Bowling Workload Management (Match intensity including Training and Matches)

The fast bowling action is very physical and demands a lot of force, particularly through the lower spine to perform the skill. Working within bowling guidelines and controlling the amount young players bowl is essential for reducing the risk of injury.

The table below is a useful resource for players to track and record the number of balls they bowl each week. More information can be found below.

| Week | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday | Sunday | Total balls this week | Total overs this week | Status |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | |
| 2 | | | | | | | | | | |
| 3 | | | | | | | | | | |
| 4 | | | | | | | | | | |
| 5 | | | | | | | | | | |
| 6 | | | | | | | | | | |
| 7 | | | | | | | | | | |
| 8 | | | | | | | | | | |
| 9 | | | | | | | | | | |
| 10 | | | | | | | | | | |
| 11 | | | | | | | | | | |
| 12 | | | | | | | | | | |

*Table 1 – A table to record the number of balls and overs bowled each day throughout the week at match intensity, including training sessions*

**Status:**

**Green – OK to bowl**
- Weekly total within age guideline
- No pain or soreness
- No big jump from last week

**Amber – Reduce load**
- Bowling increased noticeably from last week
- Bowled for more than one team
- Feeling tight or fatigued

**Red – Stop / Rest**
- Pain during or after bowling
- Bowling on consecutive days
- Weekly load clearly above guidelines

Matches + Training combined

| Age | Target overs / week | Target balls / week |
|---|---|---|
| 11 & Under | 12-16 | 72-96 |
| 12-13 | 16-20 | 96-120 |
| 14-15 | 20-24 | 120-144 |
| 16-17 | 22-26 | 132-156 |
| 18-19 | 24-28 | 144-168 |

*Table 2- ECB recommendations for the number of overs (and balls) per week based on players age and stage of development*

Note: In any 7-day period, there should be a maximum of 4 bowling days with only 1 instance of bowling on consecutive days

Holiday Spikes or time off:

| Number of Weeks Break | 11 years and below | 12 & 13 years | 14 & 15 years | 16 & 17 years | 18 & 19 years |
|---|---|---|---|---|---|
| 2 | 12-14 | 14-18 | 16-20 | 18-22 | 20-24 |
| 3 | 10-12 | 12-16 | 14-18 | 16-20 | 16-20 |
| 4 | 8-10 | 10-12 | 12-16 | 16-20 | 16-20 |
| 5 | 6-8 | 10-12 | 10-14 | 12-16 | 12-16 |
| 6 | 6-8 | 8-10 | 8-12 | 10-12 | 10-12 |
| 7 or more | 4-6 | 6-8 | 8-10 | 8-10 | 8-10 |

*Table 3- Table to indicate number of overs to bowl following time off from bowling (holidays, winter breaks etc)*

Intensity Matters

Please note:

Overs bowled at match or training intensity, including with a soft cricket ball, will still count towards workload limits and are considered within maximum overs/balls bowled per week.

Deliveries where there is a clear intention to bowl slower and at a much lower intensity should not be included in your overs, for example walk-throughs or running at half (or slower) run-up speed.

Why do we track our bowling overs?

Fast bowling places extreme stress on the lower spine, around three times a bowler's bodyweight per delivery, through repeated bending, twisting, and rotation. Over time, and with a well-managed workload, this stress drives major bone adaptation: elite fast bowlers can develop lumbar bone strength far greater than the general population, which helps protect against lumbar bone stress injury (LBSI), the most common injury in cricket.

Problems arise when bowling loads are poorly managed. Excessive bowling over short periods can cause bone damage that, without adequate rest, progresses to LBSI, ranging from bone stress to stress fractures. Because it takes around 15 years of progressive training to build protective bone strength, young and adolescent bowlers (especially during growth spurts) are at highest risk. A spinal stress fracture can keep bowlers out of the game for up to eight months, severely impacting development.

Key LBSI risk factors are age and workload. While age cannot be changed, we can reduce injury risk by carefully managing workloads by avoiding sudden spikes, ensuring sufficient monthly volume to maintain bone strength, and allowing adequate rest. Proper workload management supports safe development and helps prevent LBSI in junior fast bowlers.

How to complete the table:

This table should be used as a gradual return-to-bowling guide initially, particularly for bowlers who have not bowled over winter. Record all balls bowled each day using Table 3 to determine where to begin. For example, If you have bowled very little or no balls over winter, follow the guidance for 7 or more weeks off. Record both the balls bowled in any training sessions and matches, then total them weekly and compare against the age-appropriate targets. Start conservatively in the first few weeks, building volume progressively (around 10% each week) rather than jumping straight to the upper limits, and pay close attention to the status column: green indicates it is safe to continue, amber signals the need to reduce load or add rest, and red means stop bowling and review. Once at the recommended overs (Table 2) after following a gradual process, try and avoid any sudden spikes and allow adequate rest between bowling days to reduce injury risk. If you then have time off for missed games, holidays or injury, use Table 3 to begin the return to play process again.

What to do if you are experiencing any back pain

If you experience any back pain during or after bowling, this should be taken seriously and not pushed through. Bowling loads should be immediately reduced or stopped, and the player should be moved to an amber or red status depending on severity. You should rest from bowling until pain has fully settled and should be assessed by an appropriate medical or physiotherapy professional before returning to full workloads. If you continue to increase bowling volume, the risk of lumbar bone stress injury increases significantly. Once pain-free, bowling should resume gradually, using the return-to-play guidance to rebuild load safely and prevent recurrence.