

## Photobiomodulation (PBM) Use During Pregnancy: Clinical Summary

# **What the Research and Guidelines Say**

1. Limited but Encouraging Evidence

PBM has shown benefits in reducing pain, inflammation, and edema without known harmful tissue or systemic effects. However, clinical trials specifically on pregnant women are limited. Thus, clinical recommendations are conservative.

- 2. Safety Classification of PBM
- PBM devices are non-thermal and non-ionizing.
- No teratogenic effects have been documented.
- 3. Expert Recommendations
- Avoid direct irradiation over the uterus.
- Use with caution during the first trimester.
- Peripheral application (e.g., for carpal tunnel or mastitis) is generally considered low risk.

### **A** Contraindicated or Caution Zones

Region	Recommendation
Abdomen / Uterus	Avoid
Lower Back (lumbar)	Use only with medical supervision
Breast (e.g., mastitis)	Acceptable in many clinical protocols
Limbs (e.g., wrists, feet)	Safe
Face / Neck / Shoulders	Safe

# **☑** Common Pregnancy-Related Uses of PBM

- Carpal Tunnel Syndrome Common in pregnancy; PBM has shown effectiveness and safety when applied to wrists.
- TMJ Pain (Temporomandibular Joint)
  PBM is widely used during pregnancy for jaw-related pain.

- Mastitis (Postpartum Use)
  PBM has been shown to reduce pain and inflammation without impacting milk quality.
- General Musculoskeletal Pain
  Safe for all parts of the body when avoiding the abdominal and lower back areas.

## **Supporting Studies**

- 1. Brosseau et al. (2007). Effectiveness of low-level laser therapy for carpal tunnel in pregnancy. No adverse fetal or maternal outcomes reported.
  - 2. Vieira et al. (2016). Systematic review on PBM for mastitis. Found to be safe and effective during lactation.
  - 3. Multiple safety reviews classify PBM as low-risk when standard safety guidelines are followed.

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- 1. **Targeted Application**: Use devices on specific areas requiring therapy, such as joints, muscles, or areas experiencing pain or inflammation.
- 2. **Session Duration**: Typical sessions are 15 minutes per area, depending on the condition being treated. If the condition is severe then the devices can be used 2 x at the same time and 3 x per day.
- 3. **Frequency**: For acute conditions, multiple daily sessions may be beneficial until symptoms subside. For chronic conditions, 3-5 sessions per week are commonly recommended after the acute symptoms have subsided as a preventive measure.
- 4. **Safety Precautions**: Avoid direct exposure to the eyes. Use protective eyewear if necessary. Ensure the device is not used directly over the abdomen.
- 5. **Consultation**: Always consult with a healthcare professional before starting any new therapy, especially if you have underlying health conditions or are pregnant.

# **✓** Summary Table

Parameter	Recommendation
General use during pregnancy	Possible with caution
Avoid uterine/lumbar region	Yes
Safe for limbs, joints, neck	Yes
Physician oversight required	Yes, especially in 1st trimester

## S Final Word

Photobiomodulation can be safely used during pregnancy in non-abdominal regions, particularly for:

- Carpal tunnel
- TMJ pain
- Mastitis
- Peripheral joint or muscle pain

#### Always ensure:

- Medical supervision is involved
- Safe device parameters are used (<1000 mW, 600–900 nm)
- No direct irradiation over the fetus

#### Disclaimer

The information provided in this document is for educational and informational purposes only. It is not intended as a substitute for professional medical advice, diagnosis, or treatment. Individuals should always consult with a licensed physician or qualified healthcare provider before beginning any new therapy, including the use of photobiomodulation (PBM) devices.

PBM devices such as the SPRB and GPRB are wellness tools designed to support general health and well-being. They are not medical devices and are not intended to diagnose, treat, cure, or prevent any disease or medical condition. No medical claims are made or implied. Results may vary based on individual factors, and PBM should not be considered a replacement for appropriate medical care.