

**LET'S TALK
ABOUT**

**A SAFE RETURN
TO PLAY &
SPORT**

A PATIENT GUIDE



**kids back
@sport**



HOW DO I GET SAFELY BACK TO SPORT?

When you have been ill, injured or away from sport for some time, it is important to not resume sport at your previous level, but take time to build back up gradually. During time away from sport, the bones and muscles may have become less tolerant of loading. If there is a sudden spike in volume or intensity compared to what has been trained for in recent weeks, the body takes measures to try and strengthen itself through building new bone and muscle. However, this new bone and muscle takes time to become strong enough to withstand sporting loads and can become overloaded resulting in injury.

How quickly you can return to sport is very individual. Depending on how fit you are from other activities and often depending on factors such as how long you have played a specific sport can affect how quickly you can build back up your volume and intensity. Some people naturally can tolerate larger increases in volume, whilst others who are going through growth spurts or periods of stress have a lower tolerance. Sleep quality and energy intake through good nutrition also play a role in boosting capacity to do more, so it is worth focussing on these aspects which are easier to control.

Following an injury, it is important to follow guidelines set by a health professional for a safe return to sport. Some injuries like bone stress injuries, fractures and injuries to the cartilage have to be pain free before you can resume exercise. However, in other injuries once diagnosed, it may not harm the tissues if you do moderate exercise with low levels of pain and can in some instances be important to the healing process.

WHERE DO I START?

In apophyseal injuries such as Sever's (heel pain) and Osgood's (pain below the knee), and in conditions such as patellofemoral pain (knee cap pain), once you have a confirmed diagnosis, the clinician may suggest you can begin low intensity activity to assess how well the tissues tolerate the activity. Make sure you have agreed with them an acceptable level of pain and symptom response. .

Find a level of activity on the steps diagram in Figure 1. that you can do with minimal pain and settles quickly without causing more symptoms the next day. For example you may be able to go on a bike, but not run. The types of activity may need to be adapted for your sporting setting but work from a principle of being low intensity and impact to higher.

Start at a low level of effort, and try a short session of activity. It is better to start low and build up than risk exceeding your capacity and flaring up symptoms which may then take several weeks to settle. Through trial and error, find your sweet spot. Leave a day between exercise sessions to assess if there has been any adverse reaction, then repeat that same exercise at least twice before adding more time and intensity and moving up to the next level.

FIND A LEVEL OF ACTIVITY THEY CAN TOLERATE

KIDS BACK 2 SPORT TOOL

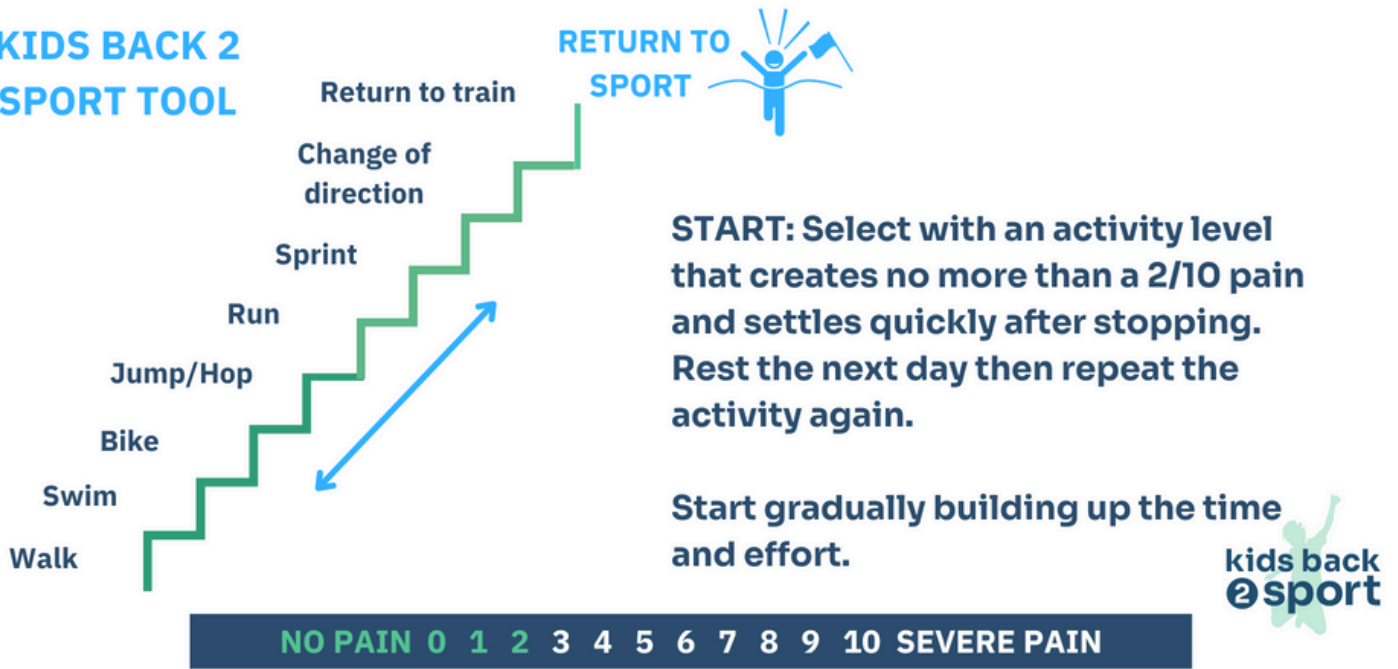


Figure 1.

CAN I PLAY WITH PAIN?

Using a pain scale of 0-10 (where 10 is severe pain and 0 is no pain), assess the pain level during and after activities. With conditions like apophysitis (Sever's and Osgood's) and knee cap pain, most people can tolerate playing with up to a 2/10 pain without creating more inflammation, but remember everyone is different.

Ask yourself these questions:

1. How much pain are you in during play?
2. Does it settle within an hour of stopping?
3. Does it make you limp or have to play differently?
4. Is it worse the next day?
5. Has it swollen up more?

If the answer to these questions does not match those the answers in Figure 2. the reduce back your activity level back to a point where you can meet these criteria every time you play.

REDUCE THE FREQUENCY AND INTENSITY OF ACTIVITY TO A LEVEL OF ACTIVITY THAT:

1. Creates only MILD pain (<3/10)
2. Settles within an hour
3. Does not cause them to limp
4. Is no worse the next day
5. Does not increase swelling

NO PAIN 0 1 2 3 4 5 6 7 8 9 10 SEVERE PAIN

Figure 2

HOW HARD SHOULD I TRY?

It is not just about how much you do, it is about how hard you do it. Think about jogging for 5 minutes and then think about sprinting for 5 minutes. The harder you work, the more stress on your body so the more rest you need between sessions, and the more energy intake you need to eat and drink. When you first add a new activity back in, it is often best to limit yourself to effort level 4-5: you are breathing heavier but can still chat easily at that level.

Look at the effort chart in Figure 3. to assess how hard you are working. Injuries most commonly occur when athletes work at the highest levels every time they play. Smart athletes vary the intensity of activity throughout the week having some lighter days interspersed with harder sessions. They also adjust their intensity down when they are sore or tired as they recognise that their capacity to do more that day might be lower.

NOT ALL SESSIONS ARE EQUAL

- 10 🤢 Jelly legs.. I am going to throw up
- 9 😓 WOW starting not to enjoy this
- 8 🙄 Can't keep this up for long
- 7 😓 Sweating buckets and panting
- 6 😓 Breathless and sweaty
- 5 😊 Getting warm, breathing heavier
- 4 😊 Sweating a little but can chat away
- 3 😊 I am enjoying this
- 2 😎 Can keep going all day
- 1 😴 Still half asleep



Figure 3

DON'T CHANGE INTENSITY, FREQUENCY AND VOLUME AT SAME TIME.

Duration	Effort level	Frequency
20 – 30 mins	50% effort	2 x per week
20 – 30 mins	75% effort	2 x per week
30 – 40 mins	75% effort	3 x per week
60 mins	75% effort	3 x per week
60 mins	Unrestricted	3 x per week
Competition	Unrestricted	3-4 x per week

CAN I RUN YET?

If there is no increase in symptoms, move up the steps one level at a time repeating the process. Continue to leave a day between activities and vary the intensity of the sessions so some days it is easier than others. See Figure 4.

It may take several weeks or longer to achieve your previous level of activity, but this process allows the immature bone and muscles time to become stronger and tolerate more load.

In order to be able to tolerate running, you need to be able to jump on the spot and hop on the spot pain free. When we run, it is really like a series of hops alternating on each leg. Hopping is therefore a good indicator of whether starting to run again, is likely to stir up your symptoms and is a useful check to assess how well you tolerated an activity the previous day. If you have been out of sport for some time, the Couch to 5K programme is based on walking intervals then adding progressively more running and provides a good platform to begin to run again. You can adapt this to your current level of fitness.

Starting to run is not an indicator that you can return to competitive sport. It will take time to build back up to high intensity efforts and children can rarely resist going back at full speed when faced with opposition and the fun of competition. They therefore need to spend several weeks becoming match or competition ready.

FIND A LEVEL OF ACTIVITY THEY CAN TOLERATE



Figure 4

WHAT IF THEIR PAIN FLARES UP?

If the pain starts to flare up again, drop down a level on the activity steps for 2 consecutive sessions and then build up again gradually adding more effort and time.

You don't have to stop everything if the pain recurs, just find a level that is more tolerable and then begin to build up again.

CAN I PLAY YET?

Once you can run for 30 minutes, you can begin to add back more intensive activities such as change of direction, sprinting, stopping and starting drills, and contact sports.

Build up the number of sprints, kicks or throws you do to replicate the demands of the sports you play, slowly adding around 10% more week on week. See the example for a cricket pace bowler below.

Still limit the number of high intensity activities you do on consecutive days leaving a rest day between. On these “adaptation” days, you could choose a low impact activity or focus on technical development more than high energy activities.

When you do start back playing in competitive settings, in the early matches, limit game time and allow a day between matches.

EXAMPLE FOR CRICKET BOWLING	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6
Deliveries	18	24	24	30	30	24
Effort	50%	50%	70%	70%	70%	Full pace
Per week	3	3	3	3	3	2
	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12
Deliveries	30	36	42	48		
Effort	Full pace	Full pace	Full pace	Full pace		
Per week	2	3	3	3		

HOW DO I STOP THE INJURY RECURRING?

Children often have to do complex, multitasking skills when they play sports in often chaotic playgrounds and sports fields. It is important to make sure that they can still jump, land and catch even when they are distracted by noises, instructions and making decisions before return to the busy sporting environment.

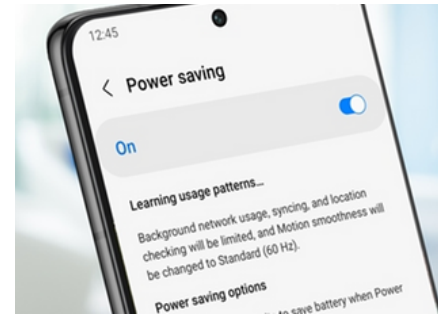
If you do not change the factors that contributed to developing pain or an injury, it is likely that the symptoms will recur. The highest incidence of non-contact injuries occurs in the third week of a school term or season. This is because children return to sport after a long holiday and exceed their capacity. The amount of sport they do exceeds the training completed in recent weeks. Their symptoms may also recur at times when their capacity has dropped such as during a growth spurt or if they are ill or stressed, so For more information, see the Kids Back 2 Sport ebook on Let's Talk About Why Kids Get Injured.

There are several factors that can boost your capacity to do more including getting better nutrition, eating enough for what you do, factoring days for tissue adaptation, and getting good quality sleep.

RECHARGE YOUR BATTERY

Just like our phones need to be recharged so does our brain and body. In the deep part of our sleep, we perform many of the same functions achieved by plugging our phone in to the mains. We perform vital updates, virus scans, repair damaged tissues, build stronger muscles and bones and upload skills learnt in the day to the hard drive.

Children need more sleep during growth spurts so make sure they are getting lots of early nights and feel refreshed in the morning.



EAT FOR ENERGY

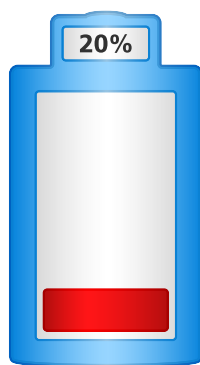
Getting adequate nutritional intake for the level of activity that the child does is important for bone health and growing stronger muscles. Make sure they eat a balanced diet including good protein sources for building muscles and repairing injured tissues. Many children don't feel hungry in the morning, but it is difficult to achieve adequate energy intake if children miss breakfast.

On days when they do more, they may need more regular intake of food and drink, especially during growth spurts. Adjust what they eat to meet the demands of what they do. Just like cars need refuelling, so do young athletes and the faster they go, the more they need..

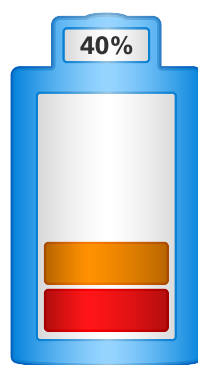
Many children require a Vitamin D supplement to improve bone health so discuss appropriate dosage with a health professional.

LISTEN TO YOUR BODY

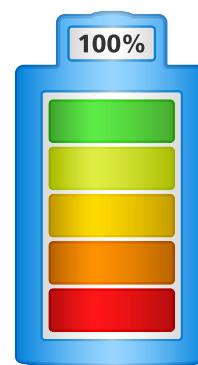
SHOULD I TRAIN OR NOT?



GO HOME



GO EASY



GO HARD



At times when they are ill, sore, stressed or tired, their body is more at risk of illness or injury. It is important to adapt how much and how hard they play to allow their body to recover and avoid increasing the risk of further injury. Sometimes a day out to recover can avoid weeks off ill or injured. For more information, see the Kids Back 2 Sport ebook on Let's Talk About Why Kids Get Injured

THIS MATERIAL IS THE EXPERIENCE AND OPINIONS OF PHYSIOTHERAPIST, ANGELA JACKSON FROM KIDS BACK 2 SPORT LIMITED. NO LIABILITY CAN BE GIVEN FOR THE CONTENT OR HOW IT IS USED. IF YOUR PAIN DOES NOT SETTLE WITHIN A FEW WEEKS OR AFFECTS YOUR SLEEP, SEEK THE HELP OF A QUALIFIED HEALTH PROFESSIONAL WITH EXPERIENCE IN TREATING CHILDREN. THIS INFORMATION SHOULD NOT BE REPRODUCED OR ALTERED IN ANY WAY WITHOUT THE EXPRESS PERMISSION OF THE AUTHOR.