

CRA Choosing Wisely Climate Conscious Recommendations

By Canadian Rheumatology Association

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1) Don't perform serological, imaging, or genetic tests without checking for and considering past available results.

In addition to increasing healthcare costs and blood draws from patients, redundant diagnostic testing for rheumatic disease adds carbon emissions through sample procurement, equipment, and processing. Beyond the tests themselves, patient transport to/from facilities and sample transport (including, for some tests, across institutions, provinces, or countries) adds to the carbon footprint. Ordering providers need to consider the reliability and validity of prior results, as well as the patients' clinical evolution, when deciding whether repeat testing could be justified. Repeat testing might occur inadvertently if prior results are not readily available (1). Therefore, integrating electronic medical records across systems to facilitate rapid retrieval of external test results may curb redundant testing without contributing to providers' administrative burden. Within a single health system, testing algorithms could prevent inadvertent repeat testing (2).

2) Don't dispose of regular waste in a biohazardous waste container when performing joint aspirations or injections.

Joint aspirations and injections create biohazardous and non-biohazardous waste. Since biohazardous waste is incinerated before going to the landfill, it generates higher greenhouse gas emissions than other types of waste disposal. Avoid placing regular, non-biohazardous waste in biohazard/sharps containers to reduce unnecessary incineration and associated emissions. (3,4)

These recommendations form part of a larger list of Choosing Wisely climate conscious recommendations. The list is available in its entirety on the Choosing Wisely website [here](#).

Sources:

1. Lake S, Yao Z, Gakhal N, et al. Frequency of repeat antinuclear antibody testing in Ontario: a population-based descriptive study. *CMAJ Open* (2020) 8(1):E184-190. [PMID: 32184282](#).
2. Man A, Shojania J, Phoon C, et al. An evaluation of autoimmune antibody testing patterns in a Canadian health region and an evaluation of a laboratory algorithm aimed at reducing unnecessary testing. *Clin Rheumatol* (2013) 32:601-608. [PMID: 23292519](#).
3. Jakik-Karpinska E, Brancaleoni R, Niemcewicz M, et al. Healthcare waste- a serious problem for global health. *Healthcare (Basel)*. 2023, 11 (2) 242. [PMID: 36673610](#).
4. Yves Chartier, Jorge Emmanuel, Ute Pieper, Annette Prüss, Philip Rushbrook, Ruth Stringer, William Townend, Susan Wilburn and Raki Zghondi, Eds. [Safe management of wastes from health-care activities, 2nd Ed.](#) World Health Organization, June 2014, WHO World Press, Geneva, Switzerland.