A coding system is required to link health data and social data to Canadian geographic locations. Statistics Canada’s Census Program established a detailed system of geographical units that covered all of Canada by 1961. Postal codes were introduced by Canada Post in 1971 and later expanded to include all of Canada. The areas represented by postal codes are adjusted on an annual basis (by Canada Post) whereas the census boundaries are adjusted every five years (by StatCan). Not only do both code listings change over time but the boundaries of these two coding systems do not match each other.

Why use PCCF/PCCF+?
Postal code conversion files are used to connect administrative/survey datasets that contain postal codes but lack socio-economic information. Commonly used administrative datasets are the Canadian Cancer Registry and the Vital Statistics – Birth Database. Comparative variables (such as age, education and income) are present within census products but these do not include postal codes. Using a PCCF/PCCF+ facilitates the linkage of postal codes to census geographical units. The first PCCF was made available to academic researchers through the StatCan Data Liberation Initiative (DLI) in 1991. Since then, five versions of the PCCF+ product have been made available (numbered 2 through 6). Each version is further identified with a letter. For example, version 5G matches 2006 census units with 2009 postal codes.

Why PCCF+ over PCCF?
This is best explained in cases where a postal code lies across a geographical unit boundary. PCCF uses a single link indicator (SLI=1) forcing each postal code to use only one set of census geocodes (introducing a systematic bias). In comparison, PCCF+ is a SAS control program that uses a population-weighted random allocation for postal codes that can link them to more than one census geographic area. The “plus” also indicates that there are more variables in the PCCF+ than are in the PCCF. They include: Health Regions; previous enumeration areas (census 1981/1986/1991/1996) and dissemination areas (census 2001/2006/2011); community size; neighbourhood income quintiles; immigrant terciles (national); etc.

Precautions
Pay attention to when the data was collected and try to match the “vintage” of your data with that version of the PCCF+. Longitudinal research spanning more than one census may require the use of more than one postal code conversion file. You also need to know that the coding specificity between urban and rural areas is not always comparable. Our final word of caution is that no version of a postal code conversion file is perfect, so you must always look for and handle unmatched codes.

Note to researchers: Your methodology must cite which version(s) you have used and our license for the PCCF/PCCF+ files is restricted to Dalhousie users for academic research and teaching purposes only. If you need assistance, our DLI contacts are Julie Marcoux and Sai Chua.