

# PAEDIATRIC FENTANYL INFUSION

Concentration: 10 mcg/mL

**Admixture:**

100 mcg diluted to a total volume of 10 mL for 10 mcg/mL

or

500 mcg diluted to a total volume of 50 mL for 10 mcg/mL

| DOSE<br>(mcg/kg/hr) | PATIENT WEIGHT (kg)   |     |     |     |     |      |      |      |      |    |      |      |      |    |      |      |      |    |      |      |
|---------------------|-----------------------|-----|-----|-----|-----|------|------|------|------|----|------|------|------|----|------|------|------|----|------|------|
|                     | 2                     | 4   | 6   | 8   | 10  | 12   | 14   | 16   | 18   | 20 | 25   | 30   | 35   | 40 | 45   | 50   | 55   | 60 | 65   | 70   |
|                     | INFUSION RATE (mL/hr) |     |     |     |     |      |      |      |      |    |      |      |      |    |      |      |      |    |      |      |
| 0.5                 | 0.1                   | 0.2 | 0.3 | 0.4 | 0.5 | 0.6  | 0.7  | 0.8  | 0.9  | 1  | 1.3  | 1.5  | 1.8  | 2  | 2.3  | 2.5  | 2.8  | 3  | 3.3  | 3.5  |
| 1                   | 0.2                   | 0.4 | 0.6 | 0.8 | 1   | 1.2  | 1.4  | 1.6  | 1.8  | 2  | 2.5  | 3    | 3.5  | 4  | 4.5  | 5    | 5.5  | 6  | 6.5  | 7    |
| 1.5                 | 0.3                   | 0.6 | 0.9 | 1.2 | 1.5 | 1.8  | 2.1  | 2.4  | 2.7  | 3  | 3.8  | 4.5  | 5.3  | 6  | 6.8  | 7.5  | 8.3  | 9  | 9.8  | 10.5 |
| 2                   | 0.4                   | 0.8 | 1.2 | 1.6 | 2   | 2.4  | 2.8  | 3.2  | 3.6  | 4  | 5    | 6    | 7    | 8  | 9    | 10   | 11   | 12 | 13   | 14   |
| 2.5                 | 0.5                   | 1   | 1.5 | 2   | 2.5 | 3    | 3.5  | 4    | 4.5  | 5  | 6.3  | 7.5  | 8.8  | 10 | 11.3 | 12.5 | 13.8 | 15 | 16.3 | 17.5 |
| 3                   | 0.6                   | 1.2 | 1.8 | 2.4 | 3   | 3.6  | 4.2  | 4.8  | 5.4  | 6  | 7.5  | 9    | 10.5 | 12 | 13.5 | 15   | 16.5 | 18 | 19.5 | 21   |
| 3.5                 | 0.7                   | 1.4 | 2.1 | 2.8 | 3.5 | 4.2  | 4.9  | 5.6  | 6.3  | 7  | 8.8  | 10.5 | 12.3 | 14 | 15.8 | 17.5 | 19.3 | 21 | 22.8 | 24.5 |
| 4                   | 0.8                   | 1.6 | 2.4 | 3.2 | 4   | 4.8  | 5.6  | 6.4  | 7.2  | 8  | 10   | 12   | 14   | 16 | 18   | 20   | 22   | 24 | 26   | 28   |
| 4.5                 | 0.9                   | 1.8 | 2.7 | 3.6 | 4.5 | 5.4  | 6.3  | 7.2  | 8.1  | 9  | 11.3 | 13.5 | 15.8 | 18 | 20.3 | 22.5 | 24.8 | 27 | 29.3 | 31.5 |
| 5                   | 1                     | 2   | 3   | 4   | 5   | 6    | 7    | 8    | 9    | 10 | 12.5 | 15   | 17.5 | 20 | 22.5 | 25   | 27.5 | 30 | 32.5 | 35   |
| 5.5                 | 1.1                   | 2.2 | 3.3 | 4.4 | 5.5 | 6.6  | 7.7  | 8.8  | 9.9  | 11 | 13.8 | 16.5 | 19.3 | 22 | 24.8 | 27.5 | 30.3 | 33 | 35.8 | 38.5 |
| 6                   | 1.2                   | 2.4 | 3.6 | 4.8 | 6   | 7.2  | 8.4  | 9.6  | 10.8 | 12 | 15   | 18   | 21   | 24 | 27   | 30   | 33   | 36 | 39   | 42   |
| 6.5                 | 1.3                   | 2.6 | 3.9 | 5.2 | 6.5 | 7.8  | 9.1  | 10.4 | 11.7 | 13 | 16.3 | 19.5 | 22.8 | 26 | 29.3 | 32.5 | 35.8 | 39 | 42.3 | 45.5 |
| 7                   | 1.4                   | 2.8 | 4.2 | 5.6 | 7   | 8.4  | 9.8  | 11.2 | 12.6 | 14 | 17.5 | 21   | 24.5 | 28 | 31.5 | 35   | 38.5 | 42 | 45.5 | 49   |
| 7.5                 | 1.5                   | 3   | 4.5 | 6   | 7.5 | 9    | 10.5 | 12   | 13.5 | 15 | 18.8 | 22.5 | 26.3 | 30 | 33.8 | 37.5 | 41.3 | 45 | 48.8 | 52.5 |
| 8                   | 1.6                   | 3.2 | 4.8 | 6.4 | 8   | 9.6  | 11.2 | 12.8 | 14.4 | 16 | 20   | 24   | 28   | 32 | 36   | 40   | 44   | 48 | 52   | 56   |
| 8.5                 | 1.7                   | 3.4 | 5.1 | 6.8 | 8.5 | 10.2 | 11.9 | 13.6 | 15.3 | 17 | 21.3 | 25.5 | 29.8 | 34 | 38.3 | 42.5 | 46.8 | 51 | 55.3 | 59.5 |
| 9                   | 1.8                   | 3.6 | 5.4 | 7.2 | 9   | 10.8 | 12.6 | 14.4 | 16.2 | 18 | 22.5 | 27   | 31.5 | 36 | 40.5 | 45   | 49.5 | 54 | 58.5 | 63   |
| 9.5                 | 1.9                   | 3.8 | 5.7 | 7.6 | 9.5 | 11.4 | 13.3 | 15.2 | 17.1 | 19 | 23.8 | 28.5 | 33.3 | 38 | 42.8 | 47.5 | 52.3 | 57 | 61.8 | 66.5 |
| 10                  | 2                     | 4   | 6   | 8   | 10  | 12   | 14   | 16   | 18   | 20 | 25   | 30   | 35   | 40 | 45   | 50   | 55   | 60 | 65   | 70   |

Flow rates not listed above may be calculated using the following equation:

Values have been rounded off

$$\text{mL/hr} = \frac{\text{dose (mcg/kg/hr)} \times \text{weight (kg)}}{\text{concentration of infusion soln (mcg/mL)}}$$