

Section Letter: **A**
Guideline Number: **08**

Effective Date: November 1, 2000

Revision Date: September 6, 2002

City of Lancaster Fire Department Standard Operating Guideline

Title: **Wellness/Fitness**

Originator (Signature/Date): _____

- A. Purpose:** Fire ground tasks are physically demanding in harsh conditions and are almost always required with no warm-up. In order for these tasks to be performed at the lowest risk to all firefighters, each individual firefighter must be prepared to accept his/her share of these physical demands. The Lancaster Fire Department Wellness/Fitness Program is designed to assist all members in their efforts to be fit and healthy. It is our common goal to provide quality services while maintaining our own physical well-being. Participation in regular exercise and the annual physical assessment not only helps prepare us for fire ground activities; it also reduces our chances for injury and increases our chances for longer lives and a healthier retirement.
- B. Scope:** This guideline applies to all LFD members.
- C. Guideline:** This guideline is designed to complement the Fire Department's annual physical assessment.

It is the responsibility of all supervisors to schedule time during the duty cycle for all members to engage in fitness activities. A further obligation for officers is to monitor any/all employees who are in the follow-up program to assure their compliance with their exercise routine.

The wellness/fitness standards adopted by the Fire Department in conjunction with Huguley Assessment Laboratory are expressed in the categories below. The minimum wellness/fitness standard for Lancaster Fire Department personnel is GOOD.

Superior
Excellent
Good
Fair
Poor

The assessment elements used in our annual examination are:

Sit and Reach Flexibility
Stomach Curl-ups (one minute)
Push-ups (one minute)
Body Fat Percentage
Treadmill Time – Bruce Protocol

Circumstances sometimes cause a member to score below GOOD on the annual assessment. This SOG describes the follow-up procedures to assist LFD members to achieve a GOOD or better rating on the next annual evaluation.

The Fire Department's certified Fitness Coordinator (FC) will assist any member who desires to improve their fitness level. For those members below the GOOD rating, an individualized on-duty exercise program will be provided by the FC. Each member in the follow-up group must exercise at least one hour each shift, using his or her individualized program as established by the FC. Personnel in each fire station are expected to remain in service during exercise periods unless specifically permitted otherwise by their Shift Commander.

For members in the follow-up cycle, re-evaluations will be conducted in January, April, and July. These tests will be the same as used in the annual assessment except the treadmill element will be replaced with a 1.5-mile walk/run.

Contained in this SOG are the scoring tables for each assessment element. Members in the follow-up program are expected to show a minimum of 10 percent improvement on each quarterly check-up, until their overall assessment reaches the GOOD category.

Members in the follow-up program may discontinue quarterly follow-up evaluations once a score of GOOD has been achieved.

Category point ranges are listed below:

<u>Category</u>	<u>Score Range</u>
Superior	438 - 495
Excellent	373 - 437
Good	298 - 372
Fair	138 - 297
Poor	98 - 137

Effective October 1, 2002, members failing to reach a score of GOOD in two consecutive annual assessments will be subject to Municipal Civil Service provisions section 143.081 Determination of Physical and Mental Fitness and may be given alternate duties pending the outcome.

It is the intent of this SOG to encourage all LFD members to recognize the need to be fit and healthy and to provide assistance in maintaining this awareness.

To emphasize the importance of the Wellness/Fitness program, a change to the annual evaluation form has been made to reflect each member's status within the Wellness program (see below).

WELLNESS/FITNESS					
Complies with Fire Department Wellness/Fitness standards	<table border="1"> <tr> <td>Yes</td> </tr> <tr> <td> </td> </tr> <tr> <td>No</td> </tr> <tr> <td> </td> </tr> </table>	Yes		No	
Yes					
No					

A "Yes" checkmark indicates GOOD or above; a "No" checkmark indicates the member is in the follow-up group.

**Flexibility
Sit & Reach - Inches**

Score / Age	20-29	30-39	40-49	50-59	60+
99 Superior	>23.0	>22.0	>21.3	>20.5	>20.0
95	23.0	22.0	21.3	20.5	20.0
90 Excellent	21.8	21.0	20.0	19.0	19.0
85	21.0	20.0	19.3	18.3	18.0
80	20.5	19.5	18.5	17.5	17.3
75 Good	20.0	19.0	18.0	17.0	16.5
70	19.5	18.5	17.5	16.5	15.5
65	19.0	18.0	17.0	16.0	15.0
60	18.5	17.5	16.3	15.5	14.5
55 Fair	18.0	17.0	16.0	15.0	14.0
50	17.5	16.5	15.3	14.5	13.5
45	17.0	16.0	15.0	14.0	13.0
40	16.5	15.5	14.3	13.3	12.5
35	16.0	15.0	14.0	12.5	12.0
30	15.5	14.5	13.3	12.0	11.3
25 Poor	15.0	13.8	12.5	11.2	10.5
20	14.4	13.0	12.0	10.5	10.0
15 Very Poor	13.5	12.0	11.0	9.7	9.0
10	12.3	11.0	10.0	8.5	8.0
05	10.5	9.3	8.3	7.0	5.8
01	<10.5	<9.3	<8.3	<7.0	<5.8

Stomach Curlups

Score / Age	20-29	30-39	40-49	50-59	60+
99 Superior	>76	>72	>68	>60	>40
95	76	72	68	60	40
90 Excellent	73	69	64	57	39
85	70	66	61	54	37
80	68	64	59	52	35
75 Good	66	62	57	50	33
70	64	60	55	48	32
65	62	56	51	46	30
60	60	54	49	44	29
55 Fair	58	52	47	42	27
50	54	50	45	40	26
45	50	46	41	36	25
40	48	44	39	34	24
35	46	42	37	32	23
30	44	40	35	30	22
25 Poor	42	36	33	28	21
20	40	34	31	26	20
15 Very Poor	38	32	29	24	19
10	36	30	28	23	18
05	34	28	26	22	17
01	<34	<28	<26	<22	<17

Push-Ups

Score / Age	20-29	30-39	40-49	50-59	60+
99 Superior	62	50	43.5	34.5	24
95	60	49	43	33.5	23
90 Excellent	58	48	42	33	22.5
85	56	46.5	38	30	22
80	53	44	38	30	21.5
75 Good	50	41	34	28	21
70	48	40	34	27	20
65	46	38	32.5	26	19
60	44	37	31	25	18.5
55 Fair	41	34	29	23	18
50	39	32.5	28	22	17
45	36	30	26	21	16.5
40	34	28.5	24	19	16
35	32	27	23	18	15
30	31	26	22	17.5	14.5
25	29	24	20.5	16	14
20 Poor	28	23	20	15.5	13.5
15	26	22	19	15	13
10 Very Poor	23	19	16	13	12
05	17	17	14	12	11
01	15	14	13	11	10

% Body Fat Men

Score / Age	20-29	30-39	40-49	50-59	60+
99 Superior	2.4	5.2	6.6	8.8	7.7
95	5.2	9.1	11.4	12.9	13.1
90 Excellent	7.1	11.3	13.6	15.3	15.3
85	8.3	12.7	15.1	16.9	17.2
80	9.4	13.9	16.3	17.9	18.4
75 Good	10.6	14.9	17.3	19	19.3
70	11.8	15.9	18.1	19.8	20.3
65	12.9	16.6	18.8	20.6	21.1
60	14.1	17.5	19.6	21.3	22.0
55 Fair	15.0	18.2	20.3	22.1	22.6
50	15.9	19.0	21.1	22.7	23.5
45	16.8	19.7	21.8	23.4	24.3
40	17.4	20.5	22.5	24.1	25.0
35	18.3	21.4	23.3	24.9	25.9
30	19.5	22.3	24.1	25.7	26.7
25 Poor	20.7	23.2	25.0	26.6	27.6
20	22.4	24.2	26.1	27.5	28.5
15 Very Poor	23.9	25.5	27.3	28.8	29.7
10	29.1	27.3	28.9	30.3	31.2
05	29.9	29.9	31.5	32.4	33.4
01	36.4	35.6	37.4	38.1	41.3

**% Body Fat
Female**

Score / Age	20-29	30-39	40-49	50-59	60+
99 Superior	5.4	7.3	11.6	11.6	5.4
95	10.8	13.4	16.1	18.8	16.8
90 Excellent	14.5	15.5	18.5	21.6	21.1
85	16.0	16.9	20.3	23.6	23.5
80	17.1	18.0	21.3	25.0	25.1
75 Good	18.2	19.1	22.4	25.8	26.7
70	19.0	20.0	23.5	26.6	27.5
65	19.8	20.8	24.3	27.4	28.5
60	20.6	21.6	24.9	28.5	29.3
55 Fair	21.3	22.4	25.5	29.2	29.9
50	22.1	23.1	26.4	30.1	30.9
45	22.7	24.0	27.3	30.8	31.8
40	23.7	24.9	28.1	31.6	32.5
35	24.4	26.0	29.0	32.6	33.0
30 Poor	25.4	27.0	30.1	33.5	34.3
25	26.6	28.1	31.1	34.3	35.5
20	27.7	29.3	32.1	35.6	36.6
15 Very Poor	29.8	31.0	33.3	36.6	38.0
10	32.1	32.8	35.0	37.9	39.3
05	35.4	35.7	37.8	39.6	40.5
01	40.5	40.0	45.5	50.8	47.0

1.5 Mile Walk/Run

Score / Age	20-29	30-39	40-49	50-59	60+
99 Superior	7:29	7:11	7:42	8:44	9:30
95	8:13	8:13	9:30	10:40	11:20
90 Excellent	9:09	9:30	10:16	11:18	12:20
85	9:45	10:16	11:18	12:20	13:22
80	10:16	10:47	11:44	12:51	13:53
75 Good	10:42	11:18	11:49	13:22	14:24
70	10:47	11:34	12:34	13:45	14:53
65	11:18	11:49	12:51	14:03	15:19
60	11:41	12:20	13:14	14:24	15:29
55 Fair	11:49	12:38	13:22	14:40	15:55
50	12:18	12:51	13:53	14:55	16:07
45	12:20	13:22	14:08	15:08	16:27
40	12:51	13:36	14:29	15:26	16:43
35	13:06	13:53	14:47	15:53	16:58
30	13:22	14:08	14:56	15:57	17:14
25	13:53	14:24	15:26	16:23	17:32
20 Poor	14:13	14:52	15:41	16:43	18:00
15	14:24	15:20	15:57	16:58	18:31
10 Very Poor	15:10	15:52	16:28	17:29	19:15
05	16:12	16:27	17:23	18:31	20:04
01	17:48	18:00	18:51	19:36	20:57

Treadmill - Bruce Protocol

Score / Age	20-29	30-39	40-49	50-59	60+
99 Superior	16:00	15:45	15:30	14:30	13:20
95	15:10	14:30	13:20	12:00	11:25
90 Excellent	14:30	13:20	12:15	11:30	10:45
85	12:45	12:15	11:30	10:45	10:10
80	12:15	11:55	11:16	10:30	9:45
75 Good	12:00	11:30	11:15	10:10	9:30
70	11:55	11:22	10:37	9:52	9:03
65	11:30	11:15	10:30	9:40	8:35
60	11:18	10:45	10:15	9:30	8:16
55 Fair	11:15	10:35	10:10	9:15	7:57
50	10:47	10:30	9:45	9:00	7:52
45	10:45	10:10	9:30	8:40	7:45
40	10:30	10:00	9:20	8:25	7:35
35	10:20	9:45	9:10	7:59	7:15
30	10:10	9:38	8:58	7:55	7:00
25	9:45	9:30	8:20	7:48	6:55
20 Poor	9:35	9:05	8:10	7:37	6:15
15	9:30	8:25	7:55	7:30	5:30
10 Very Poor	8:40	8:00	7:44	7:00	4:30
05	7:50	7:45	7:07	5:30	3:50
01	6:30	6:15	5:15	4:23	2:45

Bruce Protocol - each stage is 3 minutes long

<u>Stage</u>	<u>mph</u>	<u>% grade</u>	<u>Stage</u>	<u>mph</u>	<u>% grade</u>
1	1.7	10	5	5.0	18
2	2.5	12	6	5.5	20
3	3.4	14	7	6.0	22
4	4.2	16			