

# THE LOCKDOWN SESSIONS

#StayHome #BeActive #StaySafe



WELSH ATHLETICS  
ATHLETAU CYMRU

## Building the Base of the Pyramid:

### Learn to Brace before you Run, Jump or Throw

#### What are Athletic Motor Skill Competencies and are they important?

Athletic motor skill competencies (AMSC) are movement skills that form the basis for the global movements, such as: running, jumping and throwing, and allow for progression to more advanced sport specific training.

It is very likely that low levels of muscle strength movement control and coordination will limit the development of AMSC.

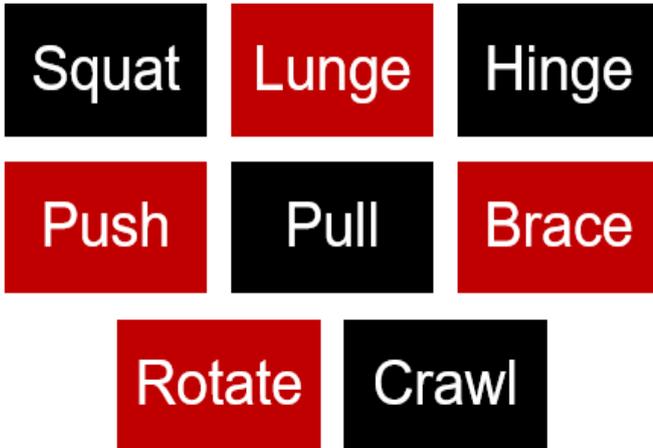
Coaches should ensure that all athletics are competent in all AMSC and are able to produce and absorb forces with correct techniques which begins with fundamental movement patterns



## Development of key fundamental movements: Exploring bracing and developing a strong core/ trunk

### What does 'brace your core' mean and why is important?

Your core, or often termed trunk, is not made up of an isolated muscle or muscle group. It consists of your abdominal muscles, hip, pelvis and back muscles.



Bracing your core is essential for movement that requires stability. It is the synchronised tightening of the abdominal muscles, hip, pelvis and back muscles and the stabilisation of the trunk. This action supports to maintain good posture and balance (as well as protecting the spine) when moving, thus allowing optimal production, transfer and control of force or energy during sprinting, running, jumping and throwing.

### What exercises are “right” for the athlete in front of me?

Using the movement competency flowchart will help to ensure the exercise prescription is stage appropriate for the athlete. It will identify whether it requires cuing of the exercises/movement or coaching to address mobility restrictions or strength limitations. For ideas for body weight training to develop strength go to [Improving Movement Patterns](#).

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## Where to start with developing core/trunk stability?

When an athlete braces their core, the lower abdominals should be in play. See below some exercises which will help an athlete develop a foundation level of core conditioning before moving to more complex bracing movements. For supporting visuals and event specific bracing ideas watch the ['Building a base' video](#).

### Lower Abdominal Conditioning Level Progression

When an athlete can achieve 30 repetitions achieving all listed technical points with no common errors evident, they can progress to the next level.

**SINGLE LEG LOWERS (STRAIGHT KNEE)**
**LEVEL 1**



START POINT



END POINT

**Technical Points**

- ✓ Lower back flat on floor
- ✓ Pelvis neutral (level)
- ✓ Brace abdominals (tension)

**Common Errors**

- ✓ Arching of the lower back
- ✓ Belly raises during exercise
- ✓ Discomfort in lower back (regress exercise)

**DOUBLE LEG LOWERS (BENT KNEE)**
**LEVEL 2**



START POINT



END POINT

**Technical Points**

- ✓ Lower back flat on floor
- ✓ Pelvis neutral (level)
- ✓ Brace abdominals (tension)

**Common Errors**

- ✓ Arching of the lower back
- ✓ Belly raises during exercise
- ✓ Discomfort in lower back (regress exercise)

**DOUBLE LEG LOWERS (STRAIGHT KNEE)**
**LEVEL 3**



START POINT



END POINT

**Technical Points**

- ✓ Lower back flat on floor
- ✓ Pelvis neutral (level)
- ✓ Brace abdominals (tension)

**Common Errors**

- ✓ Arching of the lower back
- ✓ Belly raises during exercise
- ✓ Discomfort in lower back (regress exercise)

## Abdominal bracing

**FRONT PLANK**

**LEVEL 1**



**Technical Points**

- ✓ Hips level – no pelvic tilt (right/left or forwards/backwards)
- ✓ Brace abdominals (tension)
- ✓ Back flat – hips, back and shoulders in line

**FRONT PLANK HAND RAISE**

**LEVEL 2**




**Technical Points**

- ✓ Lift arms alternately

▶ START POINT

END POINT ◀

**FRONT PLANK OPPOSITE HAND AND LEG RAISE**

**LEVEL 3**




**Technical Points**

- ✓ Lift opposite arm & leg

▶ START POINT

END POINT ◀

**General Technical Points**

- ✓ Back flat – hips, back and shoulders in line
- ✓ Hips level – no pelvic tilt (right/left or forwards/backwards)
- ✓ Brace abdominals (tension)

**General Common Errors**

- ✗ Arching or rounding of the back
- ✗ Discomfort in lower back (regress exercise)

LEVEL	EXERCISE	LEVEL PROGRESSION
1	Front Plank	60s must be perfect form
2	Front Plank Hand Raise	20 repetitions (10 reps each arm) must be perfect form slow controlled repetitions
3	Front Plank Opposite Hand and Leg	20 repetitions (10 reps each arm & leg) must be perfect form slow controlled repetitions

Note: If the athlete is unable to hold any of these positions without arching their back or unable to keep their pelvis level, regress the exercise on to their knees.

## Side Trunk Bracing

### SIDE PLANK

#### LEVEL 1



#### Technical Points

- ✓ Hold position with no trunk movement
- ✓ Free arm extended upwards

START POINT

END POINT

### SIDE PLANK BAND PULL

#### LEVEL 2



#### Technical Points

- ✓ Hold position with no trunk movement
- ✓ Pull arm from extended position to armpit

START POINT

END POINT

### SIDE PLANK LEG RAISE & HOLD

#### LEVEL 3



#### Technical Points

- ✓ Hold position with no trunk movement
- ✓ Free arm extended upwards
- ✓ Lift top leg up and hold

START POINT

END POINT

#### General Technical Points

- ✓ Back flat – hips, back and shoulders in line
- ✓ Hips level – no pelvic tilt (right/left or forwards/backwards)
- ✓ Brace abdominals (tension)
- ✓ Hold position with no movement

#### General Common Errors

- ✗ Arching or rounding of the back
- ✗ Discomfort in lower back (regress exercise)

LEVEL	EXERCISE	LEVEL PROGRESSION
1	Side Plank	60s must be perfect form
2	Side Plank Band Pull	20 repetitions (10 reps each arm) must be perfect form slow controlled repetitions
3	Side Plank Leg Raise & Hold	30s must be perfect form