# A Safe and Inclusive Approach to Disseminating Statistical Information about the Non-binary Population in Canada

Claude Girard – Senior Methodologist
France-Pascale Ménard – Senior Analyst
Statistics Canada

Statistics Canada — Statistique Canada

Canada

# Overview

- Canadian context ⇨ Methodological aspects of gender dissemination

- 2021 Census of Population: ~~sex~~ gender and sex at birth questions, dissemination strategy based on a **new 2-category gender variable (Men+, Women+)** and some findings

- **Recommendations for social surveys** on collecting and disseminating gender information

- Supporting documentation benefits... gender expertise group as well as partners and users

# Canadian Context

- Recently in Canada:

  - Public awareness and sensitivity towards 2SLGBTQI+ populations have grown substantially

  - Legal changes were made with respect to gender e.g., *Canadian Human Rights Act* and *Criminal Code* were amended in 2017 to protect gender identity and expression

  - Gender data gaps were identified

- 2018 Government-wide policy direction: collection of accurate gender data should be the default for all federal organizations ⇨ Sex *at birth* only when necessary (previous survey interpretations of 'sex' were conflating the two, sex at birth and gender)

# Canadian Context

- 2018 Survey of Safety in Public and Private Spaces: first large-scale survey conducted by StatCan to collect information about gender and sex at birth
  - ✓ 1 in 400 people (0.24%) aged 15+ were transgender or non-binary: Very small populations
  - ✓ Important differences in victimization, discrimination and mental health by the gender diversity status of respondents: Enhanced sensitivity



Experiences of violent victimization and unwanted sexual behaviours among gay, lesbian, bisexual and other sexual minority people, and the transgender population, in Canada, 2018

**Highlights**

- Transgender Canadians were more likely to have experienced violence since age 15, and also more likely to experience inappropriate behaviours in public, online and at work than cisgender Canadians.
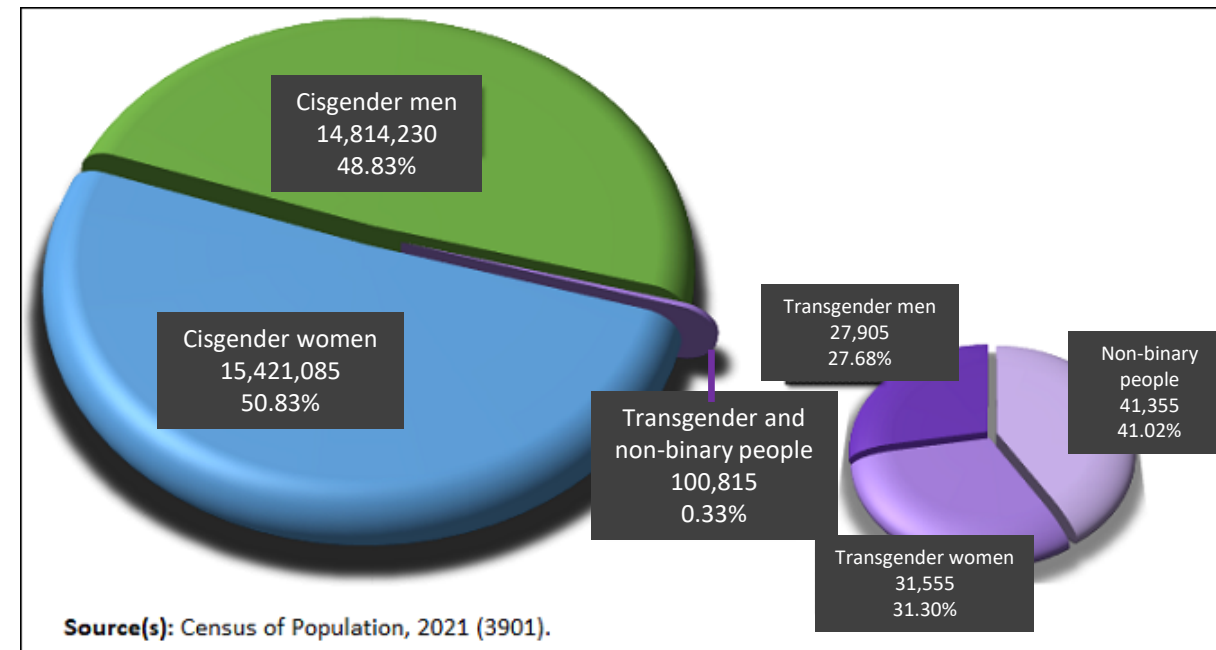
# Canadian Census

- Census of Population: conducted every 5 years and was last held in 2021
- Census 2021: new gender and sex *at birth* questions, after engaging with experts in the field of gender identity, conducting qualitative tests with non-binary, transgender and cisgender populations as well as a national census test

# Canadian Census

- 2021 Census: 1 in 300 (0.33%) people in Canada 15+ living in a private household are transgender (0.19%) or non-binary persons (0.14%)

- Almost 33% of non-binary people describe their gender using terms other than 'non-binary'



Two-Spirit  Intergender  Third gender
Polygender  Pangender  Gender neutral
Man and woman  Gender-nonconforming
Androgynous  Questioning  Queer
Demi  Bigender  Genderfluid
Non-binary
Other gender  Agender
Neither man nor woman  Trigender



Cisgender men
14,814,230
48.83%

Cisgender women
15,421,085
50.83%

Transgender men
27,905
27.68%

Non-binary people
41,355
41.02%

Transgender and non-binary people
100,815
0.33%

Transgender women
31,555
31.30%

**Source(s):** Census of Population, 2021 (3901).

# Canadian Census

- **New 2-cat. gender variable (Men+, Women+)** derived from collected data (Men, Women, Non-binary persons) and used at the lower dissemination levels: safe and more inclusive



**Overqualification rate of degree holders aged 25 to 64, by immigrant status, location of study and gender, 2021**

Legend: Total, Women+, Men+

| | Total | Women+ | Men+ |
|---|---|---|---|
| Canadian-born population | 10.6 | 9.8 | 11.7 |
| Immigrants with location of study in Canada | 11.8 | 12.0 | 11.7 |
| Immigrants with location of study outside Canada | 25.8 | 28.3 | 23.1 |

Note(s): Given that the non-binary population is small, data aggregation to a two-category gender variable is sometimes necessary to protect the confidentiality of responses provided. In these cases, individuals in the category "non-binary persons" are distributed into the other two gender categories and are denoted by the "+" symbol. The category "Men+" includes men, as well as some non-binary persons. The category "Women+" includes women, as well as some non-binary persons.
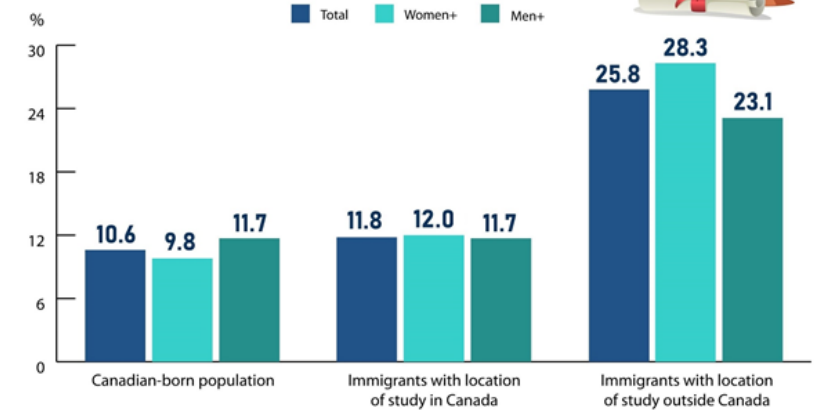Source(s): Census of Population, 2021 (3901).



TRANSGENDER MEN / CISGENDER MEN — MEN — MEN+[1]

NON-BINARY PERSONS

TRANSGENDER WOMEN / CISGENDER WOMEN — WOMEN — WOMEN+[2]

1. This category includes men (and/or boys), as well as some non-binary persons.
2. This category includes women (and/or girls), as well as some non-binary persons.

- In releases: Men+/Women+ in charts, figures and infographics, but Men/Women in text body

*Among immigrants with a foreign degree, overqualification was higher among women (28.3%) than among men (23.1%)*

Statistics Canada / Statistique Canada

Canada

# Recommendations for Social Surveys

- In line with policy direction and Census, gender ~~sex at birth~~ at the forefront of social surveys

  - Collecting *detailed* gender info. (Men, Women, Non-binary persons) **by default** – ethical and methodologically sound, allowing respondents to better identify with options proposed

  - Disseminating statistical gender info. using the **new 2-cat. gender variable (Men+, Women+)** at all geo levels except perhaps highest ones e.g., country ~~province/territory~~

  - Disseminating based on sex at birth only when warranted: insufficient justifications include comparability over time (sex *at birth* ≠ sex, as previously collected) and the mere presence of biological factors (as gender may be playing a major role too)

  - Additional statistical disclosure control measures may be required

Statistics Canada | Statistique Canada

Canada

# Recommendations for Social Surveys

- Implementation: 2-cat. gender is derived by survey team from collected gender data as
  - Transgender and cisgender men: Men+
  - Transgender and cisgender women: Women+
  - Non-binary persons: each record is ~~deterministically~~ **randomly recoded** to Men+ or Women+

  *The men+ category includes men and boys,* as well as some *non-binary persons. The women+ category includes women and girls,* as well as some *non-binary persons.*

- Random recoding can be carried out using the imputation *methods* and *systems* available

- Recoding ≠ Imputing, as it is performed on valid answers for confidentiality reasons rather than on missing answers to enhance quality

# Recommendations for Social Surveys

- Random recoding can be based on Men/Women data distribution at predetermined level (and conveniently carried out using donor imputation)...

Fictitious numerical example

| Gender (3) | Region 1 | Region 2 | Total |
|---|---|---|---|
| Men | 30 (30 / 80 = 37.5%) | 40 (40 / 115 = 34.8%) | 70 |
| Women | 50 (50 / 80 = 62.5%) | 75 (75 / 115 = 65.2%) | 125 |
| Non-binary Persons | 2 | 3 | 5 |
| Total | 82 | 118 | 200 |

| Gender (2) | Region 1 | Region 2 | Total |
|---|---|---|---|
| Men+ | 30+2 (32 / 82 = 39.0%) | 40+2 (42 / 118 = 35.6%) | 74 |
| Women+ | 50+0 (50 / 82 = 61.0%) | 75+1 (76 / 118 = 64.4%) | 126 |
| Total | 82 | 118 | 200 |

- ...or on modeling *but* without using strongly correlated auxiliary variables e.g., ~~sex at birth~~ (more prudent and respectful)

Statistics Canada   Statistique Canada

Canada

# Supporting Documentation… Supporting Whom?

- Survey team routinely documents standard statistical outputs, but may not fully appreciate the role played by documentation in implementing policy-shaping recommendations

- While documenting is hardly exciting, it was crucial in securing us the support and cooperation of stakeholders as initiative unfolded

- Documentation released alongside the recommendations include
  - A 17-pager, comprehensive document: transparency and accountability
  - Growing list of FAQs, to swiftly address implementation issues
  - Visual aid: applying recommendations to garden-variety situations

# Supporting Documentation… Supporting Whom?

- 17-pager is transparent about driving forces underlying the recommendations and promotes accountability e.g., how 5-Safes helps stakeholders better understand how confidential gender info is handled across the Agency's various data access platforms
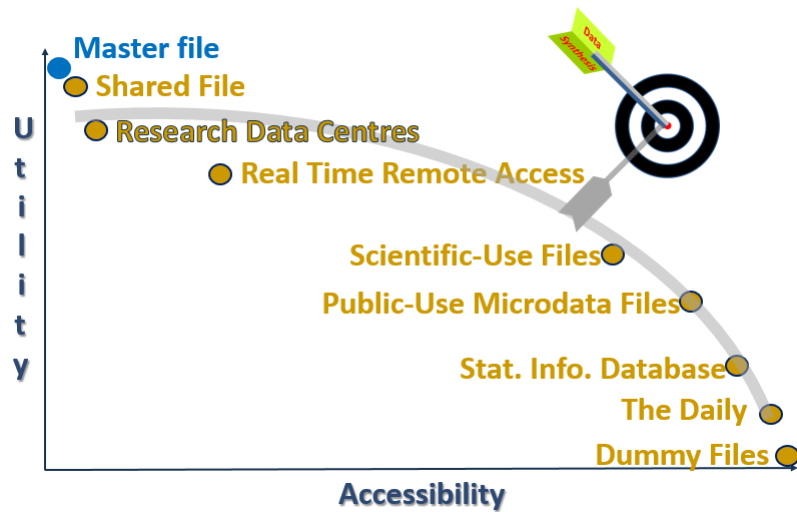


A Research Data Center (RDC) is a secure location containing microdata from a master file subject to anonymization which are under the responsibility and control of the agency. Accredited users are deemed to be employees and can only perform pre-authorized analyses; the results obtained are subject to strict disclosure control rules.
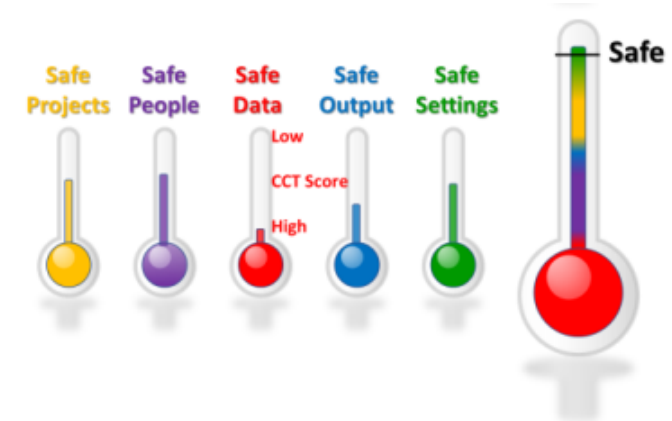


CCT: StatCan's Confid Classification Tool is a simple, lean and self-administered assessment tool raising awareness to the confid nature of its data holdings

# Supporting Documentation… Supporting Whom?

- Growing FAQ suggests outreach activities are successful (with feedback, issues and concerns channeled back to us), and swift updates convey our commitment in addressing users' issues

1) Interpreting statistical information related to gender and sex at birth
2) Dissemination of statistical information related to transgender persons
3) Interpreting the 2-category gender variable for individuals under 18 years of age
4) Creating the new 2-category gender variable (Men+/Women+) when missing data with respect to gender are present
5) About person-level gender information obtained from administrative sources
6) About the role gender may play in the dissemination of statistical information involving biological processes
7) On the simultaneous presence of proxy data and data collected directly from individuals about their gender
8) Interpreting gender data in situations where the gender reported by a parent differs from what the

- Example: (4) *Creating new 2-category gender variable in the presence of partial nonresponse*:
  - Step 1: impute (Men, Women, Non-binary persons, Missing) ⇨ (Men, Women, Non-binary persons)
  - Step2: randomly recode reported/imputed answers (Men, Women, Non-binary persons) ⇨ (Men+, Women+)

# Supporting Documentation… Supporting Whom?

• While 17-pager is comprehensive, it lacks the details to handle some garden-variety situations: quick visual guide outlining dissemination options



The Road to Disseminating Gender-Related Statistical Information, using either Gender OR Sex at Birth OR Gender Diversity
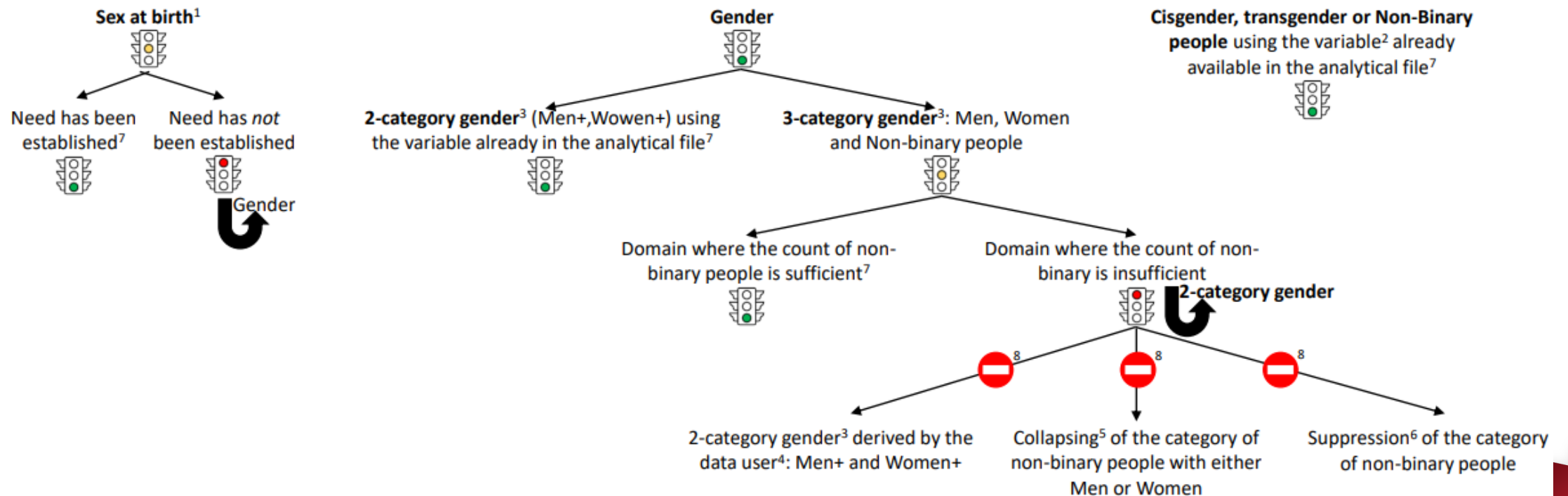
# Concluding Remarks

- Duncan et al. (2021) nicely convey the dual mission of National Statistical Organizations (NSOs)

  [A NSO] *is serving two masters* [providing high quality information and protecting confidentiality], *each with conflicting interests and concerns*.

  ⇨ In practice, NSOs must find proper balance between the two, which is especially challenging in the case of gender: new dissemination area, rare and victimized populations
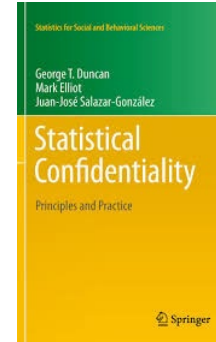
- Recommendations centered on new 2-gender category variable are quite strict, but will be reviewed as further dissemination experience is gained and society's views on gender evolve

- Supporting documentation plays a crucial role in building and maintaining stakeholders' confidence and expertise

# Thank you!
# Merci!

StatsCAN app                    Website

Eh Sayers podcast               Surveys and statistical programs

*StatsCAN Plus*                 Data service centres

*The Daily*                     My StatCan

# Questions?

Related to Gender: statcan.demography-demographie.statcan@statcan.gc.ca
General enquiries: infostats@statcan.gc.ca