Recruitment Training for Transversus Abdominis (TrA)

You cannot strengthen a muscle your brain cannot activate. These exercises help you ‘find the muscle’ and activate it properly.

Lie on your back or side with your spine in a neutral posture, (gentle curve in your low back).

Try the following connect cues to produce a deep, isolated contraction of TrA.
- Imagine a line that connects the inside of your two pelvic bones (front of hips). Think about connecting, or drawing the muscle, along this line as if closing two book covers.
- Contract your pelvic floor by drawing the muscles from behind your pubic bone to your tail bone and the left and right sides of your pelvic floor together and then like a draw string bag, gently draw the entire pelvic floor up.
- In sidelying - gently lift your lower belly up away from your pubic bone

Breathe in and on the breath out contract the transversus abdominis with the best connect cue (have your therapist help you determine which is your best connect cue).

No movement of your hips, pelvis or spine should occur as you gently connect to TrA. If you palpate your belly just inside the left and right hip bones, this deep contraction should feel like a light, deep tension under your fingertips, not a contraction that pushes your fingers out.

Hold the contraction for 3-5 seconds and then release and breathe throughout this exercise. Repeat the contraction and hold for 3 sets of 10 repetitions 3-4 times per day for 4 weeks.

Strength Training for Transversus Abdominis

Once you can activate TrA, practice recruiting it in many different positions such as sitting, standing, squatting, lifting etc. Once you can easily recruit TrA you can progress to the following exercises.

Each progression begins with a proper co-activation of all muscles of the deep system (TrA, multifidus and your pelvic floor) and this co-contraction should be held throughout the movement. Remember to MOVE WITH YOUR BREATH - Exert with exhalation, breathe in to rest or hold.

Lying on your back with your knees and hips flexed:
1. Slowly let your right knee move to the right, keep your low back and pelvis level. Return to the center and repeat with the left.
2. Lift the right foot off the floor keeping the knee bent. Don’t hold your breath and don’t bulge your lower abdomen. Return the foot to the floor and repeat with the left foot.
3. Lift the right foot off the floor and then straighten the leg only as far as you can control your core with a proper strategy. Slowly bend the knee and return the foot to the floor. Repeat with the left leg.
4. Lift the right foot off the floor and then the left foot off the floor. Alternate leg extensions, exert with exhalation, breathe in to rest or hold.

In side lying
1. Maintaining your connection to TrA, keep your ankles together and lift your top knee (only as high as you can control without breath holding), focus on turning your inner thigh outwards. Return your knee.
2. Maintaining your connection to TrA, keep your ankles together, lift your top knee and then lift your ankle. Return your ankle and then your knee.

With all these exercises maintain the leg lift for 10 seconds, build to 3 sets of 10 repetitions before moving on.

Incorporate TrA Activation into other Activities
The final step is to remember to use this muscle (TrA) during regular activities. Each time you get out of the chair, lift, bend or reach, the deep muscle system should be working with and for you. The goal is to help the brain remember to use the deep system (dMF, TrA and your pelvic floor) and the more you use it, the less you will be likely to lose it.