

Physiotherapy Department

Returning to running after an injury

This leaflet provides you with a plan for returning to your running activities. It's designed for runners who are either restarting training, or recovering from an injury that has kept them 'off their feet' for a number of weeks or longer.

If you have any further questions or concerns, please contact the Physiotherapy Department.

General tips for preventing injury / re-injury

- Many running injuries are caused by being too quick to increase the distance you run. Don't increase your weekly running distance and time by more than 10% at a time.
- Increase the intensity of the jog or run (how hard/fast) before you increase the duration (how long).
- When you increase the frequency of the workouts (how many days you jog or run), decrease the duration.
- Change your running shoes every 450-550 miles.
- Be careful of running downhill too much and try to run on softer surfaces (like grass) rather than hard surfaces (like concrete or tarmac).
- If you're struggling to run more than two days a week because of the impact this has on your joints, you may find a cross-trainer helpful instead, to keep your fitness levels up.
- Make sure you rest between workouts, and eat and drink properly to avoid tiring yourself out.
- Try to maintain a health body weight, so that you're not putting unnecessary strain on your joints.
- Cool down properly. At the end of each run, walk around for three to five minutes, to allow your heart rate to decrease. This should be followed by stretching. Stretch your muscles until the point of tension, and then hold the stretch for 30-45 seconds. Do at least three stretches per muscle group.
- If you have a particularly tight spot in your muscles, stretch frequently – not just after a run, but also after your initial warm-up or even at every mile.

The graded return-to-running programme

When beginning a programme to return to running, you should adapt it to meet your needs, taking into consideration your original injury and your health. You should progress through the programme one phase at a time.

Phase one: walking programme

You should be able to walk, pain-free and at a fast pace (roughly four to five miles per hour), in a controlled environment (preferably on a treadmill) before moving on to the next phase.

Phase two: plyometric routine

A one-mile run typically consists of 1,500 foot contacts (750 per foot). This phase involves exercises that have 470 foot contacts per leg (equivalent to two-thirds of the foot contacts during a mile run).

Stretch your calves, quads and hamstrings between the exercises. If you experience pain, or are unable to complete an exercise, stop, stretch and apply ice to the affected area. If you are pain-free the next day, try to restart the routine.

Rest for 90 seconds between sets, and three minutes between the exercises.

Exercises	Sets	Foot contacts per set	Total foot contacts
Two-leg ankle hops: in place	3	30	90
Two-leg ankle hops: forward / backward	3	30	90
Two-leg ankle hops: side to side	3	30	90
One-leg ankle hops: in place	3	20	60
One-leg ankle hops: forward / backward	3	20	60
One-leg ankle hops: side to side	3	20	60
One-leg broad hop	4	5	20
Total	22	-	470

Once you've successfully completed this phase, you should be ready to attempt running half to three-quarters of a mile.

Phase three: walk / jog progression

You can begin this phase (making sure you only run on level ground) if you have successfully completed phases one and two and you have no pain with your normal daily activities.

The exercises

Stage	Walk	Jog	Repeat for
Stage one	5 minutes	1 minute	30 minutes
Stage two	4 minutes	2 minutes	30 minutes
Stage three	3 minutes	3 minutes	30 minutes
Stage four	2 minutes	4 minutes	30 minutes
Stage five	Jog every other day with a goal of reaching 30 minutes. Begin with five minutes of walking, gradually increasing the pace. End with five minutes of walking, gradually decreasing the pace to a comfortable walk.		

If you have no pain or discomfort or tightness during this activity or afterwards, you can proceed to the next phase.

Phase four: timed running schedule

You can begin this phase (making sure you only run on level ground) if you have successfully completed phases one, two and three and you have no pain with your normal daily activities.

Run every other day for eight weeks for the durations outlined in the table below. Cross-train or rest on your days off. Estimate a pace between eight to nine minutes per mile.

Week	Mon	Tues	Wed	Thurs	Fri	Sat	Sun
1	30	-	30	-	30	-	35
2	-	30	-	30	-	35	-
3	35	-	30	-	35	-	35
3	-	35	-	40	-	35	-
5	35	-	40	-	40	-	35
6	-	40	-	40	-	40	-
7	45	-	40	-	40	-	45
8	-	45	-	40	-	45	30
After eight weeks, you can start running multiple days in a row. Increase the duration or intensity of the run on the first day you run or jog after a day of rest; then decrease your activity on the following day.							
9	-	45	35	-	45	40	-
10	45	45	-	45	45	30	-
11	45	45	35	-	45	45	40
12	-	45	45	45	-	45	45

What to do if you experience pain

If you develop swelling in a joint or muscular pain that lasts longer than 72 hours, you have done too much and need to decrease your running activity and increase your rest between workouts.

Try to identify the exact location of your pain. Is it in the same place all the time, or does it 'move around' in a general area? If it's in the same place all the time, be very cautious and try to rest more. If it moves around, continue your return-to-running programme, but do not increase the intensity of your running activity.

Try the following for these different types of pain and discomfort:

- **Tightness during running** – Stop and stretch the affected area well (at least three to five times for 30 seconds), then resume your activity. If the tightness returns, stop and stretch again. If pain develops or after three stretching sessions the tightness remains, stop and apply an ice pack to the affected area for 10-15 minutes.
- **Pain after running** – Stretch the affected area well (at least three to five times for 30 seconds), do a long gentle stretch and then apply an ice pack to the affected area. If the pain is just general muscle soreness, continue with your return-to-running programme. If joint pain and/or swelling develop, increase rest between exercise sessions and decrease your activity level to the previous phase.
- **Pain during running** – If the pain disappears after 10 minutes, continue with your run or jog. If it develops and then intensifies, stop running/jogging. If the pain persists, decrease your activity level to the previous phase.
- **Pain at night** – If you're experiencing pain at night and it's keeping you awake, this means you are doing too much. Rest until the pain has gone and then restart your return-to-running programme at the previous phase.
- **Pain on waking** – If you wake up in pain, decrease your activity level to the previous phase, even if the pain disappears.

If you experience pain for more than a few days, try to grade it; is the pain getting worse, staying the same or gradually disappearing? Use a pain scale of 0 to 10, in which 0 is normal and 10 is the worst.

- **If your pain is getting worse**, rest and decrease your activity level to the previous phase.
- **If your pain is staying the same**, decrease your activity level to the previous phase and stay at that phase until the pain lessens.

What pain is OK?

- General muscle soreness.
- Slight joint discomfort after a workout or the next day that is gone in 24 hours.
- Slight stiffness at the beginning of a run or walk, that disappears after the first 10 minutes.

What pain is not OK?

- Pain that is keeping you awake at night.
- Pain that you experience at the beginning of the run / walk and that worsens as you continue.
- Pain that changes your stride.

What to do if you are re-injured / injured

- Ice the affected area for at least 15-20 minutes, several times a day (frozen peas work well). Don't apply the ice directly to your skin – wrap a tea towel or something similar around the ice first.
- Get plenty of rest and start on the programme at the phase that did not increase your pain.
- Try to identify what caused your injury. Think about anything different you did in training; whether you rapidly increased your distance or pace, if your shoes need changing or have recently been changed, or if you've switched from running on a soft surface to a hard surface.
- Plan a gradual and sensible return to training.

The Return to running programme is based on a programme by Steven L Cole, ATC, CSCS, College of William and Mary. © 2007 The Brigham and Women's Hospital, Inc Department of Rehabilitation Services. Adapted with kind permission

Contact us

If you have any questions or concerns, please contact the physiotherapy department on **020 7188 5094** (Monday-Friday, 8am-4.30pm).

For more information leaflets on conditions, procedures, treatments and services offered at our hospitals, please visit www.guysandstthomas.nhs.uk/leaflets

Pharmacy Medicines Helpline

If you have any questions or concerns about your medicines, please speak to the staff caring for you or call our helpline.

t: 020 7188 8748 9am to 5pm, Monday to Friday

Patient Advice and Liaison Service (PALS)

To make comments or raise concerns about the Trust's services, please contact PALS. Ask a member of staff to direct you to the PALS office or:

e: 020 7188 8801 at St Thomas' **t:** 020 7188 8803 at Guy's **e:** pals@gstt.nhs.uk

Language Support Services

If you need an interpreter or information about your care in a different language or format, please get in touch using the following contact details.

t: 020 7188 8815 **fax:** 020 7188 5953

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w: www.nhs.uk

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t: 0848 143 4017 **e:** members@gstt.nhs.uk **w:** www.guysandstthomas.nhs.uk