

Pregnancy Issues

An association between periodontal (gum) disease and pregnancy risks has been shown over the last decade. These pregnancy complications include Low Birth Weight and Premature Deliveries. Research suggests the bacteria causing periodontal bone disease, your immune response, and systemic inflammation, all affect pregnancy outcomes.

The bacteria which cause periodontal bone loss invade the gum tissue and trigger systemic inflammation. These bacterial strains are unique in that they produce an enzyme that's detectable using the BANA test. BANA-positive plaque in the third trimester has been associated with preterm births. When present, removal of BANA-positive plaque has been shown to significantly reduce preterm births. In other studies, treatment of moderate to severe periodontal disease reduced the rate of pre-term birth and low birth weight deliveries by 71 – 84%.

To quote one researcher: "periodontal disease may be a greater factor for pre-term/low birth weight than smoking or alcohol use. Throughout pregnancy, regulatory proteins called cytokines and prostaglandins steadily increase until a critical threshold is reached inducing labor, cervical dilation and delivery. The specific bacteria associated with periodontal disease are capable of stimulating excessive production of the regulators which induce pre-term birth."

Interestingly, low birth weight (in full term births) seems unrelated to periodontal bone disease. Instead, recent research points to the less damaging form of the disease, gingivitis, as an indicator for low birth weight. It's unclear if gingivitis is the cause, or simply an indicator of other inflammatory factors at work. However, one study found that, "the association between periodontal disease and low birth weight is significant."

At Sandlin DDS, we provide BANA tests to all patients presenting with active periodontal disease. When a patient is BANA-positive, we recommend laser assisted periodontal therapy to eliminate these dangerous bacteria. This is extremely important with our pregnant patients. Not only do laser assisted periodontal therapies predictably remove bacteria from surrounding gum tissue, they also provide a non-prescription alternative, so the developing child is not exposed to medications like oral antibiotics.

If you are pregnant, and test BANA-positive, the second trimester is the ideal time to treat your periodontal disease. Treatment during the first trimester is admissible, but treatment in the third trimester is not advised and has shown no benefit.

[J Periodontol](#). 2010 Jul;81(7):982-91

Periodontal disease activity measured by the benzoyl-DL-arginine-naphthylamide test is associated with preterm births. [Chan HC¹](#), [Wu CT](#), [Welch KB](#), [Loesche WJ](#).

Virulence 2:6, 498-508; November/December 2011;

Oral colonization of Gram-negative anaerobes as a risk factor for preterm birth



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[Taiwan J Obstet Gynecol.](#) 2013 Mar;52(1):71-6.

Association between maternal periodontal disease and preterm delivery and low birth weight. [Wang YL](#)¹, [Liou JD](#), [Pan WL](#).