



# Wellness News Network™

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Issue 4, March 2016

## The Pop: Explaining Common Sounds Heard in the Chiropractic Treatment Room

Presented by:

### Introduction

The chiropractic treatment room is a hub of activity. Depending on the treatment techniques your chiropractor employs, you may hear some very unique and interesting sounds during your chiropractic treatment session! It's important to understand what causes these sounds and what they mean to you and your health. Some sounds you hear might be associated with the equipment your doctor uses, while others might be caused by the treatment itself.

In this edition of the Wellness News Network, we will take a closer look at some of the more common sounds you might hear when you are in the chiropractic treatment room. If you are ever unsure of what a certain sound (bodily or mechanical) means, consider asking your chiropractor for an explanation; he or she will be happy to share the details.

### Sound #1: "Pop"

The audible "pop" that often accompanies hands-on chiropractic spinal adjustments is one of the most well known and common sounds heard in the chiropractic treatment room. When cervical, or neck, adjustments are performed, the pop may seem louder, in large part because the joints being adjusted are closer to your ears than other parts of your spine. In the past, it was thought by some that the audible pop, or cavitation, heard with chiropractic adjustments involved "bone cracking," but the sound actually emanates from the *joint* being adjusted

- specifically the facet joints - the joints at the back of your vertebrae that allow for most spinal motion that are responsible for this pop.



According to the Spine Health website, the pop heard during a high-velocity low-amplitude chiropractic adjustment is caused by a change in gas pressure within one or more of your spine's facet joints.<sup>1</sup> This sound occurs when your joint is moved a short distance beyond its passive range of motion, which is similar to what happens when you crack your knuckles. One study, published in 2004 in the *Journal of the Canadian Chiropractic Association*, states that an audible pop, or release, during a chiropractic adjustment may improve the outcome of that adjustment.<sup>2</sup> Another study, published in 2006 in the *Journal of Manipulative and Physiological Therapeutics*, reports that an audible pop may not be associated with improved treatment outcomes for low back pain.<sup>3</sup>



**QUESTION:**  
Sounds you may hear during a chiropractic treatment may be...

- A) Snap, crackle and pop
- B) Thud, pop and crackle
- C) Ahhh, snap and crackle
- D) None of the above

**ANSWER:**  
B) Thud, pop and crackle

**Finish this sentence...**  
Crepitus is...

- A) an indication of joint cartilage wear
- B) air between two layers of tissue
- C) a grating feeling during joint movement
- D) all of the above

**ANSWER:**  
C) Thyme – it is a herb

**True or False?**  
A bursa is a fluid-filled sac that helps reduce friction in the body

**ANSWER:**  
True

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It is generally believed that the audible pop, or release, that accompanies a chiropractic adjustment is not necessary for a successful treatment outcome, though this sound has become one of the things for which chiropractic and chiropractors have become most well known.

## Sound #2: "Thud"

Another sound that is commonly heard in the chiropractic treatment room is "thud." This sound is usually caused by a drop mechanism that's built into the chiropractic table. A chiropractic adjusting table may have one or more segments that can be manually raised (with just enough tension to hold you in the "up" position) and then "dropped" when a chiropractor applies pressure to your spine. This drop mechanism is intended to assist the chiropractic adjustment, allow for a lighter adjustment, and improve the comfort level of the person receiving the adjustment. In most cases, the resulting sound is a thud, often loud, as the drop piece falls back into place on the table.

## Sound #3: "Crackle"

You may also hear a "crackling" sound from your tissues as your chiropractor is working on you. This crackling, known as crepitus, is a sound that may emanate from your bones, joints, tendons or bursa - fluid-filled sacs that help reduce friction in your body. Crepitus may also involve a grating feeling or sound under your skin or within an affected joint when it is moved or mobilized. A crackling sound that emanates from your soft tissues when they are mobilized is usually caused by air that has found its way between two layers of tissue.

Crackling within a joint during joint movement may indicate cartilage wear.

## Sound #4: "Ahhh!"

Most people who receive chiropractic care experience at least some degree of immediate relief, which accounts for the "ahhh!" sound commonly heard in chiropractic treatment rooms. Whether it's a much needed low back adjustment that enables pain-free gait, a cervical spine adjustment that reduces the severity of a headache or a round of soft tissue work that helps eliminate trigger point pain, chiropractic care is all about relief. According to a 2004 study published in the *Journal of Manipulative and Physiological Therapeutics*, even a single spinal manipulation treatment can cause hypoalgesia (i.e., decreased sensitivity to pain).<sup>4</sup>

During your initial appointment, most chiropractors will tell you what to expect from your treatment. Often, this includes the sensations and sounds that you will experience and hear, respectively. Knowing what to expect from your care is an important part of the chiropractic experience.



## Quote to Inspire

*"There is a vast difference between treating effects and adjusting the causes"*

*Dr. Daniel D. Palmer*

## References and Sources:

1. Spine Health. Spinal Manipulation: High-Velocity Low-Amplitude (HVLA). <http://www.spine-health.com/treatment/chiropractic/spinalmanipulation-high-velocity-low-amplitude-hvla>
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3. Flynn TW, Childs JD, Fritz JM. The audible pop from high-velocity thrust manipulation and outcome in individuals with low back pain. *Journal of Manipulative and Physiological Therapeutics*. 2006. Jan; 29(1): 40-45.
4. Mohammadian P, et. al. Areas of capsaicin-induced secondary hyperalgesia and allodynia are reduced by a single chiropractic adjustment: a preliminary study. *Journal of Manipulative and Physiological Therapeutics*. 2004. Jul; 27(6): 381-387.



Writer: Marty Hughes, DC  
Production: Mike Talarico

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