## Backpack \% of Body Weight

## Backpack weight (lbs.)

| 40 | 66.7\% | 61.5\% | 57.1 | 53.3\% | 50.0\% | 47.1\% | 44.4\% | 42.1\% | 0\% | 38.1\% | 3.4\% | 34.8\% | 3.3\% | 32.0\% | 30.8\% | 29.6\% | 8.6\% | 27.6\% | 6.7\% | 25.8\% | 25.0\% | 24.2 | 23.5 | 22.9\% | 22.2\% | 21.6\% | 21.1\% | 20.5\% | 20.0\% | 19.5\% | 19.0\% | 18.6\% | 18.2\% | 17.8\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 39 | 65.0\% | 60.0\% | 55.7\% | 52.0\% | 48.8\% | 45.9\% | 43.3\% | 41.1\% | 39.0\% | 37.1\% | 35.5\% | 33.9\% | 32.5\% | 31.2\% | 30.0\% | 28.9\% | 279\% | 26.9\% | 26.0\% | 25.2\% | 24.4\% | 23.6\% | 22.9\% | 22.3\% | 21.7\% | 21.1\% | 20.5\% | 20.0\% | 19.5\% | 19.0\% |  | 18.1\% |  |  |
| 38 | 63.3\% | 58.5\% | 54.3\% | 50.7 | 47.5\% | 44.7\% | 42.2\% | 40.0\% | 38.0\% | 36.2\% | 34.5\% | 33.0\% | 31.7\% | 30.4\% | 29.2\% | 28.1\% | 27.1\% | 26.2\% | 25.3\% | 24.5\% | 23.8\% | 23.0\% | 22.4\% | 21.7\% | 21.1\% | 20.5\% | 20.0\% | 19.5\% | 19.0\% | 18.5\% | 18.1\% | 17.7\% | 17.3\% | 16.9\% |
| 37 | 1.7\% | 56.9\% | 52.9\% | 49.3\% | 46.3\% | 3.5\% | 4.1\% | 38.9 | 37.0\% | 55.2\% | 33.6\% | 32.2\% | 0.8\% | 29.6 | 28.5\% | 27.4\% | 26.4\% | 25.5\% | 2.7 | 23.9\% | 23.1\% | 2.4 | 21.8\% | 21.1\% | 20.6\% | 20.0\% | 19.58 | 19.0\% | 18.5 | 18.0\% | 17.6\% | 17.2\% | 16.8\% |  |
| 36 | 60.0\% | 55.4\% | 51.4\% | 48.0\% | 45.0\% | 42.4\% | 40.0\% | 37.9\% | 36.0\% | 34.3\% | 32.7\% | 31.3\% | 30.0\% | 28.8\% | 27.7\% | 26.7\% | 25.7\% | 24.8\% | 24.0\% | 23.2\% | 22.5\% | 21.8\% | 21.2\% | 20.6\% | 20.0\% | 19.5\% | 18.9\% | 18.5\% | 18.0\% | 17.6\% | 17.1\% | 16.7\% | 16.4\% | 16.0\% |
| 35 | 58.3\% | 53.8\% | 50.0\% | 46.7\% | 43.8\% | 41.2\% | 38.9\% | 36.8\% | 35.0\% | 33.3\% | 31.8\% | 30.4\% | 29.2\% | 28.0\% | 26.9\% | 25.9\% | 25.0\% | 24.1\% | 23.3\% | 22.6\% | 21.9\% | 21.2\% | 20.6\% | 20.0\% | 19.4\% | 18.9\% | 18.4\% | 17.9\% | 17.5\% | 17.1\% | 16.7\% | 16.3\% | 15.9\% | 15.6\% |
| 34 | 56.7\% | 52.3\% | 48.6\% | 45.3\% | 42.5\% | 40.0\% | 37.8\% | 35.8\% | 34.0\% | 32.4\% | 30.9\% | 29.6\% | 28.3\% | 27.2\% | 26.2\% | 25.2\% | 24.3\% | 23.4\% | 22.7\% | 21.9\% | 21.3\% | 20.6\% | 20.0\% | 19.4\% | 18.9\% | 18.4\% | 17.9\% | 17.4\% | 17.0\% | 16.6\% | 16.2\% | 15.8\% | 15.5\% | 15.1\% |
| 33 | 5.0\% | 50.8\% | 47.1\% | 44.0 | 41.3\% | 38.8\% | 36.7\% | 34.7 | 33.0\% | 31.4\% | 30.0\% | 28.7\% | 27.5\% | 26.48 | 5.4 | 24.4 | 3.6\% | 22.8\% | 22.0\% | 21.3\% | 20.6\% | 20.0 | 19.4 | 18.9 | 18.3\% | 17.8\% | 17.4\% | 16.9\% | 16.5 | 1.18 | 15.7 | 15.3\% | 15.0 | 14.78 |
| 32 | 53.3\% | 49.2\% | 45.7\% | 42.7\% | 40.0\% | 37.6\% | 35.6\% | 33.7\% | 32.0\% | 30.5\% | 29.1\% | 27.8\% | 26.7\% | 25.6\% | 24.6\% | 23.7\% | 22.9\% | 22.1\% | 21.3\% | 20.6\% | 20.0\% | 19.4\% | 18.8\% | 18.3\% | 17.8\% | 17.3\% | 16.8\% | 16.4\% | 16.0\% | 15.6\% | 15.2\% | 14.9\% | 14.5\% | 14.2\% |
| 31 | 51.7\% | 47.7\% | 44.3\% | 41.3\% | 38.8\% | 36.5\% | 34.4\% | 32.6\% | 31.0\% | 29.5\% | 28.2\% | 27.0\% | 25.8\% | 24.8\% | 23.8\% | 23.0\% | 22.1\% | 21.4\% | 20.7\% | 20.0\% | 19.4\% | 18.8\% | 18.2\% | 17.7\% | 17.2\% | 16.8\% | 16.3\% | 15.9\% | 15.5\% | 15.1\% | 14.8\% | 14.4 | 14.1\% | 13.8\% |
| 30 | 50.0\% | 46.2\% | 2.9\% | 40.0 | 37.5\% | 55.3\% | 33.3 | 31.6 | 30.0\% | 3.6\% | 27.3\% | 26.1 | 25.0 | 24.0\% | 23.18 | 22.2 | 21.4\% | 20.7\% | 20.0 | 19.4 | 18.8 | 18.2 | 17.6 | 17.18 | 16.7\% | 16.2 | 15.8 | 15.4 | 15.0\% | 14.6 | 14.3 | 14.0\% | 13.6 | 13.38 |
| 29 | 48.3\% | 4.6 | 1.48 | 38.7\% | 36.3\% | 34.1\% | 32.2\% | 30.5\% | 29.0\% | 27.6\% | 26.4\% | 25.2\% | 24.2\% | 23.2\% | 22.3\% | 21.5\% | 20.7\% | 20.0 | 19.3\% | 18.7\% | 18.1\% | 17.6\% | 17.1\% | 16.6\% | 16.1\% | 15.7\% | 15.3\% | 14.9\% | 14.5\% | 14.1\% | 13.8\% | 13.5\% | 13.2\% | 12.9\% |
| 28 | 46.7\% | 43.1\% | 40.0\% | 37.3\% | 35.0\% | 32.9\% | 31.1\% | 29.5\% | 28.0\% | 26.7\% | 25.5\% | 24.3\% | 23.3\% | 22.4\% | 21.5\% | 20.7\% | 20.0\% | 19.3\% | 18.7\% | 18.1\% | 17.5\% | 17.0\% | 16.5\% | 16.0\% | 15.6\% | 15.1\% | 14.7\% | 14.4\% | 14.0\% | 13.7\% | 13.3\% | 13.0\% | 12.7\% | 12.4\% |
| 27 | 45.0\% | 4.5\% | 38.6\% | 36.0\% | 33.8\% | 3.8\% | 30.0\% | 28.4 | 27.0\% | 25.7\% | 2.5\% | 23.5\% | 22.5\% | 21.6\% | 20.8\% | 20.0\% | 19.3\% | 18.6 | 18.0\% | 17.4\% | 16.9\% | 16. | 15.9 | 15.4 | 15.08 | 14.6\% | 14.2 | 13.8\% | 13.5\% | 13.2\% | 12.9\% | 12.6 | 12.3 | 12.0\% |
| 26 | .3\% | .0\% | 37.1\% | 34.7\% | 32.5\% | 30.6\% | 28.9\% | 27.4\% | 26.0 | 8\% | 23.6\% | 22.6\% | 21.7\% | 20.8 | 20.0\% | 19.3\% | 8.6\% | 17. | 17.3 | 16.8\% | 16.3\% | 15.8 | 15.3\% | 14.9 | 14.4\% | 14.1\% | 13.7\% | 13.3\% | 13.0\% | 12.7\% | 12.4\% | 12.1\% | 11.8\% | 11.6 |
| 25 | 4.7\% | 3.5\% | 5.7\% | 33.3 | .3\% | 29.4\% | 27.8\% | 26.3\% | 25.0\% | 3.8\% | 2.7\% | 21.7\% | 20.8\% | 20.0\% | 19.2\% | 18.5\% | 17.9\% | 17.2\% | 16.7\% | 16.1\% | 15.6\% | 15.2\% | 14.7\% | 14.3\% | 13.9\% | 13.5\% | 13.2\% | 12.8\% | 12.5 | 12.28 | 11.9 | 11.6\% | 11.48 | 11.1 |
| 24 | 40.0\% | 36.9\% | 34.3\% | 32.0\% | 30.0\% | 28.2\% | 26.7\% | 25.3\% | 24.0\% | 22.9\% | 21.8\% | 20.9\% | 20.0\% | 19.2\% | 18.5\% | 17.8\% | 17.1\% | 16. | 16.0\% | 15.5\% | 15.0\% | 14. | 14.1\% | 13.7\% | 13.3\% | 13.0\% | 12.6\% | 12.3\% | 12.0\% | 11.7\% | 11.4\% | 11. | 10.9\% | 10.7\% |
| 23 | .3\% | 5.4\% | 32.9\% | 30.7\% | 27.8\% | 27.1\% | 25.6\% | 24.2\% | 23.0 | 21.9\% | 20.9\% | 20.0\% | 19.2\% | 18.4 | 17.7\% | 17.0\% | 16.4\% | 15 | 15.3 | 14.8 | 14.4 | 13.9\% | 13.5\% | 13.1 | 12.8\% | 12.4 | 12.1 | 11.8 | 11.5 | 11.2\% | 11.0\% | 10.7\% | 10. | 10.2\% |
| 22 | 7\% | 3.8\% | 31.4\% | 29.3\% | 27.5\% | 5.9\% | $2.4 \%$ | 23.2 | 22.0\% | 1.0\% | 20.0\% | 9.1\% | 18.3\% | 17.6\% | 16.9\% | 16.3\% | 15.7\% | 15.2\% | 14.7\% | 14.2\% | 13.8\% | 13.3\% | 12.9\% | 12.6\% | 2.2 | 11.9\% | 11.6\% | 11.3 | 11.0 | 10.7 | 10.5\% | 10.2\% | 10.0 | 9.8\% |
| 21 | 5.0\% | 32.3\% | 30.0\% | 28.0\% | 26.3\% | 24.7\% | 23.3\% | 22.1\% | 21.0\% | 20.0\% | 19.1\% | 18.3\% | 17.5\% | 16.8\% | 6.2\% | 15.6\% | 15.0 | 14.5\% | 14.0 | 13.5\% | 13.1\% | 12.7 | 12.48 | 12.0 | 11.7\% | 11.4\% | 11.1\% | 10.8\% | 10.5\% | 10.2\% | 10.0\% | 9.8\% | 9.5\% | 9.3\% |
| 20 | 33.3\% | 30.8\% | 28.6\% | 26.7\% | 25.0\% | 23.5\% | 22.2\% | 21.1\% | 20.0\% | 19.0\% | 18.2\% | 17.4\% | 16.7\% | 16.0\% | 15.4\% | 44.8\% | 14.3\% | 13.8\% | 13.3\% | 12.9\% | 12.5\% | 12.1\% | 11.8 | 11.4 | 11.1\% | 10.8\% | 10.5\% | 10.3 | 10.0 | 9.8\% | 9.5\% | 9.3\% | 9.1 | 8.9\% |
| 19 | 7\% | 29.2\% | 1\% | 3\% | 23.8\% | 2.4\% | 21.1\% | 2.0\% | 19.0\% | 18.1\% | 17.3\% | 16.5 | 15.8\% | 15.2\% | 14.6\% | 14.19 | 13.6\% | 13.14 | 12.7\% | 12.3\% | 11.9 | 11.5\% | 11.2 | 10.9 | 10.6 | 10.3\% | 10.0\% | 9.7\% | 9.5\% | 9.3\% | 9.0 | 8.8\% | 8.6 | 8.4\% |
| 18 | 3.0\% | 7.7\% | 25.7\% | 24.0\% | 5\% | 2.2\% | 20.0\% | 18.9\% | 18.0\% | 17.1\% | 16.4\% | 15.7\% | 15.0\% | 14.4\% | 13.8\% | 13.3\% | 12.9\% | 12.4\% | 12.0\% | 11.6\% | 11.3\% | 10.9\% | 10.6\% | 10.3\% | 10.0\% | 9.7\% | 9.5\% | 9.2\% | 9.0\% | 8.8\% | 8.6\% | 8.4 | 8.2 | 8.0 |
| 17 | 28.3\% | 27.2\% | 24.3\% | 22.7\% | 21.3\% | 20.0\% | 18.9\% | 17.9\% | 17.0\% | 16.2\% | 15.5\% | 14.8\% | 14.2\% | 13.6\% | 13.1\% | 12.6\% | 12.1\% | 11.7\% | 11.3\% | 11.0\% | 10.6\% | 10.3\% | 10.0\% | 9.7\% | 9.4\% | 9.2\% | 8.9\% | 8.7\% | 8.5\% | 8.3\% | 8.1\% | 7.9\% | 7.7\% | 7.6\% |
| 16 | 26.7\% | 24.6\% | 22.9\% | 21.3\% | 20.0\% | 18.8\% | 17.8\% | 16.8\% | 16.0\% | 15.2\% | 14.5\% | 13.9\% | 13.3\% | 12.8\% | 12.3\% | 11.9\% | 11.4\% | 11.0\% | 10.7\% | 10.3\% | 10.0\% | 9.7\% | 9.4\% | 9.1\% | 8.9\% | 8.6\% | 8.4\% | 8.2\% | 8.0\% | 7.8\% | 7.6\% | 7.4\% | 7.3\% | 7.1\% |
| 15 | .0\% | .1\% | 1.4\% | 20.0\% | 8\% | 7.6\% | 6.7\% | 5.8\% | 15.0\% | 4.3\% | 3.6\% | .0\% | 12.5\% | 12.0\% | 1.5\% | 1.1\% | 10.7\% | 10.3\% | 0.0\% | 9.7\% | 9.4\% | 9.1\% | 8.8\% | 8.6\% | 8.3\% | 8.1\% | 7.9\% | 7.7\% | 7.5\% | 7.3\% | 7.1\% | 7.0\% | 6.8\% | 6.7 |
| 14 | 3\% | 1.5\% | .0\% | .7\% | 175 | 6.5\% | 15.6\% | 14.7\% | 14.0\% | 13.3\% | .7\% | 12.2\% | 11.7\% | 11.2\% | 10.8\% | 0.4\% | 10.0\% | 9.7\% | 9.3\% | 9.0\% | 8.8\% | 8.5\% | 8.2\% | 8.0\% | 7.8\% | 7.6\% | 7.4\% | 7.2\% | 7.0\% | 6.8 | 6.7\% | 6.5\% | 6.4 | 6.2 |
| 13 | 21.7\% | 20.0\% | 18.6\% | 17.3\% | 6.3\% | 5.3\% | 14.4\% | 13.7\% | 13.0\% | 12.4\% | 1.8\% | 11.38 | 10.8\% | 10.4\% | 10.0\% | 9.6\% | 9.3\% | 9.0\% | 8.7\% | 8.4\% | 8.1\% | 7.9\% | 7.6\% | 7.4\% | 7.2\% | 7.0\% | 6.8\% | 6.7\% | 6.5 | 6.3\% | 6.2\% | 6.0\% | 5.9 | 5.8\% |
| 12 | 2.0\% | 8.5\% | 17.1\% | 16.0\% | 15.0\% | .1\% | 13.3\% | 12.6\% | 12.0\% | 11.4\% | 10.9\% | 10.4\% | 10.0\% | 9.6\% | 9.2\% | 8.9\% | 8.6\% | 8.3\% | 8.0\% | 7.7\% | 7.5\% | 7.3\% | 7.1\% | 6.9\% | 6.7\% | 6.5\% | 6.3\% | 6.2\% | 6.0\% | 5.9\% | 5.7\% | 5.6\% | 5.5\% | 5.3\% |
| 11 | 3\% | .9\% | 15.7\% | .7\% | 13.8\% | 2.9\% | 2.2\% | 11.6\% | 1.0\% | 0.5\% | 10.0\% | 9.6\% | 9.2\% | 8.8\% | 8.5\% | 8.1\% | 7.9\% | 7.6\% | 7.3\% | 7.18 | 6.9\% | 6.7\% | 6.5\% | ${ }^{6} .3^{\circ}$ | 6.1 | 5.9 | 5.8\% | 5.6 | 5.5 | 5.4\% | 5.2\% | 5.1 | 5.0 | 4.9\% |
| 10 | 16.7\% | 15.4\% | 14.3\% | 13.3\% | 12.5\% | 11.8\% | 1.1\% | 10.5\% | 10.0\% | 9.5\% | 9.1\% | 8.7\% | 8.3\% | 8.0\% | 7.7\% | 7.4\% | 7.1\% | 6.9\% | 6.7\% | 6.5\% | 6.3\% | 6.1\% | 5.9\% | 5.7\% | 5.6\% | 5.4\% | 5.3\% | 5.1\% | 5.0\% | 4.9\% | 4.8\% | 4.7\% | 4.5\% | 4.4\% |
|  | 60 | 65 | 70 | 75 | 80 | 85 | 90 | 95 | 100 | 105 | 110 | 115 | 120 | 125 | 130 | 135 | 140 | 145 | 150 | 155 | 160 | 165 | 170 | 175 | 180 | 185 | 190 | 195 | 200 | 205 | 210 | 215 | 220 | 225 |

Body Weight

