

## New Cooper Age and Gender Base Standards for Law Enforcement

| Dynamic Strength (One Minute Push Ups) Male |         |         |         |     | %                                                | Category  |
|---------------------------------------------|---------|---------|---------|-----|--------------------------------------------------|-----------|
| 20 - 29                                     | 30 - 39 | 40 - 49 | 50 - 59 | 60+ |                                                  |           |
| 100                                         | 86      | 64      | 51      | 39  | 99                                               | Superior  |
| 62                                          | 52      | 40      | 39      | 28  | 95                                               |           |
|                                             |         |         |         |     |                                                  |           |
| 57                                          | 46      | 36      | 30      | 26  | 90                                               | Excellent |
| 51                                          | 41      | 34      | 28      | 24  | 85                                               |           |
| 47                                          | 39      | 30      | 25      | 23  | 80                                               |           |
|                                             |         |         |         |     |                                                  |           |
| 44                                          | 36      | 29      | 24      | 22  | 75                                               | Good      |
| 41                                          | 34      | 26      | 21      | 21  | 70                                               |           |
| 39                                          | 31      | 25      | 20      | 20  | 65                                               |           |
| 37                                          | 30      | 24      | 19      | 18  | 60                                               |           |
|                                             |         |         |         |     |                                                  |           |
| 35                                          | 29      | 22      | 17      | 16  | 55                                               | Fair      |
| 33                                          | 27      | 21      | 15      | 15  | 50                                               |           |
| 31                                          | 25      | 19      | 14      | 12  | 45                                               |           |
| 29                                          | 24      | 18      | 13      | 10  | 40                                               |           |
|                                             |         |         |         |     |                                                  |           |
| 27                                          | 21      | 16      | 11      | 9   | 35                                               | Poor      |
| 26                                          | 20      | 15      | 10      | 8   | 30                                               |           |
| 24                                          | 19      | 13      | 9.5     | 7   | 25                                               |           |
| 22                                          | 17      | 11      | 9       | 6   | 20                                               |           |
|                                             |         |         |         |     |                                                  |           |
| 19                                          | 15      | 10      | 7       | 5   | 15                                               | Very Poor |
| 18                                          | 13      | 9       | 6       | 4   | 10                                               |           |
| 13                                          | 9       | 5       | 3       | 2   | 5                                                |           |
| 1,045                                       | 790     | 364     | 172     | 26  | n= Total # of individuals tested for validation. |           |

Total n = 2,397

## New Cooper Age and Gender Base Standards for Law Enforcement

| Dynamic Strength (One Minute Push Ups) <b>Female</b> |          |          |           |       | %  | Category  |
|------------------------------------------------------|----------|----------|-----------|-------|----|-----------|
| *20 - 29                                             | *30 - 39 | *40 - 49 | **50 - 59 | **60+ |    |           |
| 53                                                   | 48       | 23       |           |       | 99 | Superior  |
| 42                                                   | 39.5     | 20       |           |       | 95 |           |
|                                                      |          |          |           |       |    |           |
| 37                                                   | 33       | 18       |           |       | 90 | Excellent |
| 33                                                   | 26       | 17       |           |       | 85 |           |
| 28                                                   | 23       | 15       |           |       | 80 |           |
|                                                      |          |          |           |       |    |           |
| 27                                                   | 19       | 15       |           |       | 75 | Good      |
| 24                                                   | 18       | 14       |           |       | 70 |           |
| 23                                                   | 16       | 13       |           |       | 65 |           |
| 21                                                   | 15       | 13       |           |       | 60 |           |
|                                                      |          |          |           |       |    |           |
| 19                                                   | 14       | 11       |           |       | 55 | Fair      |
| 18                                                   | 14       | 11       |           |       | 50 |           |
| 17                                                   | 13       | 10       |           |       | 45 |           |
| 15                                                   | 11       | 9        |           |       | 40 |           |
|                                                      |          |          |           |       |    |           |
| 14                                                   | 10       | 8        |           |       | 35 | Poor      |
| 13                                                   | 9        | 7        |           |       | 30 |           |
| 11                                                   | 9        | 7        |           |       | 25 |           |
| 10                                                   | 8        | 6        |           |       | 20 |           |
|                                                      |          |          |           |       |    |           |
| 9                                                    | 6.5      | 5        |           |       | 15 | Very Poor |
| 8                                                    | 6        | 4        |           |       | 10 |           |
| 6                                                    | 4        | 1        |           |       | 5  |           |
| 3                                                    | 1        | 0        |           |       | 1  |           |

\*Full body push ups are generally used by law enforcement and public safety organizations. These norms are based on >1000 female U.S. Army soldiers who were tested in the 1990's by the U.S.Army.

\*\*No data gathered.

## New Cooper Age and Gender Base Standards for Law Enforcement

| Dynamic Strength (One Minute Sit Ups) Males |         |         |         |         |     | %                                                | Category  |
|---------------------------------------------|---------|---------|---------|---------|-----|--------------------------------------------------|-----------|
| -20                                         | 20 - 29 | 30 - 39 | 40 - 49 | 50 - 59 | 60+ |                                                  |           |
| 62+                                         | 55+     | 51+     | 47+     | 43+     | 39+ | 99                                               | Superior  |
| 62                                          | 55      | 51      | 47      | 43      | 39  | 95                                               |           |
|                                             |         |         |         |         |     |                                                  |           |
| 55                                          | 52      | 48      | 43      | 39      | 35  | 90                                               | Excellent |
| 53                                          | 49      | 45      | 40      | 36      | 31  | 85                                               |           |
| 51                                          | 47      | 43      | 39      | 35      | 30  | 80                                               |           |
|                                             |         |         |         |         |     |                                                  |           |
| 50                                          | 46      | 42      | 37      | 33      | 28  | 75                                               | Good      |
| 48                                          | 45      | 41      | 36      | 31      | 26  | 70                                               |           |
| 48                                          | 44      | 40      | 35      | 30      | 24  | 65                                               |           |
| 47                                          | 42      | 39      | 34      | 28      | 22  | 60                                               |           |
|                                             |         |         |         |         |     |                                                  |           |
| 46                                          | 41      | 37      | 32      | 27      | 21  | 55                                               | Fair      |
| 45                                          | 40      | 36      | 31      | 26      | 20  | 50                                               |           |
| 42                                          | 39      | 36      | 30      | 25      | 19  | 45                                               |           |
| 41                                          | 38      | 35      | 29      | 24      | 19  | 40                                               |           |
|                                             |         |         |         |         |     |                                                  |           |
| 39                                          | 37      | 33      | 28      | 22      | 18  | 35                                               | Poor      |
| 38                                          | 35      | 32      | 27      | 21      | 17  | 30                                               |           |
| 37                                          | 35      | 31      | 26      | 20      | 16  | 25                                               |           |
| 36                                          | 33      | 30      | 24      | 19      | 15  | 20                                               |           |
|                                             |         |         |         |         |     |                                                  |           |
| 34                                          | 32      | 28      | 22      | 17      | 13  | 15                                               | Very Poor |
| 33                                          | 30      | 26      | 22      | 15      | 10  | 10                                               |           |
| 27                                          | 27      | 23      | 17      | 12      | 7   | 5                                                |           |
| -27                                         | -27     | -23     | -17     | -12     | -7  | 1                                                |           |
| 46                                          | 312     | 1,431   | 1,558   | 919     | 205 | n= Total # of individuals tested for validation. |           |

Total n = 4,471



## New Cooper Age and Gender Base Standards for Law Enforcement

| Dynamic Strength (One Minute Sit Ups) Females |         |         |         |         |     | %                                                | Category  |
|-----------------------------------------------|---------|---------|---------|---------|-----|--------------------------------------------------|-----------|
| -20                                           | 20 - 29 | 30 - 39 | 40 - 49 | 50 - 59 | 60+ |                                                  |           |
| 55+                                           | 51+     | 42+     | 38+     | 30+     | 28+ | 99                                               | Superior  |
| 55                                            | 51      | 42      | 38      | 30      | 28  | 95                                               |           |
|                                               |         |         |         |         |     |                                                  |           |
| 54                                            | 49      | 40      | 34      | 29      | 26  | 90                                               | Excellent |
| 49                                            | 45      | 38      | 32      | 25      | 20  | 85                                               |           |
| 46                                            | 44      | 35      | 29      | 24      | 17  | 80                                               |           |
|                                               |         |         |         |         |     |                                                  |           |
| 40                                            | 42      | 33      | 28      | 22      | 15  | 75                                               | Good      |
| 38                                            | 41      | 32      | 27      | 22      | 12  | 70                                               |           |
| 37                                            | 39      | 30      | 25      | 21      | 12  | 65                                               |           |
| 36                                            | 38      | 29      | 24      | 20      | 11  | 60                                               |           |
|                                               |         |         |         |         |     |                                                  |           |
| 35                                            | 37      | 28      | 23      | 19      | 10  | 55                                               | Fair      |
| 34                                            | 35      | 27      | 22      | 17      | 8   | 50                                               |           |
| 34                                            | 34      | 26      | 21      | 16      | 8   | 45                                               |           |
| 32                                            | 32      | 25      | 20      | 14      | 6   | 40                                               |           |
|                                               |         |         |         |         |     |                                                  |           |
| 30                                            | 31      | 24      | 19      | 12      | 5   | 35                                               | Poor      |
| 29                                            | 30      | 22      | 17      | 12      | 4   | 30                                               |           |
| 29                                            | 28      | 21      | 16      | 11      | 4   | 25                                               |           |
| 28                                            | 24      | 20      | 14      | 10      | 3   | 20                                               |           |
|                                               |         |         |         |         |     |                                                  |           |
| 27                                            | 23      | 18      | 13      | 7       | 2   | 15                                               | Very Poor |
| 25                                            | 21      | 15      | 10      | 6       | 1   | 10                                               |           |
| 25                                            | 18      | 11      | 7       | 5       | 0   | 5                                                |           |
| -25                                           | -18     | -11     | -7      | -5      | 0   | 1                                                |           |
| 15                                            | 144     | 289     | 249     | 137     | 26  | n= Total # of individuals tested for validation. |           |

Total n = 860

## New Cooper Age and Gender Base Standards for Law Enforcement

| Cardiorespiratory Fitness Test (1.5 Mile Run) <b>Male</b> |         |         |          |          |          | %                                                | Category  |
|-----------------------------------------------------------|---------|---------|----------|----------|----------|--------------------------------------------------|-----------|
| 20 - 29                                                   | 30 - 39 | 40 - 49 | 50 - 59  | 60 - 69  | 70 - 79  |                                                  |           |
| 8:22                                                      | 8:49    | 9:02    | 9:31     | 10:09    | 10:27    | 99                                               | Superior  |
| 9:10                                                      | 9:31    | 9:47    | 10:27    | 11:20    | 12:25    | 95                                               |           |
|                                                           |         |         |          |          |          |                                                  |           |
| 9:34                                                      | 9:52    | 10:09   | 11:09    | 12:10    | 13:25    | 90                                               | Excellent |
| 9:52                                                      | 10:14   | 10:44   | 11:45    | 12:53    | 13:57    | 85                                               |           |
| 10:08                                                     | 10:38   | 11:09   | 12:08    | 13:25    | 14:52    | 80                                               |           |
|                                                           |         |         |          |          |          |                                                  |           |
| 10:34                                                     | 10:59   | 11:32   | 12:37    | 13:58    | 15:38    | 75                                               | Good      |
| 10:49                                                     | 11:09   | 11:52   | 12:53    | 14:33    | 16:22    | 70                                               |           |
| 11:09                                                     | 11:34   | 11:58   | 13:25    | 14:55    | 16:46    | 65                                               |           |
| 11:27                                                     | 11:49   | 12:25   | 13:53    | 15:20    | 17:37    | 60                                               |           |
|                                                           |         |         |          |          |          |                                                  |           |
| 11:34                                                     | 11:58   | 12:53   | 13:58    | 15:53    | 18:05    | 55                                               | Fair      |
| 11:58                                                     | 12:25   | 13:05   | 14:33    | 16:19    | 18:39    | 50                                               |           |
| 12:11                                                     | 12:44   | 13:25   | 14:35    | 16:46    | 19:19    | 45                                               |           |
| 12:29                                                     | 12:53   | 13:50   | 15:14    | 17:19    | 19:43    | 40                                               |           |
|                                                           |         |         |          |          |          |                                                  |           |
| 12:53                                                     | 13:25   | 14:10   | 15:53    | 17:49    | 20:28    | 35                                               | Poor      |
| 13:08                                                     | 13:48   | 14:33   | 16:16    | 18:39    | 21:28    | 30                                               |           |
| 13:25                                                     | 14:10   | 15:00   | 16:46    | 19:10    | 22:22    | 25                                               |           |
| 13:58                                                     | 14:33   | 15:32   | 17:30    | 20:13    | 23:55    | 20                                               |           |
|                                                           |         |         |          |          |          |                                                  |           |
| 14:33                                                     | 15:14   | 16:09   | 18:22    | 21:34    | 25:49:00 | 15                                               | Very Poor |
| 15:14                                                     | 15:56   | 17:04   | 19:24    | 23:27    | 27:55:00 | 10                                               |           |
| 16:46                                                     | 17:30   | 18:39   | 21:40    | 25:58:00 | 30:34:00 | 5                                                |           |
| 20:55                                                     | 20:55   | 22:22   | 27:08:00 | 31:59:00 | 33:30:00 | 1                                                |           |
| 2,606                                                     | 13,158  | 16,534  | 9,102    | 2,682    | 467      | n= Total # of individuals tested for validation. |           |

Total n = 44,549



## New Cooper Age and Gender Base Standards for Law Enforcement

| Cardiorespiratory Fitness Test (1.5 Mile Run) <b>Female</b> |          |          |          |          |          | %                                                | Category  |
|-------------------------------------------------------------|----------|----------|----------|----------|----------|--------------------------------------------------|-----------|
| 20 - 29                                                     | 30 - 39  | 40 - 49  | 50 - 59  | 60 - 69  | 70 - 79  |                                                  |           |
| 9:23                                                        | 9:52     | 10:09    | 11:34    | 12:25    | 12:25    | 99                                               | Superior  |
| 10:20                                                       | 11:08    | 11:35    | 13:16    | 14:28    | 14:33    | 95                                               |           |
|                                                             |          |          |          |          |          |                                                  |           |
| 10:59                                                       | 11:43    | 12:25    | 13:58    | 15:32    | 16:06    | 90                                               | Excellent |
| 11:34                                                       | 12:23    | 13:14    | 14:33    | 16:22    | 16:57    | 85                                               |           |
| 11:56                                                       | 12:53    | 13:38    | 15:14    | 16:46    | 18:05    | 80                                               |           |
|                                                             |          |          |          |          |          |                                                  |           |
| 12:07                                                       | 13:08    | 13:58    | 15:47    | 17:34    | 18:39    | 75                                               | Good      |
| 12:51                                                       | 13:41    | 14:33    | 16:26    | 18:05    | 19:24    | 70                                               |           |
| 13:01                                                       | 13:58    | 15:03    | 16:46    | 18:39    | 20:02    | 65                                               |           |
| 13:25                                                       | 14:33    | 15:17    | 17:19    | 18:52    | 20:54    | 60                                               |           |
|                                                             |          |          |          |          |          |                                                  |           |
| 13:58                                                       | 14:33    | 15:56    | 17:38    | 19:29    | 21:45    | 55                                               | Fair      |
| 14:15                                                       | 15:14    | 16:13    | 18:05    | 20:08    | 22:22    | 50                                               |           |
| 14:33                                                       | 15:35    | 16:46    | 18:39    | 20:38    | 22:54    | 45                                               |           |
| 15:05                                                       | 15:56    | 17:11    | 19:10    | 20:55    | 23:47    | 40                                               |           |
|                                                             |          |          |          |          |          |                                                  |           |
| 15:32                                                       | 16:43    | 17:38    | 19:43    | 22:03    | 24:54:00 | 35                                               | Poor      |
| 15:56                                                       | 16:46    | 18:26    | 20:17    | 22:34    | 25:49:00 | 30                                               |           |
| 16:43                                                       | 17:38    | 18:39    | 20:55    | 23:20    | 26:15:00 | 25                                               |           |
| 17:11                                                       | 18:18    | 19:43    | 21:57    | 23:55    | 27:17:00 | 20                                               |           |
|                                                             |          |          |          |          |          |                                                  |           |
| 17:53                                                       | 19:01    | 20:49    | 22:53    | 25:02:00 | 27:55:00 | 15                                               | Very Poor |
| 18:39                                                       | 20:13    | 21:52    | 23:55    | 26:32:00 | 30:34:00 | 10                                               |           |
| 21:05                                                       | 21:57    | 23:27    | 26:15:00 | 29:06:00 | 33:32:00 | 5                                                |           |
| 25:17:00                                                    | 25:10:00 | 27:55:00 | 30:34:00 | 33:05:00 | 37:26:00 | 1                                                |           |
| 1,350                                                       | 4,394    | 4,834    | 3,103    | 1,088    | 209      | n= Total # of individuals tested for validation. |           |

Total n = 14,978