# Fit to Pass Fit to Serve Bleep test

The Job-related fitness test

Advice on the test and training



Know what your test involves
Improve your cardiovascular (CV) fitness
Fitness test specific training
Resistance training



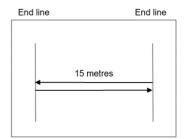
# Know what your test involves

The general annual test is for substantive officers of all ranks and applicable staff where specified.

## **Test Format**

Bleep Test – pass mark level 5.4





The test involves running between two lines that are 15 metres apart, arriving at each end line in time with a series of audio bleeps. At the end of each level the time interval between each bleep will decrease meaning you need to run faster to keep in time. The lines are marked with cones at each end to denote the turning point. At the start, participants will be taken through a warm up, the nature of the warmup varies depending on the force you are joining.

For Dorset Police, the first part involves running to the start of Level 3. Thus, giving you the opportunity to understand the bleep system as well as warming you up. The test then starts back at Level 1.

For Devon & Cornwall Police the warm up consists of gradually raising your heart rate, walking and running between the lines, to raise the pulse and mobilise the joints. This will then be followed by further mobilisation and muscle stretches relative to the test.

Bleep Test (Shuttle Run) explained			
Required Level is 5.4 = 5 levels and 4 shuttles			
Total time	Distance Covered	Shuttles completed	
3 minutes 35 seconds	525 metres	35	
Levels	Shuttles per level	Approximate seconds per shuttle	
1	7	7	
2	8	7	
3	8	6	
4	8	6	
5	4	6	

# Improve your cardiovascular fitness

Please note: If you are not used to exercise it is advisable to get yourself checked by your doctor before you start on any exercise programme.

Always warmup before a session and cooldown afterwards!

See pages 6 and 7 for more information on warm ups and cool downs.

## **Endurance element** (Cardiovascular fitness)

Rhythmic, aerobic type exercises involving large muscle groups are recommended for improving cardiovascular (CV) fitness i.e. running, cycling, swimming, rowing, or use of machines such as a cross-trainer to reduce impact. If running outdoors, try to run on softer ground and not always on tarmac to reduce the effect of impact on the joints.



Progress depends on your health status.

It may consist of increasing any or all of the following- duration (time), intensity (speed or resistance/hills), or frequency of activity (amount of sessions per week). Any progression should be made gradually avoiding large increases to minimise risks of muscular soreness and injury.

In order to make gains your system must be overloaded, i.e. work harder than normal.

#### **Guidelines**

If you are a beginner, it is recommended that you start with 2 sessions per week, this can be progressed to 3 sessions after a few of weeks. The aim is to progress to three CV training elements/sessions per week of 30 to 60 minutes duration. To improve your general fitness, it is advised that you incorporate two strength based elements/sessions, these can be incorporated in the CV sessions. For the CV sessions, work at approximately 55% to 90% of your maximum heart rate depending on your level of fitness. Each of the sessions should vary as per the explanation below.

If you don't have a heart rate monitor, a good gauge is when you are at your lowest levels (55%) you should be able to carry out a normal conversation. Whereas, at the highest levels you will be out of breath and only able to maintain the level of exertion for shorter periods of time. Or put another way you are working hard, short of breath, unable to talk.

(To roughly calculate your maximum heart rate: 220 minus your age i.e. 220 – 40years = 180 beats per minute maximum. 75% would therefore be 135bpm.)

As your aim is to run in the test, ideally your training should include running.

Don't overdo it though. One run could simply be a run at your own pace (run/walk) that over the weeks extends in duration, so you are building up stamina. Another session could push boundaries (see interval or progressive training below). Running is a high impact activity, so it is important to vary sessions allowing your body time to recover. Additional sessions could be anything low impact that raises your heart rate, i.e. cross trainer, rower, swimming, cycling etc.



## **Interval Training**

Interval training consists of repeated workouts interspersed with recovery periods. The bursts of harder work allow your body to adapt to the training effect.

#### **Example:**

Once warmed up, run at your normal pace for five minutes. Then for between 20 seconds and a minute, run (sprint) faster without stopping, before returning to your normal (slower) pace to recover. Once recovered, repeat the short sprint (set) and recovery. Aim for three sets initially, look to increase the amount of work sets as your fitness improves. Ensure the last five minutes are at a normal running pace and then cool down including stretching of the main leg muscles to end.

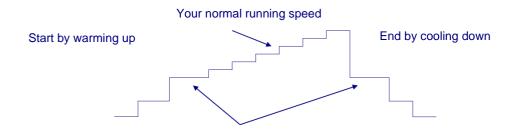


## **Progressive Training**

Progressive training comprises of increases in intensity until high intensity is reached (80%) and then maintaining at that level for a length of time that is achievable. Initially during this programme the time will be short, around only five minutes, but should increase to at least 20 minutes of constant 80 - 90% for longer periods. This mirrors the demands of the fitness test albeit without twisting and turning.

#### **Example:**

Once warmed up, run at your normal pace for one minute. Then every 30 seconds increase the pace slightly until you reach 80% holding this pace, fast but not a sprint. You may only be able to sustain the speed for a short period of time. At this point, reduce speed substantially but keep running until you recover, then run at a slower pace for a further five minutes and cool down. You may be able to achieve five minutes to start with, plus warm up and cool down. Gradually increasing over the programme to 20 minutes if possible.



**Note:** Both methods can be adapted to a variety of exercises or sports.



## Fitness test specific training

At the start of your training have an attempt at the bleep test to gauge your starting position. Measure out a 15 meter area, warm up including stretches to the lower body muscles. Using the App (page 13) for timings, Run between the lines (15 m) as per page 2.

At the start of your training ensure you build in some bleep test specific sessions. Measure out a 15 meter area, warm up including stretches to the lower body muscles. Run between the lines (15m) practising the technique and turning that is required for the test.

**Example session 1 –** to build stamina and fitness required for the bleep test

Warm up

Using app run to the start of level 3 – 15 lengths (work set)

Walk to recover

Repeat

Do this for 3 sets = 45 lengths

Progress by increase lengths in 1 set i.e. run to 3.2 (17 lengths), run to 3.4 (19 lengths)

**Example session** – to build stamina and speed required for the bleep test

Warm up

Using app run to failure (e.g. level 4.4)

Restart the app and walk to recover

As app reaches level 4, start running again to failure (e.g. level 5)

Restart the app and walk to recover

As app reaches level 5, start running again to failure/max

Walk to recover and cool down

#### Rest

Don't overdo your training!

This shouldn't be viewed as not actively participating in training, but as improving nutrition and rebalancing your health by resting and sleeping well. If you are feeling overtired prior to starting the next week's training, tone down or reduce the sessions according to how you have rested.

Rest should consist of two or three rest days a week, reducing to one or two as you progress to more sessions per week, this will allow your body to recover and adapt to the increased physical demands whilst reducing the risk of injury or ailment.

## **Starting Out**

Remember, if you are not used to exercise it is always a good idea to get your doctor to check you out before starting.

Always start at a lower intensity & duration to allow your body to adjust to the new demands you are placing on it.

## Warm Up

You should always 'warm up' before commencing exercise, and 'cool down' on completion. Each should last between 5 to 10 minutes.

Your warm-up should start without much physical effort and moving gradually to a dynamic warm-up which concludes at a physical state equal to that required by the activity to follow.

Warming up helps prepare muscle groups for exercise and helps prevent injury. Hold static stretches gently for 8 -10 seconds, dynamic stretches for 10 - 12 reps.

The following exercises and volume are examples and are meant as a guide that can be used for a general warm-up, select appropriate exercises for your level and to last a minimum of 8 minutes

Exercise	Volume	
Mobility exercises (Examples)		
<b>Shoulder shrugs</b> - Draw large circles with the points of the shoulders, to the back and the front.	10 repetitions each way	
Straight arm circles - Move the arms in large circles past the ears and the side of the body.	10 repetitions each way	
Side bends – facing forwards, reach hand towards knee, straighten, repeat on other side, increase range throughout reps	10 repetitions each side	
<b>Trunk rotations –</b> maintain hips facing forwards, rotate shoulders to one side, return to middle, repeat on other side.	10 repetitions each side	
Standing alternate hamstring leg curl - Standing on one leg perform a controlled leg curl, bending at the knee, heel to buttocks	10 repetitions per leg	
Standing alternate knee raise - Standing on one leg perform a controlled knee raise, bringing the knee/thigh to hip height	10 repetitions per leg	
Ankle Rotations – Standing on one leg draw large circles with the toes of the elevated foot.	10 repetitions in both directions for each foot	
Pulse Raiser		
<b>Jog –</b> Easy jogging pace for 4 -5 mins, normal jogging, add turns, increase speed gradually.	4-5 mins increasing pace	
Side to side jogging - Sideways running/steps, on balls of feet, do not cross feet	10+ steps facing each direction	
Walking with high knee drive – While walking drive one knee high into the chest with a flexed ankle and drive the opposite arm to shoulder height. Progress to jogging	8 – 10 reps on each leg	
Walking buttock kicks - Forwards walking with exaggerated knee flexion to bring feet up towards the buttock. Progress to jogging	8 – 10 reps on each leg	

<b>Parallel squat –</b> With feet at shoulder width apart, squat down to where the thighs are parallel with the ground while keeping chest upright.	10 repetitions
Front lunge (static)- Alternating steps forward with a strong drive off the ground with front foot and stable trunk, arms and head.	8 – 10 reps on each leg
Walking Lunges – Walk in a controlled and continuous way. Gradually lower the knee of the back leg to the ground.	8 – 10 reps on each leg
Lateral lunge - Sideways step with a strong leg drive back to the midline and a stable trunk, arms and head.	8 – 10 reps on each leg
<b>Sumo squat</b> - With heels shoulder width apart, turn the feet out as far as possible, then gradually squat while keeping a stable trunk.	10 repetitions
Stretches (examples)	
Hamstrings (back of thigh) - front leg straight, back leg bent, sit in keeping back straight	Static stretch 8-10 secs
<b>Quadriceps</b> (front of thigh) – stand on one leg, bend other leg to buttocks, holding ankle, back in neutral, head looking forward	Static stretch 8-10 secs
Calf (back of lower leg) – Back leg straight pushing heel down, front leg bent, back in neutral, head looking forward	Static stretch 8-10 secs
Hamstrings/hip flexors (leg swings) – standing on one leg, body upright, swing leg forwards and backwards, slight bend in knee, smooth leg swings increasing range of movement repetitions	Dynamic 10-12 repetitions per leg
Calf (back of lower leg) – Press up position, bum higher in the air, on toes, pushing heel down towards floor, return repeat on other leg. Increasing range of movement throughout repetitions	Dynamic 10-12 repetitions per leg
Chest – Standing, facing forward, hands in small of back, draw elbows back stretching chest, head looking forward	Static stretch 8-10 secs
<b>Back</b> – Standing, facing forward, hands linked at shoulder height in front of body, push away rounding shoulders forward, head looking forward and slightly down.	Static stretch 8-10 secs
Chest/back – Standing, facing forward, hands/arms at shoulder height, swing arms backwards opening chest, return arms around shoulders and repeat, Increasing range of movement throughout repetitions	Dynamic 10-12 repetitions

Cooling down can assist in dispersing lactic acid that occurs during exercise and training. The cool down should include some pulse lowering to lower the breathing and heart rates. Static stretches of the major muscles used will help alleviate muscle soreness and assist with flexibility. During the cool down the stretch should be held for between 15 - 30 seconds, you can use the same stretches as your warm up. Be careful not to overstretch.



# **Resistance Training**

Resistance training has many health benefits, including maintaining a healthy musculoskeletal system.

The role of a Police Officer involves wearing body armour and personal equipment, resistance training will prepare the body for the increased load on your body.

## Improving strength

The best way to improve strength in the muscles of the upper and lower body is performing resistance exercise, using body weight exercises, free weights, resistance machines or resistance bands.

A degree of strength in the arms, shoulders, chest, back muscles and lower limbs is essential for general fitness but for the bleep test we have added some specific lower limb exercises.

To improve strength, the muscles must be made to work against a resistance that is heavier than normally encountered, i.e. the muscles must be overloaded.

As strength increases, it will be necessary to continue to progressively increase the intensity through increased resistance/weight, repetitions, sets, or complexity of exercise to maintain the progressive muscle overload.

## **Muscular strength Training**

Strength is the ability of the muscle or group of muscles to increase function against a resistance achieving greater muscle mass and change in muscle shape.

Higher weight/resistance, lower repetitions (reps) e.g. 6 reps x 4 sets to failure, allowing 2 minutes rest between sets/exercises.

## Muscular endurance training

Muscular endurance is the ability of the muscle or group of muscles to perform an exercise against a resistance over a number of repetitions, also achieving greater muscle mass and change in muscle shape. This form of training builds up strength and endurance. You could aim to adjust the tempo increases the speed of exercises, i.e. drive up on the count of 1, lower for 2-3 seconds

Lower weight/resistance, higher repetitions (reps) e.g. 12-15 reps x 3 sets to failure, short rest between sets/exercises.

#### **Power**

Power is as strength x speed. There are many benefits to this type of training Full range of movement on all repetitions and performing the exercise under control is more important than quantity.

Remember, with this type of weight-training there is an increased risk of injury, only participate if you are experienced and competent – ensuring you warm up thoroughly.



## Strength Related (Full body) Resistance Programme

The example programme below is suitable for a beginner to resistance training. Aim to achieve 2 sets of 8-10 reps of each exercise to start with, allowing 1 minute's rest between exercises. Increase to 3 sets after a few sessions. As your strength and technique improves, continue to progress by increasing the weight.

Aim to achieve this session twice a week allowing 2–3 rest days between sessions.

Always ensure safe and effective technique on all exercises. Seek advice from a qualified fitness instructor if unsure of any exercises or technique.

Example Full body programme/plan - Gym		
Exercise	Reps	Sets
Bench Press	8 - 10	2-3
Lat pull down	8 - 10	2-3
Leg press	8 - 10	2-3
Shoulder press	8 - 10	2-3
Seated row	8 - 10	2-3
leg curl	8 - 10	2-3
Arm curls	8 - 10	2-3
Tricep press	8 - 10	2-3
Sit ups	8 - 10	2-3
Plank	30 seconds	2-3

# **Strength Related Resistance Programme**

As you progress you may wish to split your sessions to an upper body session on one day, a lower body session on another. You can continue to progress by performing more than 2 resistance sessions per week.

Example upper body routine (Strength)		
Exercise	Reps	Sets
Bench Press	6	3
Bent forward row	6	3
Shoulder press	6	3
Pec fly (Pec deck)	10	3
Seated row	6	3
Lateral raise	10	3
Arm curls	10	3
Tricep press	10	3

Example lower body routine (Strength)		
Exercise	Reps	Sets
Squats	6	4
leg curl	10	3
Lunges alternate (with dumbbells)	8-10	3
Leg extension	10	3
Leg press	6	4
Calf extension	10	3

## **Create your own workouts**

To devise your own routines, choose a number of exercises to work all muscle groups:

Area/muscles	Exercise	Equipment
worked		
Legs	Deadlift	Bar/dumbbells
	Squat	Free standing/weights
	Lunge	Dumbbells
	Leg press	Machine
	Leg Curl	Machine
	Leg extension	Machine
	Hip Abductor	Machine
	Hip Adductor	Machine
Chest	Bench Press	Bar/dumbbells/bench
	Press ups	Free standing
	Chest/pec flys	Bar/dumbbells/bench/Machine
	Bent arm pullover	Machine
Back	Bent forward row	Bar/dumbbells
	Single arm row	Dumbbells/bench
	Lat pull down	Machine
	Seated row	Machine
Shoulders	Shoulder press	Dumbbells/bar
	Upright row	Dumbbells/bar
	Lateral raise (side)	Dumbbell
	Front raise	Dumbbell
	Bent forward raise/reverse fly	Dumbbell
Arms	Arm curl	Bar/dumbbells
(Front/bicep)	Screw curls	Dumbbells
	Arm curls	Machine
Arms	Standing tricep press/extension	Dumbbell
(back/triceps)	Tricep dips	Bench
, , ,	Tricep pushdown/extensions	Machine
Core/Trunk	Sit ups	Mat
	Crunches	Mat
	Russian twist	Mat/dumbbell/ball
	Plank (front + side)	Mat
	Side bends	Dumbbell
	Back extension	Mat
A majority of the	resistance exercise can be performe	ed using resistance bands

# Abdominal Conditioning (Core Stability)

Core stability is the ability to control the position and movement of the central portion of the body. Core stability training targets the deep and superficial muscles within the trunk which connect to



the spine, pelvis and shoulders. These muscles assist in the maintenance of good posture and provide the foundation for all arm and leg movements. Good core stability can help maximise performance and prevent injury.

Core is essential for the demands of carrying and wearing your personal equipment

## **Positive Action**



We aim to employ a representative workforce that reflects the diversity of the communities we serve and attracts the best talent from the widest pool of people. However, some groups of people are currently under-represented in our workforce as a whole, or in particular positions.

We particularly encourage applications from the following under-represented groups to join our police family:

- Young people
- BAME communities
- People with disabilities
- Women
- Lesbian, gay and bisexual
- Transgender

In order to achieve this we are proud to pursue a policy of 'Positive Action'. Positive Action refers to a range of measures and initiatives that we provide to actively encourage and assist individuals from under-represented groups to apply to work for Dorset Police. All selection procedures are the same and final selection is based solely on merit.

If you are from an under-represented group and are interested in finding out more information, we invite you to make contact with our Positive Action Team to discuss what assistance we can provide. To find out more, visit <a href="https://www.dorset.police.uk/pa">www.dorset.police.uk/pa</a> or <a href="https://www.dorset.police.uk/pa">www.dorset.police.uk/pa</a>.

## **Staff Support Groups**

These play a very important role in our organisation, empowering employees and officers from under-represented groups to have their voice heard at all levels of the organisation. The groups act as support mechanisms and undertake advocacy and representative roles. They enable the Force to involve and consult staff from a range of diverse groups on a variety of issues including its people policies and processes. Support groups in the Force include the LGBT Network, Christian Association, Black and Minority Ethnic Group, Mental Wellbeing Network and the Women's Network.



To find out more, visit www.dorset.police.uk/staffsupport or www.dc.police.uk/staffsupport.

## Help

This booklet is extensive and supportive for your personal fitness development. If you have any questions, you can contact the Fitness leads for D&C and Dorset as below. For queries relating to any of the named exercises in the first interest please utilise resources on the internet or speak to a fitness professional.

**D&C** – Gary Stephens Gary.STEPHENS@devonandcornwall.pnn.police.uk

**Dorset** – Kerry Stacey <u>Kerry.Stacey@Dorset.PNN.Police.uk</u>
Shelley Hogan <u>Shelley.Hogan@Dorset.PNN.Police.uk</u>

**Practice the Bleep test** - Download the 15m bleep test on the PoliceUK.com site. Occasionally access to this download is not possible but if this happens, you can access via the website, bleep test downloads such as <a href="https://download.cnet.com/Bleep-Test-15m/3000-2129">https://download.cnet.com/Bleep-Test-15m/3000-2129</a> 4-75003027.html

There is a free Uk Police bleep test app available to download on google play and apple store, look for the image below



Measure an area of 15 meters, ensure the surface is sound, not wet or slippery, arrange an inside venue if possible.

Practice the bleep test to ensure you find it less challenging on your fitness test day, ensure you prepare!

# 'Fail to prepare, prepare to fail'!

**Video** – preparation, training tips and technique - <a href="https://www.youtube.com/watch?v=s6LZtN6jf88">https://www.youtube.com/watch?v=s6LZtN6jf88</a>

