

# Top Ten Things Rheumatologists Should (And Might Not) Know About Smoking Cessation

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Since researchers first identified smoking as a risk factor for lung cancer and heart disease in 1950,<sup>1</sup> there has been a consistently growing body of research outlining the incredible risks associated with smoking cigarettes. In more recent years, a convincing body of research and many large trials and registries (including BARFOT, DANBIO, DESIR, HUNT, NINJA, and SWEFOT), have found relationships between smoking and rheumatologic diseases. We present a basic introduction into the specific rheumatologic risks of smoking and the evidence-based treatment options to help patients become smoke free.

## 1. Risk Factor

Smoking is the most conclusively proven environmental risk factor for rheumatoid arthritis (RA) and increases risk twofold.<sup>2,3</sup> Smoking may also double risk for ankylosing spondylitis (AS)<sup>4-6</sup> and evidence is growing to suggest that smoking is linked to the development of systemic lupus erythematosus (SLE)<sup>7,8</sup> and psoriasis.<sup>9,10</sup>

## 2. Patient Outcomes

Smoking has been linked to increased severity and worsened trajectory of RA, SLE, psoriatic arthritis (PsA), and AS.<sup>4-6,11-15</sup>

## 3. Treatment Failure

Smoking has been shown to decrease the efficacy of tumor necrosis factor (TNF)- $\alpha$  inhibitors and patients who smoke are up to 80% less likely to respond well to therapy.<sup>11,13</sup> Furthermore, smoking cessation has been shown to reduce failure of biologics for the treatment of RA.<sup>16</sup>

## 4. Addiction

Tobacco dependence is a bona fide addictive disorder, best viewed as a chronic disease; treatment frequently entails repeated interventions, multiple relapses, and multiple quit attempts. Each year 40% of smokers make at least a single quit attempt and many long-term smokers have made more than 20 failed quit attempts.<sup>17</sup>

## 5. Obligation

A Canadian clinical practical guideline by the Canadian Action Network for the Advancement, Dissemination and Adoption of Practice-informed Tobacco Treatment (CAN-ADAPTT) states that it is a Grade 1A recommendation for physicians to identify, document, and treat the tobacco usage status of every patient in the healthcare setting.<sup>18</sup>

## 6. Counselling

Any intervention is worthwhile—even brief physician counselling sessions have been shown to be effective at helping patients achieve abstinence. Counselling in any form—individual, group, or telephone—has been shown to be effective at increasing rates of smoking cessation. We should focus on practical counselling and social support. Offering more than 30 minutes of counselling can triple rates of abstinence.<sup>19</sup>

## 7. Medications

Medication-based treatments for smoking cessation have been validated in a wide array of populations and can be used in isolation or in combination. The use of any nicotine replacement therapy (NRT; gum, patch, spray, inhaler, or lozenge) will approximately double rates of abstinence. Chances of success further increase when multiple types of NRT are used in combination (e.g., patch with gum or oral spray) or are used in combination with bupropion. The use of varenicline alone (2 mg/day) triples abstinence rates.<sup>19</sup>

## 8. NRT and Smoking

Continuing to smoke while using NRT is not dangerous and does not increase risk of adverse cardiovascular events. Patients can begin NRT at any stage of readiness for change and consistently are twice as likely to achieve abstinence.<sup>20</sup> The FDA has allowed label changes on NRT products to remove the statement that smoking while using NRT is contraindicated.<sup>21,22</sup>

## 9. Cost Effectiveness

Tobacco treatment programs are among the most cost effective interventions available. Combining counselling and pharmacotherapy is the most effective intervention and may increase chances of a successful quit attempt five-fold.<sup>19</sup>

## 10. Moving Forward

You can help patients at any stage along the quit process, from those currently unwilling to quit, to those who have recently quit. There are many resources available to learn more about pharmacological options and the general principles of cessation counselling.<sup>19,23</sup>

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## Fracture Liaison Service: Update

Plans for implementation of Fracture Liaison Services (FLS) are ongoing in several jurisdictions across Canada. To support ongoing implementation of FLS, Osteoporosis Canada has developed Quality Standards for FLS in Canada. The CRA has endorsed these Quality Standards, along with the Canadian Orthopedic Association, the Canadian Orthopedic Nurses Association, and Bone and Joint Canada. The list of endorsing organizations will be updated as additional endorsements are received.

The Quality Standards provide a concise set of statements which describe the most important functions of an FLS and which provide very clear guidance for healthcare professionals and administrators on what a world-class FLS will actually deliver. The Quality Standards will help ensure that any FLS can be set up for success at the time of implementation. These Standards are in compliance with the 2010 Osteoporosis Canada Clinical Guidelines and the International Osteoporosis Foundation Capture the Fracture Best Practice Framework for FLS.

Download the Quality Standards for FLS in Canada from [www.osteoporosis.ca/fls](http://www.osteoporosis.ca/fls).