



How much fluid should I give?

Maintenance Only

1. Estimate patient's **body weight** in pounds (or kilograms).
2. Go to **Maintenance Only** column (this gives total volume of fluids [in mL/24 hrs] that the patient requires based on his or her metabolic water requirements over 24 hrs [(30 x body weight in kilograms) + 70]).
3. If using a fluid pump or in-line regulator, use the **mL/hr** figure. If using a gravity-fed IV set, use the **drops/min** figure.
4. If patient is less than 5 kg, use a micro-drip infusion set that is calibrated to deliver 60 drops per milliliter of fluid. The drip rate (**drops/min**) is denoted in **blue**.
5. If patient is over 5 kg, use a macro-drip infusion set that delivers 15 drops per milliliter of fluid. The drip rate (**drops/min**) is denoted in **brown**.

Maintenance and Dehydration

1. Estimate patient's **body weight** in pounds (or kilograms).
2. Estimate patient's **% Dehydration** deficit based on clinical signs as listed in boxes and choose appropriate data column. The figures in these columns include both the fluid volume required to replenish hydration in a 24-hour period and the patient's maintenance fluid requirements.
3. Proceed per the instructions from #3 in the **Maintenance Only** section above.
4. After 24 hours, the patient's hydration status should be reassessed and a fluid plan for the next 24 hours determined.

Overhydration

- Serous nasal discharge
- Increased respiratory rate
- Pulmonary crackles
- Chemosis
- Bloody frothy fluid from trachea or nose
- Peripheral or dependent edema

5% Dehydration

- Dry mucous membranes
- Mild skin tenting

7% Dehydration

- Increased skin tenting
- Dry mucous membranes
- Mildly increased heart rate
- Normal blood pressure and pulses

10% Dehydration

- Increased skin tenting
- Dry mucous membranes
- Increased heart rate
- Weak pulses

12% Dehydration

- Increased skin tenting
- Dry mucous membranes
- Sunken eyes, dry cornea
- Weak to absent pulses
- Low blood pressure
- Altered mentation and level of consciousness

Body Weight		Maintenance Only			Maintenance + 5% Dehydration			Maintenance + 7% Dehydration			Maintenance + 10% Dehydration			Maintenance + 12% Dehydration		
lb	kg	mL/24 hrs	mL/hr	drops/min	mL/24 hrs	mL/hr	drops/min	mL/24 hrs	mL/hr	drops/min	mL/24 hrs	mL/hr	drops/min	mL/24 hrs	mL/hr	drops/min
2	1	100	4	4	150	6	6	170	7	7	200	8	8	220	9	9
4	2	130	5	5	230	10	10	270	11	11	330	14	14	370	15	60
7	3	160	7	7	310	13	13	370	15	15	460	19	19	520	22	22
9	4	190	8	8	390	16	16	470	20	20	590	25	25	670	28	28
11	5	220	9	9	470	20	20	570	24	24	720	30	30	820	34	34
13	6	250	10	3	550	23	6	670	28	7	850	35	9	970	40	10
15	7	280	12	3	630	26	7	770	32	8	980	41	10	1120	47	12
18	8	310	13	3	710	30	7	870	36	9	1110	46	12	1270	53	13
20	9	340	14	4	790	33	8	970	40	10	1240	52	13	1420	59	15
22	10	370	15	4	870	36	9	1070	45	11	1370	57	14	1570	65	16
26	12	430	18	4	1030	43	11	1270	53	13	1630	68	17	1870	78	19
31	14	490	20	5	1190	50	12	1470	61	15	1890	79	20	2170	90	23
35	16	550	23	6	1350	56	14	1670	70	17	2150	90	22	2470	103	26
40	18	610	25	6	1510	63	16	1870	78	19	2410	100	25	2770	115	29
44	20	670	28	7	1670	70	17	2070	86	22	2670	111	28	3070	128	32
48	22	730	30	8	1830	76	19	2270	95	24	2930	122	31	3370	140	35
53	24	790	33	8	1990	83	21	2470	103	26	3190	133	33	3670	153	38
57	26	850	35	9	2150	90	22	2670	111	28	3450	144	36	3970	165	41
62	28	910	38	9	2310	96	24	2870	120	30	3710	155	39	4270	178	44
66	30	970	40	10	2470	103	26	3070	128	32	3970	165	41	4570	190	48
79	36	1150	48	12	2950	123	31	3670	153	38	4750	198	49	5470	228	57
88	40	1270	53	13	3270	136	34	4070	170	42	5270	220	55	6070	253	63
101	46	1450	60	15	3750	156	39	4670	195	49	6050	252	63	6970	290	73
110	50	1570	65	16	4070	170	42	5070	211	53	6570	274	68	7570	315	79
123	56	1750	73	18	4550	190	47	5670	236	59	7350	306	77	8470	353	88
132	60	1870	78	19	4870	203	51	6070	253	63	7870	328	82	9070	378	94
143	65	2020	84	21	5270	220	55	6570	274	68	8520	355	89	9820	409	102
154	70	2170	90	23	5670	236	59	7070	295	74	9170	382	96	10 570	440	110
165	75	2320	97	24	6070	253	63	7570	315	79	9820	409	102	11 320	472	118
176	80	2470	103	26	6470	270	67	8070	336	84	10 470	436	109	12 070	503	126
187	85	2620	109	27	6870	286	72	8570	357	89	11 120	463	116	12 820	534	134
198	90	2770	115	29	7270	303	76	9070	378	94	11 770	490	123	13 570	565	141
209	95	2920	122	30	7670	320	80	9570	399	100	12 420	518	129	14 320	597	149
220	100	3070	128	32	8070	336	84	10 070	420	105	13 070	545	136	15 070	628	157