

MINIMUM GUIDELINES FOR EXERCISE PARTICIPATION (No. 64 July 2007)

1837

All employees covered by Section 1836, Mandatory Exercise Programs, and others who participate voluntarily during work time ([see Section 1835](#)), will include components of aerobic, strength and flexibility conditioning in their planned physical conditioning program. The type of activity, intensity, frequency, duration, or other variables will depend on their conditioning history and fitness level in each area, as described in the CAL FIRE Physical Fitness Guidelines supplement, and must meet or exceed guidelines described in Sections 1837.1 through 1837.3.3.

Willful failure to participate as described in the following sections is a serious failure and supervisors must take corrective disciplinary action when needed. (See Section 1837.4, Consequences of Willful Non-Participation.) However, supervisors must recognize that all employees will not progress at the same rate. Younger employees who have a long-term history of intensive conditioning or athletic competition have the ability to easily exceed these minimums. Others, such as some older employees who have been sedentary for 20 or more years, may have difficulty progressing faster than the minimum standard rate. Consequently, when employees have difficulty meeting progress guidelines, it is important to determine the cause. Lack of progress may be related to motivation, injuries, known or unknown medical problems, physical disabilities, stress, job- or non-job fatigue, unrealistic goals, lack of training, errors in the conditioning plan, or incorrect exercise technique. When employees are prevented or excused from exercise sessions to the degree that their current level becomes inappropriate, then they may change their program to a more appropriate level.

Supervisors should seek assistance from their unit physical fitness coordinator to determine the cause and potential solutions to an individual's lack of progress. Unit coordinators have the training and access to tools to develop special exercise programs for special cases. Unit coordinators, in turn, will seek assistance from the departmental physical fitness coordinator when needed. Special exercise programs that prescribe activity type, intensity, frequency, duration or other variables below minimum standards or outside the scope of the CAL FIRE Physical Fitness Guidelines supplement must be approved by the departmental physical fitness coordinator.

Whenever possible, employees should exercise in small groups and be visible to others.

Note: The CAL FIRE Physical Fitness Guidelines supplement describes frequency of exercise recommendations in terms of **days per week**, for ease in planning **optimum** individual programs, and it assumes that employees will continue their planned exercise programs on days off and vacation. Sections 1837 through 1837.3.3 describe standards for **minimum** levels of participation, below which supervisors are required to investigate the cause and take action when necessary. Minimum frequency of exercise standards are expressed in terms of **days per 7 work days**, because the minimum standards only apply to exercise done during duty hours.

MINIMUM GUIDELINES FOR AEROBIC CONDITIONING

1837.1

(No. 64 July 2007)

Approved types of aerobic conditioning include walking, alternating walking and jogging in 30-second to five-minute intervals, continuous jogging or running, bicycling (ergometer), hiking with or without a backpack, swimming, dance aerobics, stepping, circuit training, rowing (machine), laddermill (machine), or cross country skiing (machine). Every aerobic conditioning session will be preceded by a 5 to 10 minute period of gradually increasing exercise intensity up to the level planned for the conditioning session. Warm up activities will be specific to the activity planned for the conditioning session. For example, if jogging were planned as the conditioning activity, the warm up would begin with a slow walk and progress through faster walking to slow jogging and finally jogging at the pace planned for the conditioning period. All aerobic conditioning sessions will be followed by a cool down period of gradually decreasing intensity, including light calisthenics and/or stretching, for a total period of 5 to 10 minutes. Time spent in the warm up and cool down phases is not conditioning per se, and does not count toward meeting any minimum duration standard described below.

There are four levels of aerobic conditioning standards: beginning, weight control, improvement, and maintenance. Each employee exercising on work time must meet the minimum standard for one of the four levels and may choose his or her own level according to procedures described in the CAL FIRE Physical Fitness Guidelines supplement. Those who are beginning an aerobic exercise program or who (by their own judgment) are unable to exercise continuously at an intensity of 60% of their aerobic capacity for 30 minutes or more must meet the beginning level standard. (Note: percent of aerobic capacity is determined by heart rate in the CAL FIRE Physical Fitness Guidelines supplement.) Employees who can exercise continuously for 30 minutes or more at 60% of aerobic capacity and have established their own goal to control weight or reduce fat must meet the weight control level exercise standard. Those who have been at the beginning level for four to six weeks, or who can exercise continuously for 30 minutes at 60% of their aerobic capacity, and have not selected the weight control level, must meet the improvement level or the maintenance level standard. Only employees who voluntarily demonstrate, in a supervised field test, the ability to run 1½ miles in a time of 11 minutes and 30 seconds may meet the maintenance level exercise standard instead of the other standards.

Supervisors are encouraged to observe intensity, duration and frequency, and to review conditioning plans and logs periodically.

**AEROBIC CONDITIONING
-- BEGINNING LEVEL STANDARD**
(No. 64 July 2007)

1837.1.1

Beginning level aerobic exercisers will participate in aerobic conditioning at least three days in each seven days worked. Beginning level exercisers must choose a low-impact activity. (See the CAL FIRE Physical Fitness Guidelines supplement.) They may choose a moderate- or high-impact activity no more than twice per week, but never on two days in a row. Beginning level aerobic exercisers will exercise at an intensity level of at least 60% of aerobic capacity. In the first week of exercise after beginning, the minimum acceptable duration of exercise is 15 minutes, with intensity held at or above 60% continuously during that period. In successive weeks after beginning, the minimum acceptable duration is increased 5 minutes. Thus, in the fourth week after beginning, the minimum acceptable duration is 30 minutes. Beginning level exercisers may move to either the weight control level or the improvement level at any time, once they can comfortably exercise continuously for 30 minutes at 65% intensity. After the sixth week at the beginning level, exercisers must move to one of the three other levels of their choice.

**AEROBIC CONDITIONING – WEIGHT CONTROL
LEVEL STANDARD**
(No. 64 July 2007)

1837.1.2

Weight control exercisers will participate in aerobic conditioning at least five days in each seven days worked. They will exercise at an intensity level of at least 60% of aerobic capacity. Minimum duration of each exercise session is 35 minutes, with 5 minutes per session added each week, up to 60 minutes, 6 weeks after beginning this level. Weight control level exercisers must choose a low-impact activity. (See the CAL FIRE Physical Fitness Guidelines supplement.) They may substitute a moderate- or high-impact activity no more than twice per week, but never on two consecutive days.

**AEROBIC CONDITIONING – IMPROVEMENT LEVEL
STANDARD**
(No. 18A May 1999)

1837.1.3

Improvement level exercisers are those who do not have a weight loss goal and have been at the beginning level for four weeks, or who can already exercise continuously for 30 minutes at 65% of their aerobic capacity. Minimum frequency is three exercise sessions in every seven work days. Minimum intensity is 70% of aerobic capacity, and intensity should be increased by 5% after each month at this level. After 4 months at this level, the minimum intensity must be 80%. Minimum duration is 25 minutes per session.

AEROBIC CONDITIONING – MAINTENANCE LEVEL STANDARD

1837.1.4

(No. 18A May 1999)

Maintenance level exercisers are those who do not have a weight loss goal, are satisfied with their aerobic fitness level, and can run 1½ miles in a time of 11 minutes and 30 seconds. Maintenance level is open only to individuals who voluntarily demonstrate ability to meet the 1½ mile run standard. Ability to meet the 1½ mile run standard must be retested every six months. Employees failing to maintain at the standard level must choose one of the other three aerobic conditioning standards. Minimum intensity level is 70% of aerobic capacity. Minimum duration is 30 minutes. Minimum frequency is two days in every seven work days.

MINIMUM GUIDELINES FOR STRENGTH CONDITIONING

1837.2

(No. 64 July 2007)

Approved types of strength conditioning include weight training and calisthenic exercises. Every strength conditioning session will be preceded by a 5 to 10 minute warm up period when all of the specific exercises planned for the conditioning period will be done slowly and at a lower intensity. All strength conditioning sessions will be followed by a cool down period consisting of 5 to 10 minutes of light calisthenics and stretching.

There are three levels of strength conditioning standards: beginning, improvement, and maintenance. Beginning level is the entry level for beginners who are low fitness or are not familiar with strength training techniques, and for those who have prior injuries which may limit their ability to perform at a higher level. The improvement level is for those who have been engaged in a regular muscle conditioning program, want to improve, and are familiar with the exercise techniques they will use, or who have been at the beginning level for four or more weeks. Maintenance level is only open to individuals who are satisfied with their strength fitness and voluntarily demonstrate ability to meet a strength field test standard.

There are three body areas that the three standards apply to: upper body, trunk, and lower body. Thus, an employee might be beginning level for all three body areas or may be maintenance level for the upper body area, beginning level for the trunk body area, and improvement level for the lower body area, or any other combination. Employees who exercise on work time must meet the minimum requirement for one of the three levels for each of the three body areas and may choose their own level of each, according to procedures described in the CAL FIRE Physical Fitness Guidelines supplement.

STRENGTH CONDITIONING -- BEGINNING LEVEL STANDARD

1837.2.1

(No. 64 July 2007)

Beginning level strength exercisers will participate in calisthenic exercises at least three days in each seven days worked or participate in weight training at least two days in each seven work days.

A minimum of two exercises must be done for each of three body areas. Two exercises must be done for the upper body, two for the trunk, and two for the lower body, for a total of at least six exercises. Each day, one of the two exercises for each body area must be substituted with an alternate exercise for the same body area, unless substitution is impossible due to equipment availability. This substitution must be done in such a way that all 24 approved exercises are done in each ten exercise sessions. Approved calisthenic and weight training exercises for beginning level individuals are described in the CAL FIRE Physical Fitness Guidelines supplement.

There is no minimum progress standard for beginning level strength conditioning because the primary purpose of this level is to learn safe and effective technique. See the CAL FIRE Physical Fitness Guidelines supplement for a description of the beginning level. No weight may be lifted or attempted to lift that cannot be lifted at least ten times. No one repetition maximum (one rep max) lifts are permitted. Employees may move up to the improvement level after 4 weeks at the beginning level. They must move up to another level by 6 weeks.

STRENGTH CONDITIONING -- IMPROVEMENT LEVEL STANDARD

1837.2.2

(No. 18A May 1999)

Improvement level strength exercisers will participate in calisthenic or weight training exercises at least three days in each seven days worked. Each exercise day, a minimum of two exercises must be done for each of the three body areas, plus two additional exercises, for a total of at least eight exercises. Each day, at least one of the exercises for each body area must be substituted with an alternate exercise for that body area, unless substitution is impossible due to equipment availability.

The minimum progress standard for improvement level calisthenic exercises is that the total number of repetitions done for all exercises (in one day) must be increased by at least four repetitions or 10% each month, whichever is least. (Note: For the purpose of this standard, each 10 seconds of wall hold exercise counts as one repetition.) The minimum progress standard for improvement level weight training exercises is to increase lifting resistance (weight) by 2% per month, or to increase the number of repetitions by 10% each month.

No weight may be lifted or attempted that cannot be lifted at least three times. No one repetition maximum (one rep max) lifts are permitted. Improvement level exercisers who choose strength improvement must lift 3 to 6 repetitions per set. Those who choose endurance improvement must lift 14 or more repetitions per set. Employees who choose strength and endurance improvement must lift 8 to 12 repetitions per set.

STRENGTH CONDITIONING – MAINTENANCE LEVEL STANDARD

1837.2.3

(No. 64 July 2007)

Maintenance level is only open to individuals who voluntarily demonstrate ability to meet a strength field test standard for each of the three body parts: upper body, trunk, and lower body. The upper body standard is to be able to do 25 pushups and 9 chinups. The trunk strength standard is to be able to do a situp hold for one minute. The lower body standard is to be able to do a wall hold for 2 minutes without stopping. (See the CAL FIRE Physical Fitness Guidelines supplement for test procedures.) Ability to meet these standards must be retested every six months. Employees failing to maintain the standard (or declining to take the test) must choose one of the other two levels.

Maintenance level strength exercisers will participate in calisthenic or weight training exercises at least two days in each seven days worked. Each session, maintenance level calisthenics and weight training exercisers will do at least two exercises for each of the three body areas and will rotate one exercise of each body area.

Maintenance level exercisers who use weight training will do 8 to 12 repetitions per set, and may not lift or attempt any weight that cannot be lifted at least eight times. No one repetition maximum (one rep max) lifts are permitted.

MINIMUM GUIDELINES FOR FLEXIBILITY CONDITIONING

1837.3

(No. 64 July 2007)

Static stretching is the approved flexibility conditioning activity. (See the CAL FIRE Physical Fitness Guidelines supplement.) Every flexibility conditioning session will be preceded by an aerobic or strength conditioning session or a 5 to 10 minute period when all of the areas to be stretched will be warmed up by calisthenics or light activity. Some stretching must be included in all cool-down periods done after any strength or aerobic conditioning sessions.

There are three levels of flexibility conditioning standards: beginning, improvement, and maintenance. Beginning level is the entry level for those who are not already in a regular flexibility program. The improvement level is for those who have started a stretching program and want to improve. The maintenance level is for those who already stretch and only want to maintain flexibility. Employees who exercise on work time must meet the minimum requirement for one of the three levels and may choose their own level according to procedures described in the CAL FIRE Physical Fitness Guidelines supplement.

**FLEXIBILITY CONDITIONING -- BEGINNING LEVEL
STANDARD**

1837.3.1

(No. 64 July 2007)

Optimal frequency is five days in every seven days worked. A minimum of 6 different stretches must be done each session and they must be substituted in such a way that all 14 exercises (described in the CAL FIRE Physical Fitness Guidelines supplement) are done in each 5 stretching sessions. Employees may move to the improvement level after two weeks. They must move to the improvement or maintenance level by four weeks.

**FLEXIBILITY CONDITIONING -- IMPROVEMENT LEVEL
STANDARD**

1837.3.2

(No. 18A May 1999)

Minimum frequency is three days in every seven days worked. A minimum of 10 different stretches must be done in each session.

**FLEXIBILITY CONDITIONING -- MAINTENANCE LEVEL
STANDARD**

1837.3.3

(No. 64 July 2007)

The maintenance level is only open to individuals who voluntarily demonstrate ability to meet three flexibility field test standards: sit-and-reach, shoulder flexibility, and quadriceps flexibility. The sit-and-reach standard is 14 inches. The shoulder flexibility standard is to be able to touch fingertips on both sides. The quadriceps flexibility standard is two inches for each leg. See the CAL FIRE Physical Fitness Guidelines supplement for test procedures. Ability to meet these standards must be retested every six months. Employees failing to maintain the standard (or declining to take the test) must choose one of the other two levels.

A minimum of 8 different stretches must be done in each session. Minimum frequency is two days in every seven work days.

CONSEQUENCES OF WILLFUL NON-PARTICIPATION

1837.4

(No. 18A May 1999)

Willful failure to participate in an exercise program with sincere effort, when required, is as serious as any other failure in direct support of the department's emergency mission. Supervisors must ensure that employees carry out their physical fitness related responsibilities. Supervisors should make sure employees know what level of effort is expected. They should also be sure to set reasonable exercise objectives and to keep employees interested in achieving their objectives. Every employee's honest effort and achievement should be encouraged and commended.

It is always best to emphasize preventive rather than corrective action, but supervisors must take prompt corrective action when employees fail to comply with mandatory exercise participation. (See Personnel Procedures Handbook, Section 1090, Adverse Actions -- Employee Conduct and Discipline.)

Personnel Procedures Handbook, Section 1092.1, Types of Adverse Actions, lists examples of adverse actions and describes levels of possible outcomes of each. It contains examples similar to the following:

- Failure to maintain or falsifying reports or other required documentation,
- Carelessness, indifference, laziness, and inattention to duty during exercise sessions,
- Refusal to comply with a reasonable and proper order or instruction from a supervisor,
- Failure of a supervisor to take corrective disciplinary action where such action is needed.

[\(see next section\)](#)

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[\(see Forms or Forms Samples\)](#)