV boluses to treat hypotension

**Rocuronium**  
Standard - 1.6 ml  
RSI - 2.6 ml

**Ketamine**  
RSI - 2.6-5.2 ml  
of 10mg/ml

**Fentanyl**  
1-3 mcg/kg  
26-78 mcg

# 28 kg



**Energy** 4 J/kg

**120 J**

**ETT** (Check against age)

**4.5 - 5 mm**

**LMA** Ambu AuraGain

**Size 2½**

**Atropine**

**0.9 ml**

**Glycopyrrolate**

**1 ml**

**Sux**

**1.1 ml IV | 2.2 ml IM**

**Adrenaline**

**1:10,000  
(Cardiac Arrest)**

**2.8 ml**

**Fluid**

**10-20ml/kg**

**280 - 560 ml**

**Glucose 10%**

**84 ml**

**Anaphylaxis**

Take 2.8 ml of 1:10,000 - dilute to 10ml with saline.  
use 0.5 - 1 ml IV boluses to treat hypotension

**Rocuronium**

**Standard - 1.7 ml  
RSI - 2.8 ml**

**Ketamine**

**RSI - 2.8-5.6 ml  
of 10 mg/ml**

**Fentanyl**

**1-3 mcg/kg  
28-84 mcg**

# 30 kg



**Energy** 4 J/kg **120 J**

**ETT** (Check against age) **5 - 5.5 mm**

**LMA** Ambu AuraGain **Size 2½ / 3**

**Atropine** **1 ml**

**Glycopyrrolate** **1 ml**

**Sux** **1.2 ml IV | 2.4 ml IM**

**Adrenaline** 1:10,000 (Cardiac Arrest) **3 ml**

**Fluid** 10-20ml/kg **300 - 600 ml**

**Glucose 10%** **90 ml**

**Anaphylaxis** Take 3 ml of 1:10,000- dilute to 10ml with saline.  
use 0.5 - 1 ml IV boluses to treat hypotension

**Rocuronium**  
Standard - 1.8 ml  
RSI - 3 ml

**Ketamine**  
RSI - 3-6 ml  
of 10 mg/ml

**Fentanyl**  
1-3 mcg/kg  
30-90 mcg

# 32 kg



**Energy** 4 J/kg

**120 J**

**ETT** (Check against age)

**5 - 5.5 mm**

**LMA** Ambu AuraGain

**Size 3**

**Atropine**

**1 ml**

**Glycopyrrolate**

**1 ml**

**Sux**

**1.3 ml IV | 2.6 ml IM**

**Adrenaline**

1:10,000  
(Cardiac Arrest)

**3.2 ml**

**Fluid**

10-20ml/kg

**320 - 640 ml**

**Glucose 10%**

**96 ml**

**Anaphylaxis**

Take 3.2 ml of 1:10,000 - dilute to 10ml with saline.  
use 0.5 - 1 ml IV boluses to treat hypotension

**Rocuronium**

Standard - 1.9 ml  
RSI - 3.2 ml

**Ketamine**

RSI - 3.2-6.4 ml  
of 10 mg/ml

**Fentanyl**

1-3 mcg/kg  
32-96 mcg

# 34 kg



**Energy** 4 J/kg **120 J**

**ETT** (Check against age) **5.5 - 6 mm**

**LMA** Ambu AuraGain **Size 3**

**Atropine** **1 ml**

**Glycopyrrolate** **1 ml**

**Sux** **1.4 ml IV | 2.7 ml IM**

**Adrenaline** 1:10,000 (Cardiac Arrest) **3.4 ml**

**Fluid** 10-20ml/kg **340 - 680 ml**

**Glucose 10%** **102 ml**

**Anaphylaxis** Take 3.4 ml of 1:10,000 - dilute to 10ml with saline.  
use 0.5 - 1 ml IV boluses to treat hypotension

**Rocuronium**  
Standard - 2 ml  
RSI - 3.4 ml

**Ketamine**  
RSI - 3.4-6.8 ml  
of 10 mg/ml

**Fentanyl**  
1-3 mcg/kg  
34-102 mcg

# 36 kg



**Energy** 4 J/kg

**120 J**

**ETT** (Check against age)

**5.5 - 6 mm**

**LMA** Ambu AuraGain

**Size 3**

**Atropine**

**1 ml**

**Glycopyrrolate**

**1 ml**

**Sux** **1.4 ml IV | 2.9 ml IM**

**Adrenaline** 1:10,000 (Cardiac Arrest)

**3.6 ml**

**Fluid** 10-20ml/kg

**360 - 720 ml**

**Glucose 10%**

**108 ml**

**Anaphylaxis**

Take 3.6 ml of 1:10,000 - dilute to 10ml with saline.  
use 0.5 - 1 ml IV boluses to treat hypotension

**Rocuronium**  
Standard - 2.2 ml  
**RSI - 3.6 ml**

**Ketamine**  
RSI - 3.6-7.2 ml  
of 10mg/ml

**Fentanyl**  
1-3 mcg/kg  
36-108 mcg

# 38 kg



**Energy** 4 J/kg **120 J**

**ETT** (Check against age) **5.5 - 6 mm**

**LMA** Ambu AuraGain **Size 3**

**Atropine** **1 ml**

**Glycopyrrolate** **1 ml**

**Sux** **1.5 ml IV | 3.0 ml IM**

**Adrenaline** 1:10,000 (Cardiac Arrest) **3.8 ml**

**Fluid** 10-20ml/kg **380 - 760 ml**

**Glucose 10%** **114 ml**

**Anaphylaxis** Take 3.8 ml of 1:10,000 - dilute to 10ml with saline.  
use 0.5 - 1 ml IV boluses to treat hypotension

**Rocuronium**  
Standard - 2.3 ml  
RSI - 3.8 ml

**Ketamine**  
RSI - 3.8-7.6 ml  
of 10 mg/ml

**Fentanyl**  
1-3 mcg/kg  
38-114 mcg

# 40 kg



**Energy** 4 J/kg

**120 J**

**ETT** (Check against age)

**6 - 6.5 mm**

**LMA** Ambu AuraGain

**Size 3**

**Atropine**

**1 ml**

**Glycopyrrolate**

**1 ml**

**Sux** 1.6 ml IV | 3.2 ml IM

**Adrenaline** 1:10,000 (Cardiac Arrest)

**4 ml**

**Fluid** 10-20ml/kg

**400 - 800 ml**

**Glucose 10%**

**120 ml**

**Anaphylaxis**

Take 4 ml of 1:10,000 - dilute to 10ml with saline.  
use 0.5 - 1 ml IV boluses to treat hypotension

**Rocuronium**

Standard - 2.4 ml

RSI - 4 ml

**Ketamine**

RSI - 4-8 ml

of 10 mg/ml

**Fentanyl**

1-3 mcg/kg

40-120 mcg

# 42 kg



**Energy** 4 J/kg **120 J**

**ETT** (Check against age) **6 - 6.5 mm**

**LMA** Ambu AuraGain **Size 3**

**Atropine** **1 ml**

**Glycopyrrolate** **1 ml**

**Sux** **1.7 ml IV | 3.4 ml IM**

**Adrenaline** **4.2 ml**  
1:10,000 (Cardiac Arrest)

**Fluid** **10-20ml/kg** **420 - 840 ml**

**Glucose 10%** **126 ml**

**Anaphylaxis** Take 4.2 ml of 1:10,000 - dilute to 10ml with saline.  
use 0.5 - 1 ml IV boluses to treat hypotension

**Rocuronium**  
Standard - 2.5 ml  
RSI - 4.2 ml

**Ketamine**  
RSI - 4.2-8.4ml  
of 10 mg/ml

**Fentanyl**  
1-3 mcg/kg  
42-126 mcg

# 44 kg



**Energy** 4 J/kg

**120 J**

**ETT** (Check against age)

**6 - 6.5 mm**

**LMA** Ambu AuraGain

**Size 3**

**Atropine**

**1 ml**

**Glycopyrrolate**

**1 ml**

**Sux** **1.8 ml IV | 3.5 ml IM**

**Adrenaline** 1:10,000 (Cardiac Arrest)

**4.4 ml**

**Fluid** 10-20ml/kg

**440 - 880 ml**

**Glucose 10%**

**132 ml**

**Anaphylaxis**

Take 4.4 ml of 1:10,000- dilute to 10ml with saline.  
use 0.5 - 1 ml IV boluses to treat hypotension

**Rocuronium**  
Standard - 2.6 ml  
**RSI - 4.4 ml**

**Ketamine**  
**RSI - 4.4-8.8 ml**  
of 10 mg/ml

**Fentanyl**  
1-3 mcg/kg  
44-132 mcg

# 46 kg



**Energy** 4 J/kg

**120 J**

**ETT** (Check against age)

**6 - 6.5 mm**

**LMA** Ambu AuraGain

**Size 3**

**Atropine** **1 ml**

**Glycopyrrolate** **1 ml**

**Sux** **1.8 ml IV | 3.7 ml IM**

**Adrenaline** **4.6 ml**  
1:10,000 (Cardiac Arrest)

**Fluid** **10-20ml/kg** **460 - 920 ml**

**Glucose 10%** **138 ml**

**Anaphylaxis**

Take 4.6 ml of 1:10,000 - dilute to 10ml with saline.  
use 0.5 - 1 ml IV boluses to treat hypotension

**Rocuronium**  
Standard - 2.8 ml  
RSI - 4.6 ml

**Ketamine**  
RSI - 4.6-9.2 ml  
of 10 mg/ml

**Fentanyl**  
1-3 mcg/kg  
46-138 mcg

# 48 kg



**Energy** 4 J/kg

**120 J**

**ETT** (Check against age)

**6 - 6.5 mm**

**LMA** Ambu AuraGain

**Size 3**

**Atropine**

**1 ml**

**Glycopyrrolate**

**1 ml**

**Sux** **1.9 ml IV | 3.8 ml IM**

**Adrenaline** 1:10,000 (Cardiac Arrest)

**4.8 ml**

**Fluid** 10-20ml/kg

**480 - 960 ml**

**Glucose 10%**

**144 ml**

**Anaphylaxis**

Take 4.8 ml of 1:10,000 - dilute to 10ml with saline.  
use 0.5 - 1 ml IV boluses to treat hypotension

**Rocuronium**  
Standard - 2.9 ml  
**RSI - 4.8 ml**

**Ketamine**  
RSI - 4.8-9.6 ml  
of 10 mg/ml

**Fentanyl**  
1-3 mcg/kg  
48-144 mcg

# 50 kg



**Energy** 4 J/kg

**120 J**

**ETT** (Check against age)

**6 - 6.5 mm**

**LMA** Ambu AuraGain

**Size 3**

**Atropine**

**1 ml**

**Glycopyrrolate**

**1 ml**

**Sux**

**2 ml IV | 4 ml IM**

**Adrenaline**

**1:10,000  
(Cardiac Arrest)**

**5 ml**

**Fluid**

**10-20ml/kg**

**500 - 1000 ml**

**Glucose 10%**

**150 ml**

**Anaphylaxis**

Take 5 ml of 1:10,000 - dilute to 10ml with saline.  
use 0.5 - 1 ml IV boluses to treat hypotension

**Rocuronium**  
Standard - 3 ml  
**RSI - 5 ml**

**Ketamine**  
RSI - 5-10 ml  
of 10 mg/ml

**Fentanyl**  
1-3 mcg/kg  
50-150 mcg

Age (Years)	Term - 8 Months	8 months - 2	2 - 4	4 - 6	6 - 8	8 - 10	10 - 12
ETT Size (cuffed) (Stylet)	3.0 (Stylet)	3.5 (Stylet)	4.0	4.5	5.0	5.5	6.0
Length (cm)	11	12	13	14	15	16	17
Bougie	5Fr	10Fr	10Fr	10Fr	10Fr	14Fr	14Fr
Suction Catheter	6	8	10	10	10	14Fr	14Fr

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