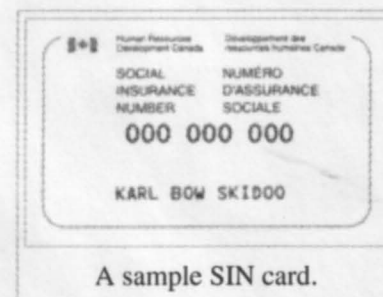


Social Insurance Number

From Wikipedia, the free encyclopedia

A **Social Insurance Number** (SIN) is a number issued in Canada to administer various government programs. The SIN was created in 1964 to serve as a client account number in the administration of the Canada Pension Plan and Canada's varied employment insurance programs. In 1967, Revenue Canada (now the Canada Revenue Agency) started using the SIN for tax reporting purposes. SINs are issued by Human Resources and Skills Development Canada (previously Human Resources Development Canada).



The SIN is formatted as three groups of three digits (e.g., 123-456-789).

Through functionality creep, the SIN has become a *de facto* national identification number, much in the same way as the Social Security Number in the United States. However, unlike in the US, in Canada there are specific legislated purposes for which a SIN can be requested. Unless an organization can demonstrate that the reason they are asking for a person's SIN is specifically allowed by law, or that no alternative identifiers would suffice to complete the transaction, they cannot deny or refuse a product or service on the grounds of a refusal to provide a SIN. Examples of organizations that legitimately require an SIN include employers, banks and investment companies, and federal government agencies. Giving an SIN when applying for consumer credit, such as buying a car or electronics, or allowing it to be used as a general purpose identification number, such as by your cable company, is likely a bad idea.

Social Insurance Numbers that begin with the number "9" are issued to temporary residents who are not Canadian citizens (e.g., foreign students, individuals on work visas) or permanent residents. These individuals must have an employment authorization in order to work in Canada. SINs beginning with a "9" are different from SINs assigned to citizens and permanent residents, because they have an expiry date (which usually coincides with the expiration of the holder's work authorization). These SINs are invalid unless there is an expiry date listed on the card and the date has not passed.

Analysis

Social Insurance Numbers can be validated through a simple check digit process called the Luhn Algorithm.

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046 454 286 <--- A fictitious, but valid SIN
121 212 121 <--- Multiply each top number by the number below it.
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The result is:

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086 858 276
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Notice that, in the second-to-last column, 8 multiplied by 2 is equal to 16. In the case of a two-digit

number, simply add the digits together ($1 + 6$) and insert the result (in this case, 7). When writing a program to complete this task, MOD 9 might be simpler to implement.

Then, add all of the digits together:

$$0+8+6+8+5+8+2+7+6=50$$

If the SIN is valid, this number will be evenly divisible by 10.