

## Modifying High-Impact Exercises for Pregnant Women



High-impact exercises are those that require both feet to be off of the ground at the same time. So box jumps, burpees, sprints, and plyometrics are all considered high-impact. While these are great exercises for women who are not pregnant, they can be problematic during pregnancy for a couple reasons:

- **Risk of falling:** Falls are the most common mechanism of injury during pregnancy, with 25–27% of women reporting a fall while pregnant. This increased risk of falling has been postulated as being related to: changes in center of gravity, increased body weight, the effects of hormonal changes on ligamentous and muscular function, and changes in proprioceptive function.
- **Pelvic floor pressure:** High-impact exercise can cause a lot of downward pressure on the pelvic floor, especially in later trimesters when the pressure is in addition to the weight of the baby. This increase in load may lead to pelvic floor dysfunction, such as prolapse and/or incontinence.

In many cases, women will self-regulate when it comes to high-impact exercise because it doesn't "feel right" anymore or it causes symptoms. However, women who were high-level athletes prior to pregnancy may be able to continue high-impact activity with no issues.

### Modifying High-Impact Exercises

If a woman who is pregnant comes to your bootcamp class, especially if she is in her third trimester (or late in her second), the more conservative approach would be to modify her high-impact exercises so that they are



low-impact instead. This means she can continue the workout and reap the benefits, but be at less risk for potential issues.

As Amanda Vander Tuig, a [Pre- & Postnatal Coaching Certification](#) grad, group fitness instructor, and healthcare professional says: *“I give lower-impact versions during demos regardless of presence of pre/postnatal clients.”*

This is a fantastic way to make sure you are respecting your client’s privacy while still making sure the class is safe for her to attend (as well as anyone else who may have limitations or concerns!).

For example, if you’re having your class do burpees, you can also demonstrate or recommend a “baby burpee.” Or for box jumps, consider having your client perform alternating step-ups instead so that she keeps one foot in contact with the ground or box throughout the movement.

(Depending on your class, you may also wish to give a more general comment at the beginning of the session about things that *all* women should look out for during the workout — whether they are pregnant or not and regardless of age.

For example, something along the lines of: *“When doing the circuit, you shouldn’t feel any heaviness or dragging sensation in your perineum — this may be a sign of prolapse.”* This way, your class as a whole will know what to be aware of, and you can help prevent possible injury.)

## What to Watch Out For

If you notice that your client who is pregnant is experiencing pain, modifying her form or technique in an odd way, or is exceedingly short of breath (making it hard to speak), then it’s a sign that something is amiss. Head over to your client and check in with her.



Remember, in a group setting you don't want to make her uncomfortable or sacrifice her privacy, so try gently recommending a modification, taking it from high-impact to low-impact, or from low-impact to a more assisted movement, and watch her complete it.

If that doesn't seem to resolve her symptoms quickly, or if she mentions having pain or another problem, then she should not continue the exercise. Ask her to take a quick water break or perform a gentle stretch while the class finishes up that movement.

Always encourage your client to listen to her body. If something doesn't feel right or if she's concerned, uncomfortable, or doesn't feel safe, she should not continue the class.

The following chart demonstrates exercises, sample symptoms that necessitate a modification, and possible regressions that are likely appropriate depending on your client's trimester.

**Each client is unique, so while this chart can provide guidance, make sure you coach the woman in front of you based on her individual needs.**



High-Impact Exercise	Possible Symptom(s)	First Trimester Modification	Second Trimester Alternative	Third Trimester Alternative
<b>BURPEE</b>	<ul style="list-style-type: none"> <li>Leaking urine</li> <li>Back pain</li> <li>Wrist pain</li> </ul>	<ul style="list-style-type: none"> <li>Reduce reps</li> <li>Reduce intensity</li> <li>Remove jump upon standing</li> </ul>	Baby burpee (aka safe burpee — where you step back instead of jump, and elevate your hands if need be)	Alternating incline push-ups and bodyweight squats
<b>SPRINTS</b>	Overexertion	<ul style="list-style-type: none"> <li>Reduce distance, time, and/or intensity</li> <li>Increase rest time</li> </ul>	<ul style="list-style-type: none"> <li>Jogging</li> <li>Incline treadmill walking</li> <li>Sled pushing on high handles</li> </ul>	<ul style="list-style-type: none"> <li>Incline treadmill walking</li> <li>Indoor cycling</li> <li>Sled pushing on high handles</li> </ul>
<b>BOX JUMPS</b>	<ul style="list-style-type: none"> <li>Leaking urine</li> <li>Fall risk</li> </ul>	<ul style="list-style-type: none"> <li>Reduce box height</li> <li>Reduce number of reps</li> <li>Reduce number of sets</li> </ul>	<ul style="list-style-type: none"> <li>Weighted step-ups</li> <li>Weighted lateral step-ups</li> </ul>	<ul style="list-style-type: none"> <li>Bodyweight step-ups</li> <li>Reduced-height bodyweight step-ups</li> <li>Lateral step-ups</li> </ul>
<b>JUMP SQUATS</b>	Heaviness in pelvic floor	<ul style="list-style-type: none"> <li>Barbell back squat</li> <li>Barbell front Squat</li> <li>Goblet squat</li> <li>Dumbbell front squat</li> </ul>	<ul style="list-style-type: none"> <li>Goblet squat</li> <li>Dumbbell front squat</li> <li>Bodyweight squat</li> </ul>	<ul style="list-style-type: none"> <li>Goblet squat</li> <li>Dumbbell front squat</li> <li>Bodyweight squat</li> </ul>
<b>JUMP LUNGES</b>	<ul style="list-style-type: none"> <li>Loss of balance</li> <li>Pelvic girdle pain</li> </ul>	<ul style="list-style-type: none"> <li>Dumbbell reverse lunges</li> <li>Dumbbell walking lunges</li> </ul>	<ul style="list-style-type: none"> <li>Dumbbell reverse lunges</li> <li>Dumbbell walking lunges</li> <li>Split squats</li> </ul>	<ul style="list-style-type: none"> <li>Reverse Lunges</li> <li>Bodyweight lunges</li> <li>Split squats</li> </ul>
<b>SPEED SKATER</b>	<ul style="list-style-type: none"> <li>Knee pain</li> <li>Pelvic girdle pain</li> </ul>	Weighted curtsy lunge (non-ballistic)	<ul style="list-style-type: none"> <li>Curtsy lunge</li> <li>Lateral Squat</li> </ul>	<ul style="list-style-type: none"> <li>Curtsy Lunge</li> <li>Bodyweight lunge</li> </ul>
<b>MOUNTAIN CLIMBER</b>	<ul style="list-style-type: none"> <li>Overexertion</li> <li>Abdominal strain/bulging</li> </ul>	<ul style="list-style-type: none"> <li>Reduce reps</li> <li>Reduce intensity</li> </ul>	<ul style="list-style-type: none"> <li>Slow mountain climber</li> <li>Incline slow mountain climber</li> </ul>	<ul style="list-style-type: none"> <li>Incline slow mountain climber</li> <li>Standing knee raise</li> </ul>



## ADDITIONAL RESOURCES

We've provided trimester-specific exercises within each category, but while these regressions are *likely* they are not *definite*, and will vary client by client. You can find more information on adaptations to be made during each trimester [here](#).



If you want to get the *exact* skills and knowledge you need to confidently & effectively train women at every stage of pregnancy, consider becoming a Certified Pre- and Postnatal Coaching Specialist. To learn more, visit: [girlsgonestrong.com/cppc](https://girlsgonestrong.com/cppc)