

## Home Desensitization Program

### How does desensitization work?

A desensitization program is designed to provide consistent stimulus to the affected area for short periods of time, frequently throughout the day. These small bursts of therapeutic activity shower the brain with sensory input. The brain responds to this demand by acclimating to the sensation, thereby gradually decreasing the body's pain response to the particular stimuli. In short, your body gets used to it-the stimulus and becomes tolerable and no longer elicits the maximal pain response.

### What does a desensitization program consist of?

Desensitization programs progress gradually from stimuli that produce the least painful response to stimuli that produce the most painful response. Once the affected area begins to acclimate to the initial stimulus, the next stimulus is incorporated. For example, a desensitization program may progress from a very soft material stimulus (ie, silk) to a rougher material (i.e. wool) or textured fabric (i.e. Velcro). The course of this progression may take several days to several weeks, depending on the level of hypersensitivity.

<http://rsds.org/complex-regional-pain-syndrome-crps-treatment-desensitization/>

Complete at least **1-8 minutes of desensitization to the affected area(s) 4-8x each day**. Vary the stimulus used each day.

Examples of desensitization textures you can use:

- Brushing: use a hair brush or combing in circular or sweeping motions over the area
- Tapping: use your hand to tap or pat the area
- Towel rubs: use a dry towel and rub the area in circular or sweeping motions
- Massage: massage the area with your hands, may use lotion
- Vibration: apply home massager or other vibration tool over area
- Light touch: gently "tickle" the area with your fingertips

Additional desensitization ideas:

rub lotion - ice cubes - warm wash cloths – warm/cold water – erasers – rice – velcro - toothbrush - cotton balls - Q-tips - cold packs/warm packs - vibratory stimulation – tapping – paint brush – silk - tennis ball – sponge - leather – cotton wool – corduroy – netting – soap

How to perform desensitization:

1. Choose up to 5 textures
2. Start with the texture that you consider the most tolerable and apply to your **unaffected** limb in the area equivalent to the painful area of the affected limb.
3. Apply movements with the texture against your skin such as light stroking, firm stroking, tapping and circular motions according to what you can tolerate.
4. Eyes open, look at what you are applying and where you are applying it to.
5. Say what the item is that you are applying to your body.
6. Say out loud where you are applying the item.
7. Concentrate on how it feels.
8. Describe how it feels. (say it out loud)
9. Now apply the same texture to your affected limb and repeat the process.
10. While applying the texture to your affected limb keep thinking about your unaffected limb while touching toward the painful area and go further towards still thinking pleasant feelings.
11. Does it feel the same?
12. Have someone test you with your eyes closed. Can you guess what you are feeling?
13. **Track what you did using the chart provided.**

References:

[1] Lewis, J. S., Coales, K., Hall, J., & McCabe, C. S. (2011). Now you see it, now you do not: Sensory–motor re-education in complex regional pain syndrome. *Hand Therapy, 16*(2), 29-38. doi:10.1258/ht.2011.011005

[2] Pollard C (2013) Physiotherapy management of complex regional pain syndrome *New Zealand Journal of Physiotherapy* 41(2): 65-72.

[3] Moseley GL, Zalucki NM and Weich K (2008a) Tactile discrimination, but not tactile stimulation alone, reduces chronic limb pain. *Pain* 137: 600-608

[4] Royal College of Physicians (2018) 'Complex Regional Pain Syndrome in adults UK guidelines for diagnosis, referral and management in primary and secondary care,' RCP London website. May 2012. Available: <<https://rcplondon.ac.uk/sites/default/files/documents/complex-regional-pain-full-guideline.pdf>>



