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**CHAIRE**

**de déficience intellectuelle  
et troubles du comportement**

**UQÀM**

# The health of persons with ID in Québec

La santé des personnes présentant une déficience intellectuelle  
au Québec

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**Presented by : Hélène Ouellette-Kuntz**

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# The Research Team

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- Co-investigators:
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  - Hélène Ouellette-Kuntz, MSc (Queen's University)
  - Michael Kerr, FRCPSYCH (Cardiff University)
- Research Assistants:
  - Mélissa Clark, MPs (PhD candidate)
  - Julie Mérineau-Côté, MPs (PhD candidate)

# Introduction

- What we know...
  - Persons with ID experience the same health problems as the general population and are even at higher risk for certain conditions (Jones and Kerr, 1997; Jansen et al., 2004; Lin et al., 2003).
  - Many studies have focused on specific health problems (heart diseases, hypothyroidism, constipation...) but few have examined the overall health status of persons with ID.
  - Some studies, like the Pomona Project, have developed and validated health indicators for use in this population (Noonan-Walsh et al., 2008).
  - no studies have examined the overall health of persons with ID in Québec.

# Research Objectives

- Describe the health status of persons with ID in Québec.
- Compare the health status of persons 15 years of age and older with ID to that of the general population of Quebec.
- Identify the health services used by persons with ID in Québec.
- Identify lifestyle behaviours among persons with ID which can contribute to increased health problems.

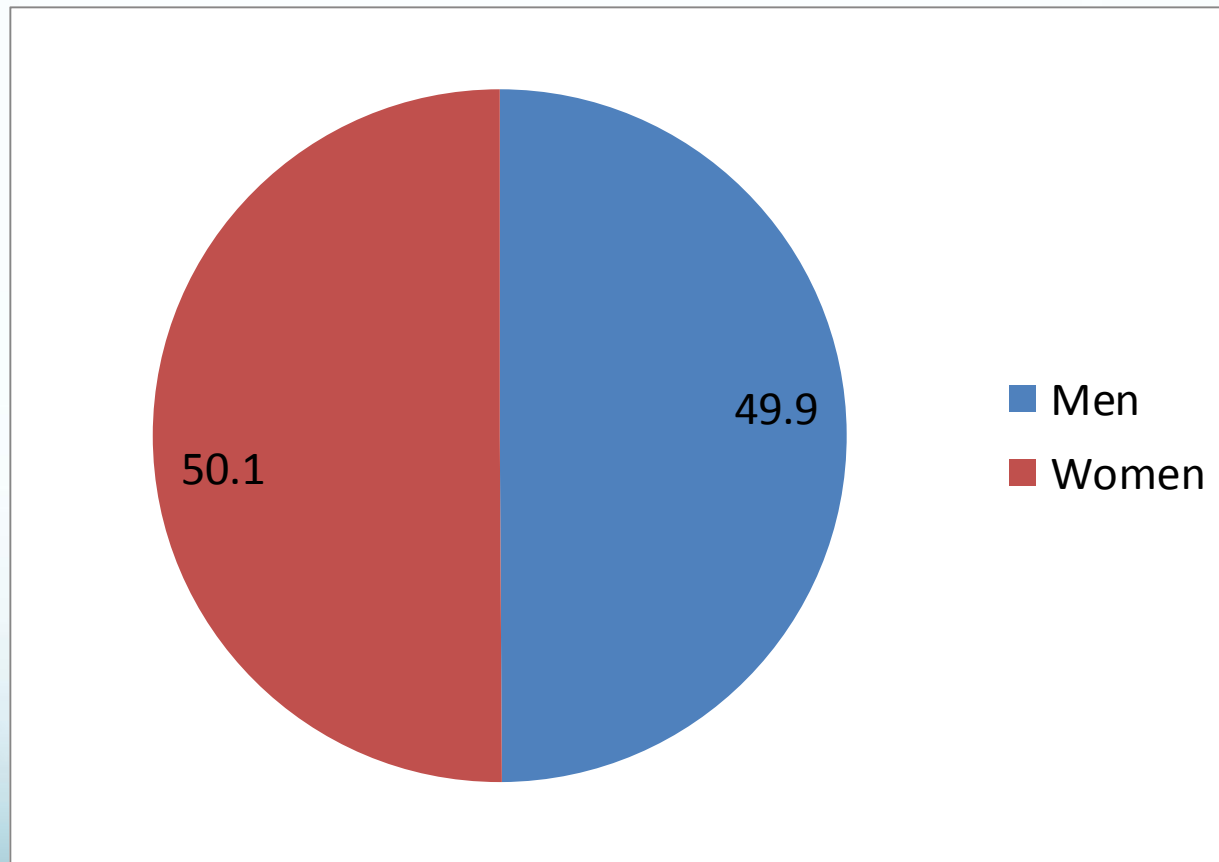
# Methods

# Participants

- N= 791
- Adolescents and adults 15 years and older
- Recruited through ID/PDD rehabilitation centers (CRDITED), primary care centers (CSSS), People First.
  - 87% received services through an ID/PDD rehabilitation center
- 14 of the 17 health regions of the province are included in the sample

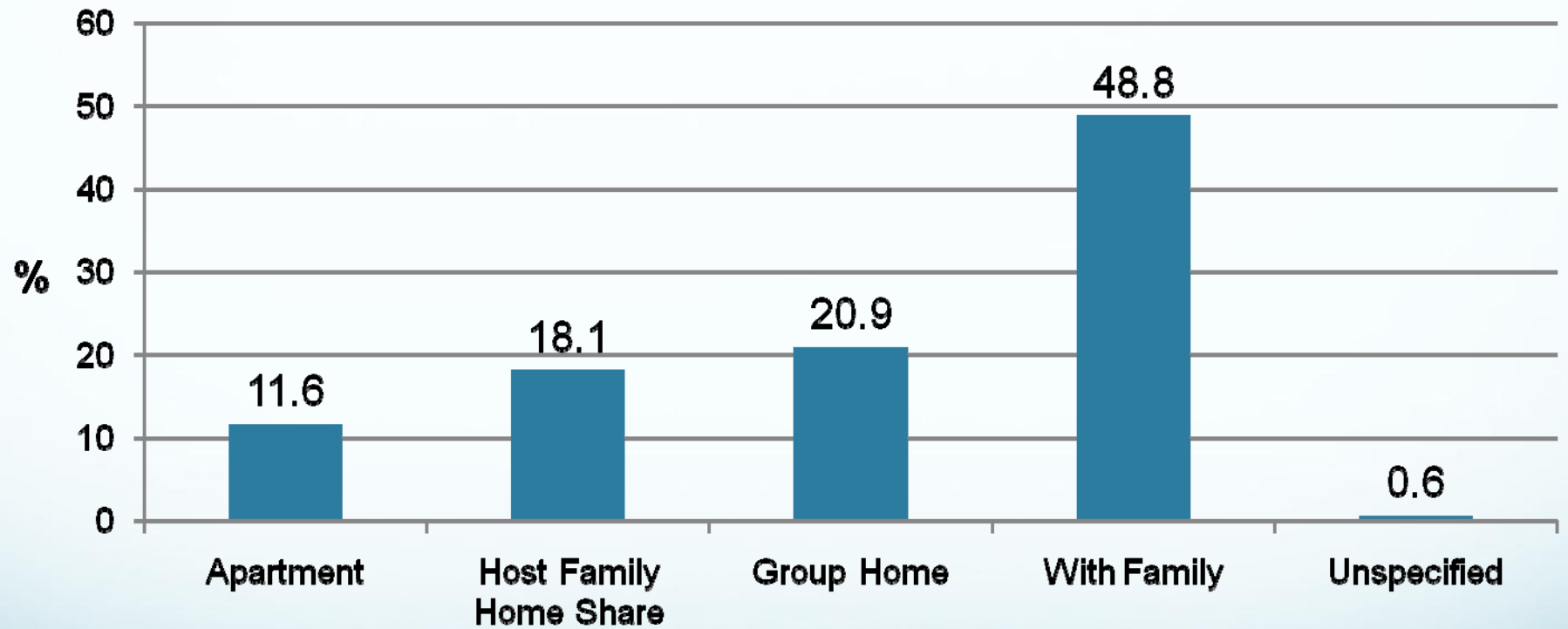
# Participants

## Gender

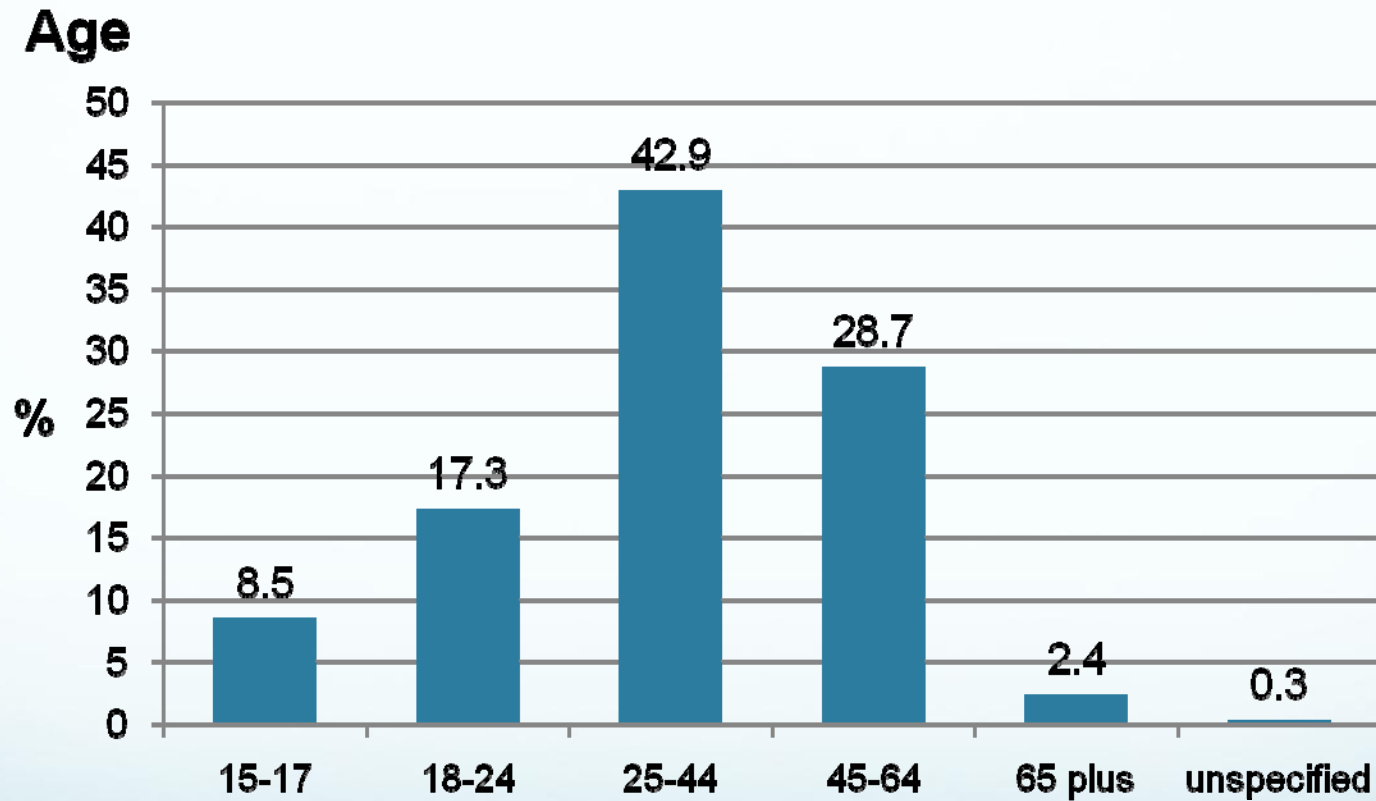


# Participants

## Living Arrangement

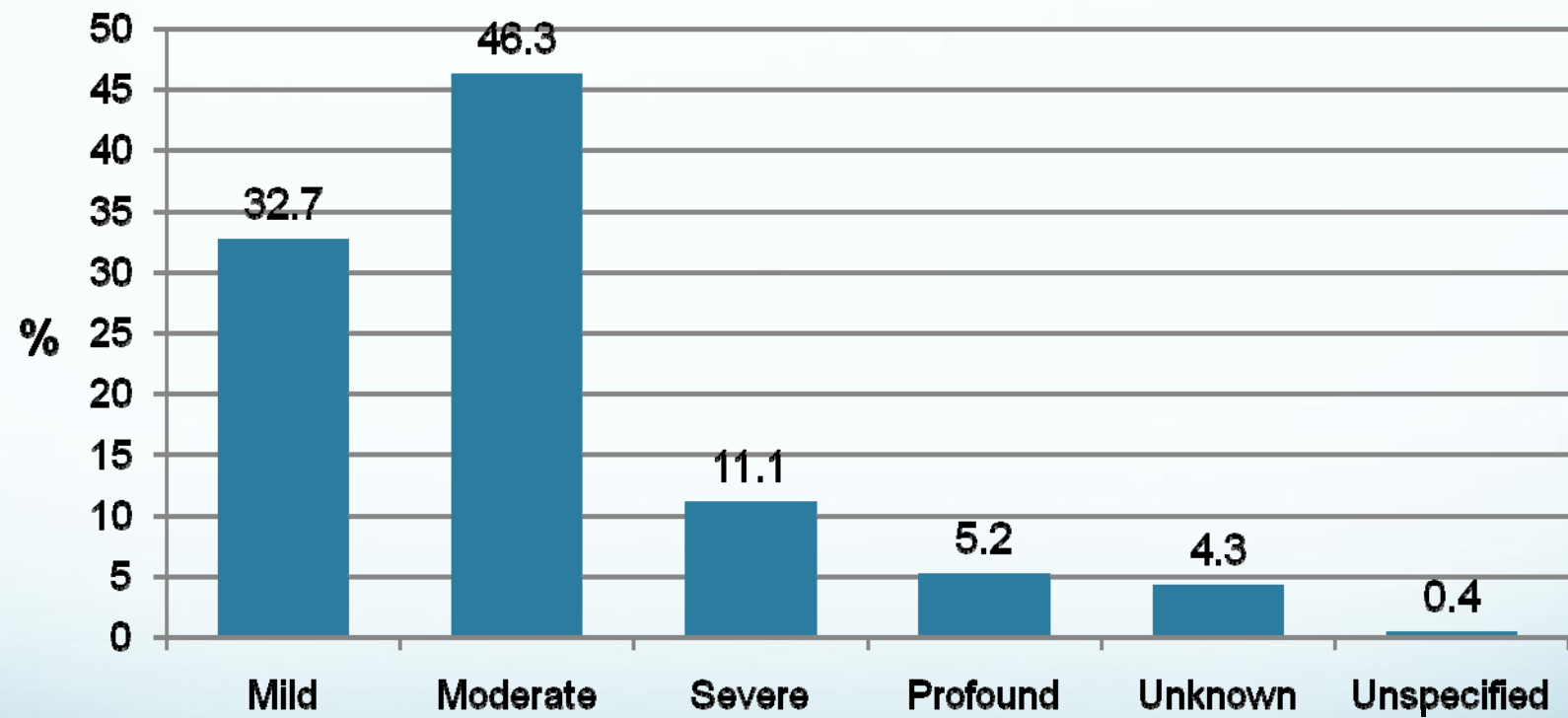


# Participants

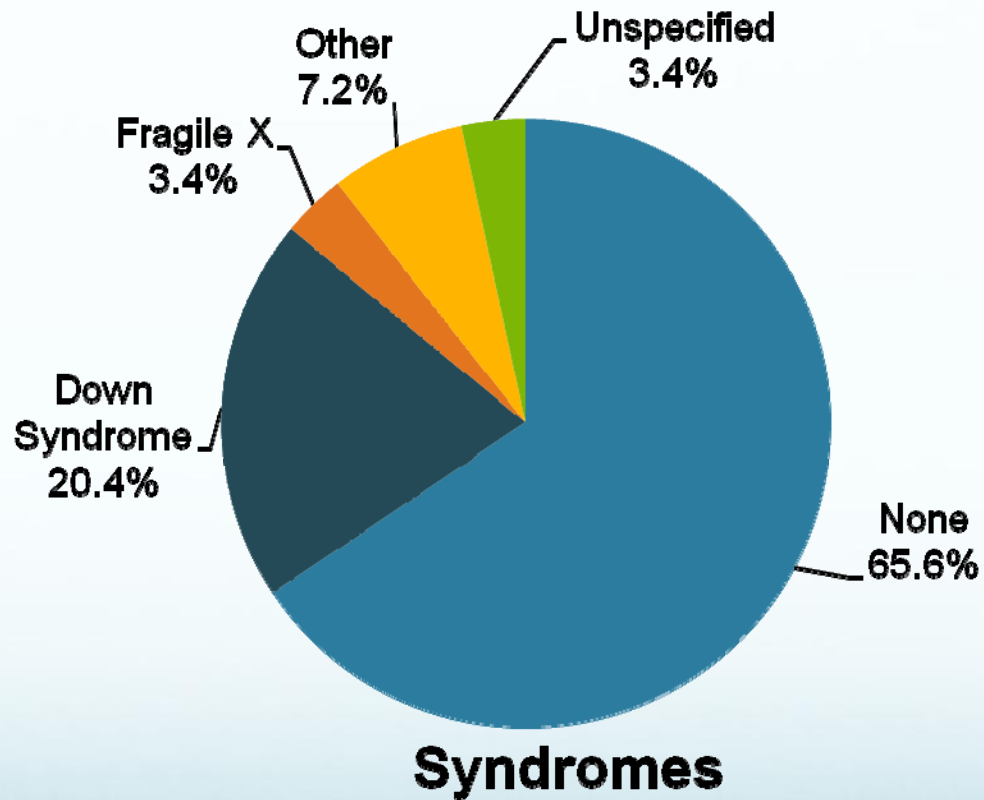


# Participants

## Level of ID



# Participants



# Survey Tools

- SF-36 v2 (Ware et al., 1994):
  - Measure of functional health and wellbeing
  - 8 health domains:
    - Physical functioning, role limitations due to physical health, bodily pain, general health, vitality, social functioning, role limitations due to emotional health, mental health
  - Version 2 has greater reliability and precision than Version 1 (Jenkinson et al., 1999)

# Survey Tools continued

- Demographic Form:
  - Created by the research team
  - Collects information related to Characteristics of the person with ID
    - Living arrangement
    - Diagnoses
    - Sexual health
    - Hospitalization
    - Lifestyle/behaviours
    - Socio-economic indicator
    - Psychological well-being

# Procedure

- 2 questionnaires (SF-36 and Demographic Form) combined into one mail-out survey document
- Survey completed by:
  - Family members (65.5%)
  - Direct care workers (26.5%)
  - Person with ID (7.6%)

# Éco-Santé Québec 2010

- Software freely available on the internet ([www.ecosante.fr](http://www.ecosante.fr))
- Brings together the main social and health data series for Québec
- Data series date back to 1981
- Includes health indicators for the whole of the province as well as its 17 health regions

# Results

# Physical Health

- 78.9% have a diagnosed physical health problem
- The most common physical health problems are:
  - Non-food Allergies (**21.5%**)
  - Seizure disorder (**19.9%**)
  - Skin problems (**13.1%**)
  - Hypo or hyperthyroidism (**12.1%**)
  - Gastrointestinal problems (**11.3%**)

Health Problem	% among persons with ID	% among general population (Éco-Santé 2009)
Hypo/hyperthyroidism	<b>11.2</b>	6.7 ***
Back Problems	11.2	<b>16.4 ***</b>
Migraines	6.5	<b>9.8**</b>
Asthma	7.0	8.6
Cardiac disease	<b>7.2</b>	5.1 **
Diabetes	8.3	5.1
Arthritis	6.7	<b>14.1 ***</b>
Food Allergies	2.4	<b>5.8 ***</b>

\* p<0.05 \*\* p<0.01 \*\*\*p<0.001

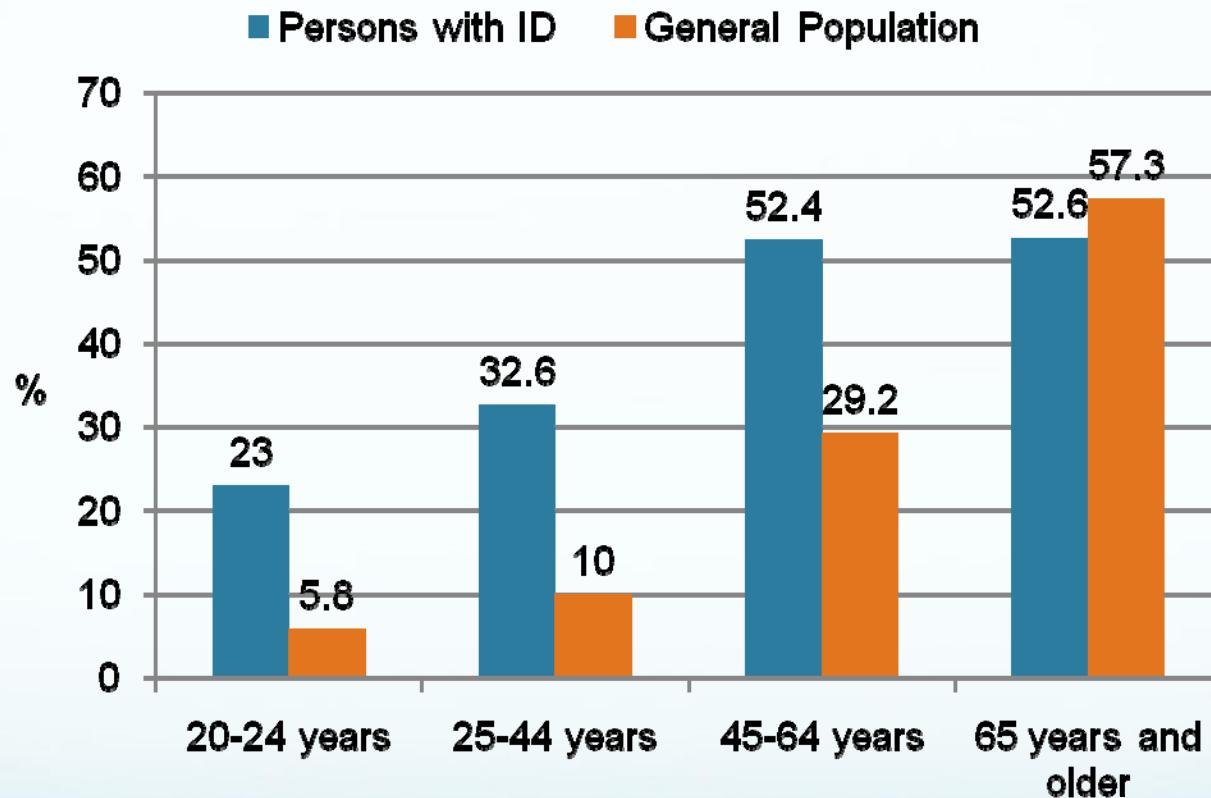
Health Problem	% among persons with ID without DS	% among persons with DS	% among general population (Éco-Santé 2009)
Hypo/hyperthyroidism	7.2	<b>28.5***</b>	6.7
Back Problems	<b>10.4***</b>	14.7	16.4
Migraines	7.2	<b>3.1**</b>	9.8
Asthma	7.6	<b>4.6*</b>	8.6
Cardiac disease	5.8	<b>14.2***</b>	5.1
Diabetes	<b>9.6**</b>	4.2	5.1
Arthritis	<b>6.3***</b>	<b>8.8*</b>	14.1
Food Allergies	<b>2.2***</b>	3.7	5.8

\* p<0.05 \*\* p<0.01 \*\*\*p<0.001

Health Problem	% among persons with mild-moderate ID	% among persons with severe-profound ID	% among general population (Éco-Santé 2009)
Hypo/hyperthyroidism	<b>9.9***</b>	<b>13.8**</b>	6.7
Back Problems	<b>11.4***</b>	<b>7.4**</b>	16.4
Migraines	7.4	<b>3.3*</b>	9.8
Asthma	7.6	4.3	8.6
Cardiac disease	<b>7.9**</b>	4.4	5.1
Diabetes	8.6	4.8	5.1
Arthritis	<b>5.8***</b>	<b>6.6*</b>	14.1
Food Allergies	<b>2.8***</b>	1.3	5.8

\* p<0.05 \*\* p<0.01 \*\*\*p<0.001

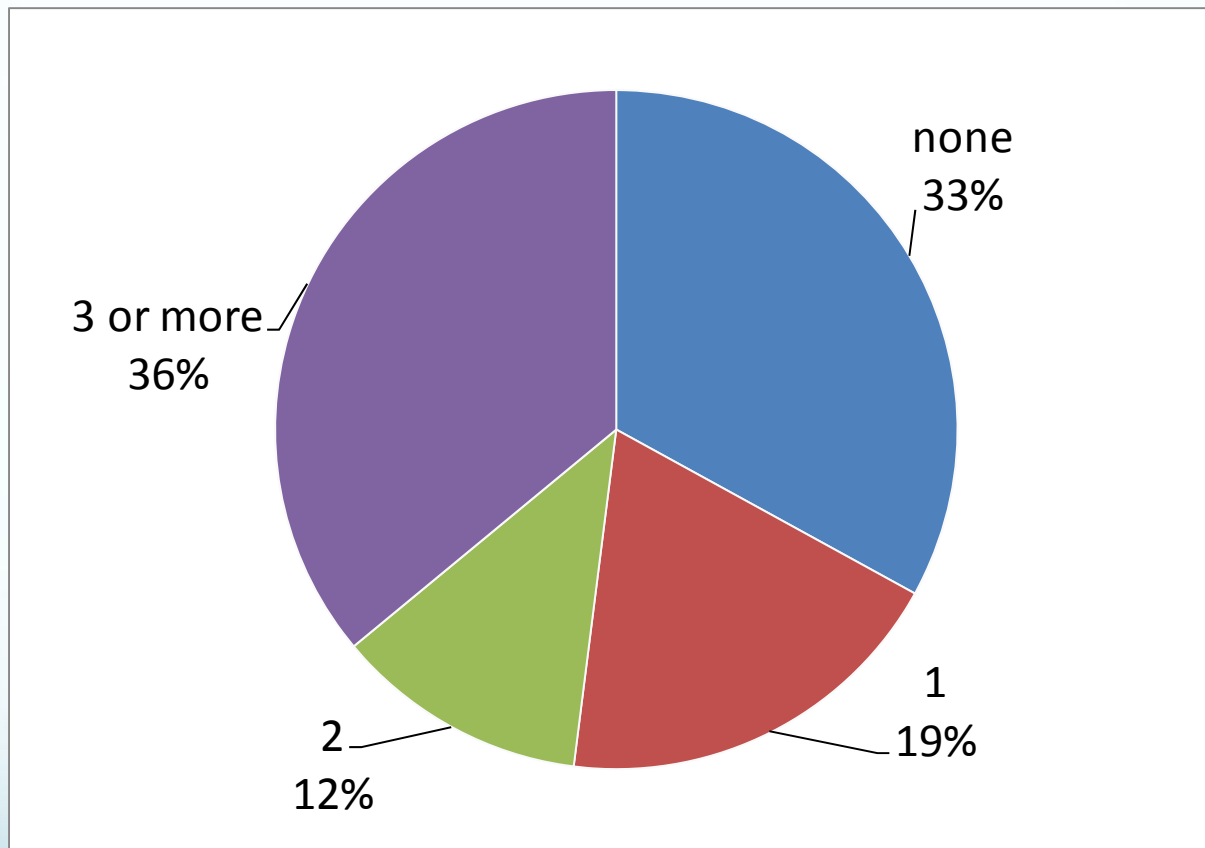
# Medications



- Under 65 years: significant difference,  $p < 0.001$
- Among those 65 years and older, the difference disappears.

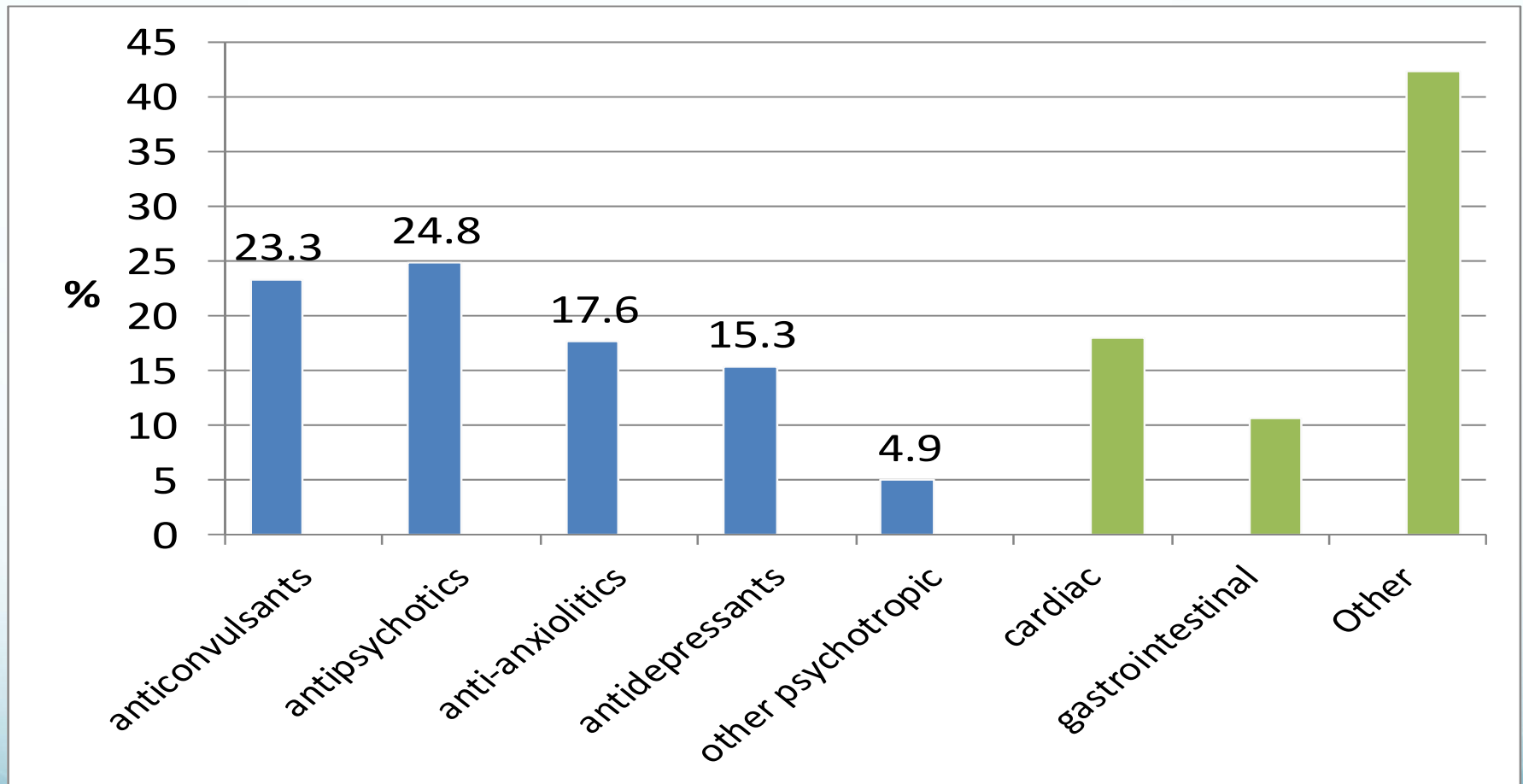
# Medications

(% of persons with ID)



# Medications

(% persons with ID)



# Mental Health

- 40.9% have a diagnosed mental health problem
  - 11.4 % have 2 to 5 different mental health diagnoses
- The most common mental health problems are:
  - Anxiety Disorders (**15.1%**)
  - Pervasive Developmental Disorders (**9.3%**)
  - Mood Disorders (**8.8%**)
  - Psychotic Disorders (**5.8%**)

## **Health care utilization among persons with ID**

# Health services used

- **81.2%** have consulted with a general practitioner in the past 12 months.
- **69.9%** have had an annual health exam in the past 12 months.

# Hospitalizations

- **13.8 %** (109 persons) of the sample have been hospitalized in the past 12 months.
- Among them,
  - 80.7% (88) were hospitalized for **physical health** problems
  - 22% (24) were hospitalized for **mental health or behavioural problems**

# Specialists consulted

## In the past 12 months:

- Dentist: **62.5%**
- Optometrist: **30.4%**
- Psychiatrist: **18%**
- Neurologist: **15.6%**
- Gynecologist/urologist: **12.7%**
- Orthopedist: **8.8%**
- ENT: **8.5%**
- Dermatologist: **7.8%**
- Cardiologist: **7.4%**
- Podiatrist: **7.3%**
- Psychologist: **6.8%**
- Audiologist: **6.4%**
- Occupational Therapist: **6%**
- SLP: **5.6%**
- Physiotherapist: **4.6%**
- Endocrinologist: **4%**
- Gastroenterologist: **3.6%**
- Hematologist: **3.5%**

## Comparison with the general population

Health care utilization in the past 12 months	% of persons with ID	% of the general population (Éco-santé 2009)
Eye exam	30.4%	<b>39.3%***</b>
Dental exam	<b>62.5%</b>	57.3%**
Psychology	<b>6.8%</b>	5%*
Psychiatry	<b>18%</b>	1.3%***
Physiotherapy	4.6%	<b>7.3%**</b>

\* p<0.05; \*\* p<0.01; \*\*\* p<0.001

## Comparison with the general population

Health care utilization	% persons with ID	% general population (Éco-santé 2009)
Pap Test (women 18 to 69 years)	28% (last 2 yrs) 40.5% (ever)	<b>70.1%***</b> (last 3yrs)
Mammography (women 50 to 69; note there were only 63 women with ID of this age in the sample)	58.7% (last 2 yrs) 61.9% (ever)	65% (last 3 yrs)
Prostate Cancer Screening (men 50 years and older)	<b>31.9%</b>	17.9%**
Influenza vaccination in the past year (50 years and older)	<b>82.4%</b>	46.1%***
Seen a general practitioner in the past year	<b>81.2%</b>	69.2%***

\* p<0.05; \*\* p<0.01; \*\*\* p<0.001

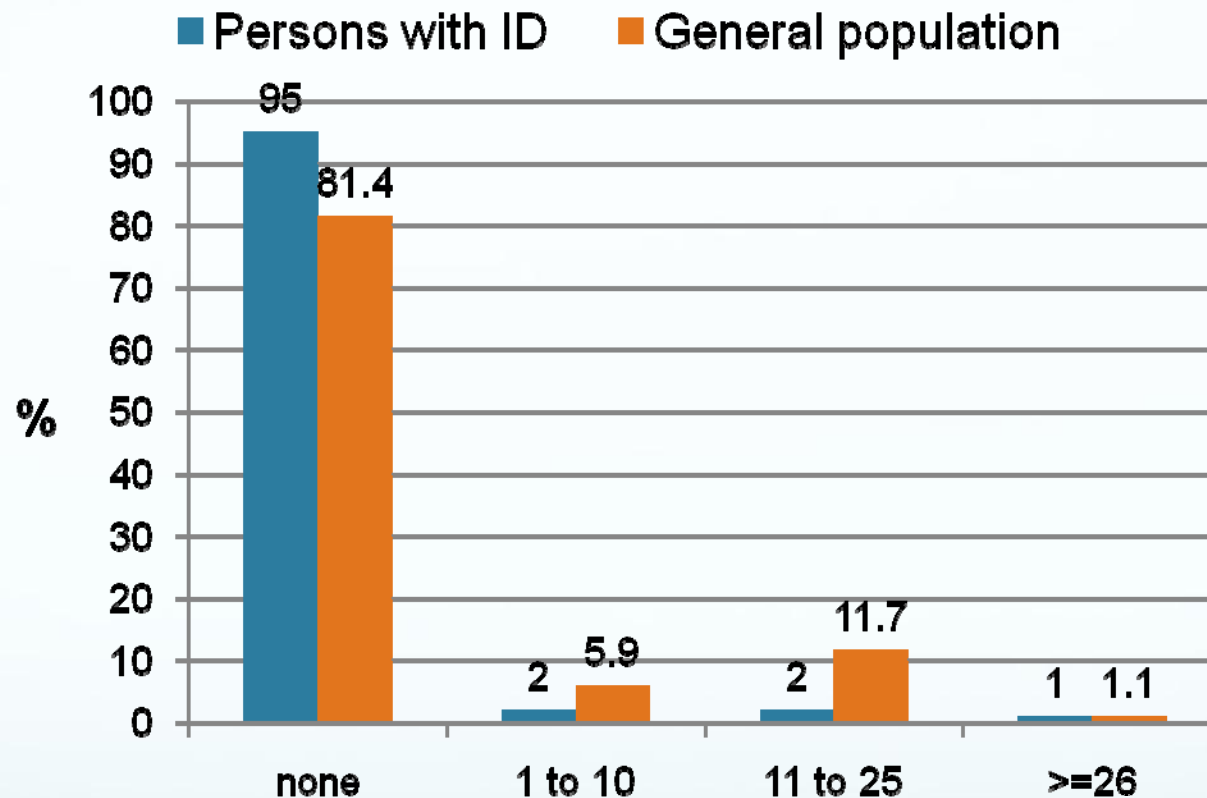
**Lifestyle/behaviours**

# Healthy Lifestyle

- **No consumption of tobacco, alcohol or illicit drugs**
- **A balanced nutrition** : including a sufficiently large quantity of fruits and vegetables each day
- **Physical activity**: at least 30 minutes of medium intensity activity per day
- **Healthy body weight** : BMI between 18.5 and 24.9

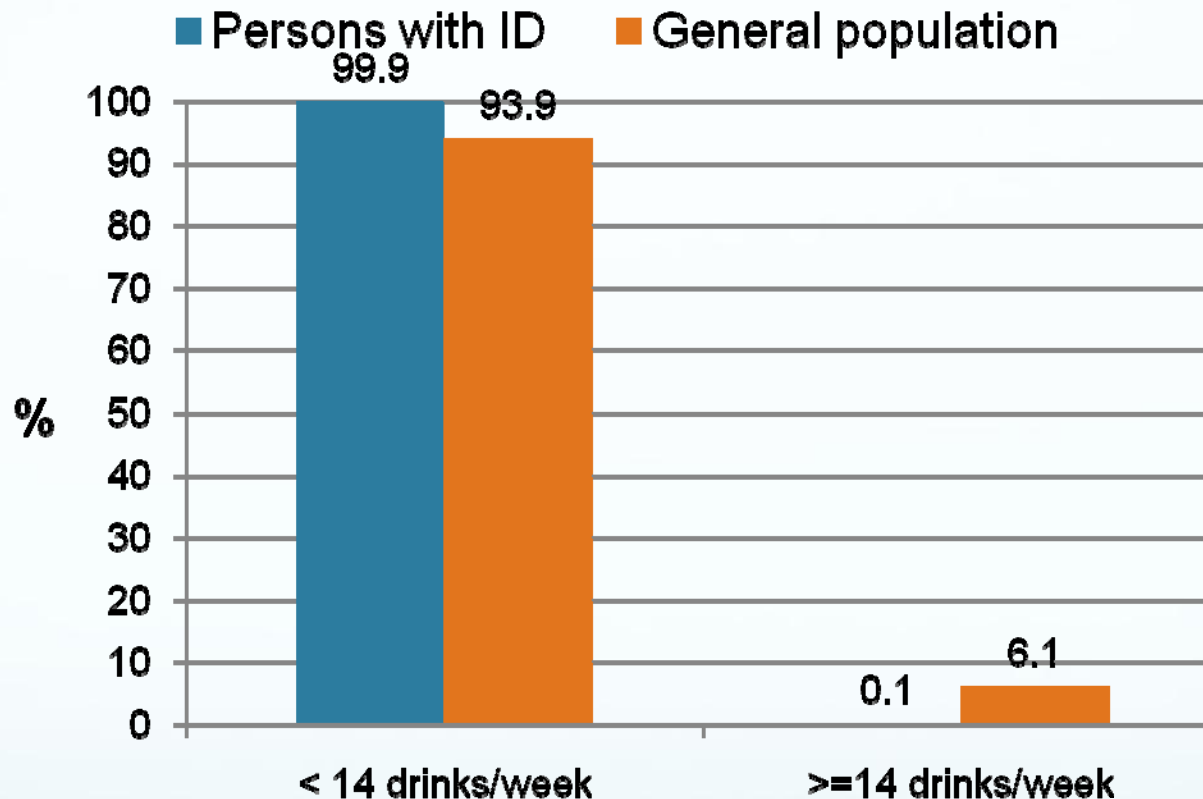
(Jobling, 2001; Winter, 2009; McGuire, 2007)

# Tobacco consumption



- Cigarettes smoked per day is significantly lower among persons with ID compared to the general population:
  - $\chi^2(3) = 99.205$   
 $p < .001$

# Alcohol consumption

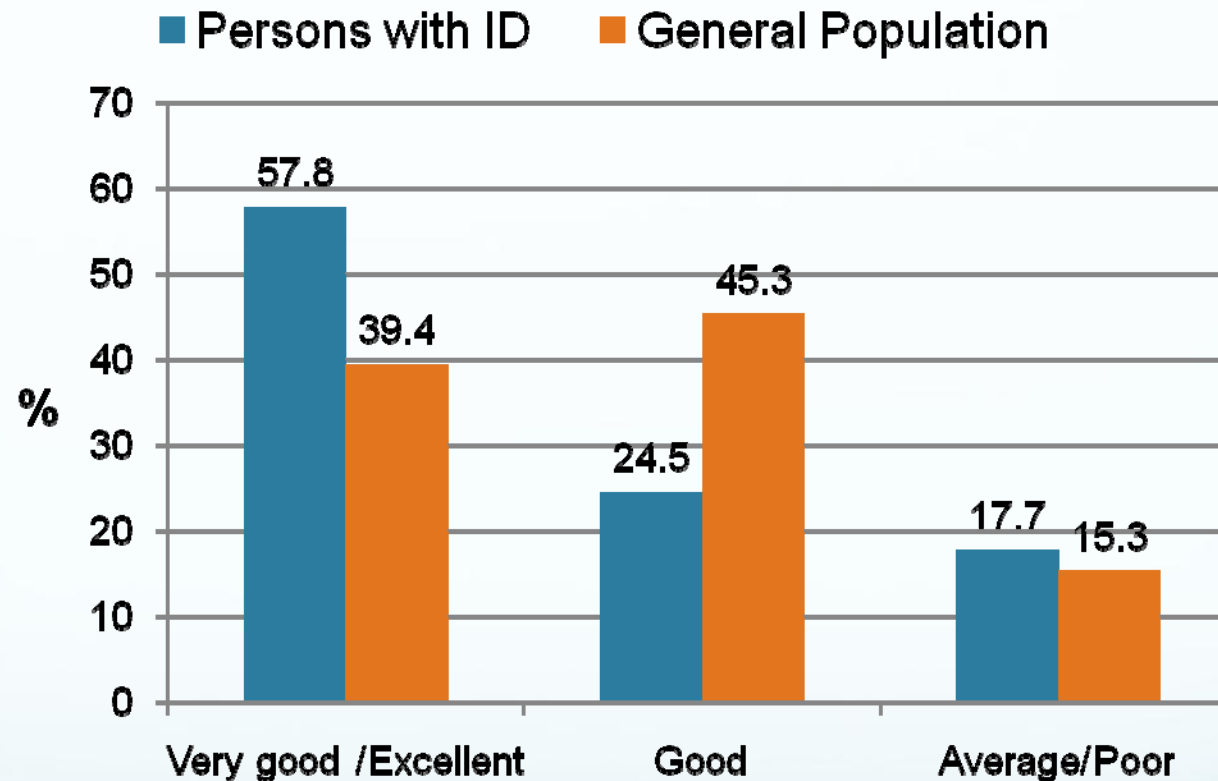


- Alcohol consumption per week is significantly lower among persons with ID compared to the general population:
  - $\chi^2(1) = 48.953$   
 $p < .001$

# Illicit drug consumption

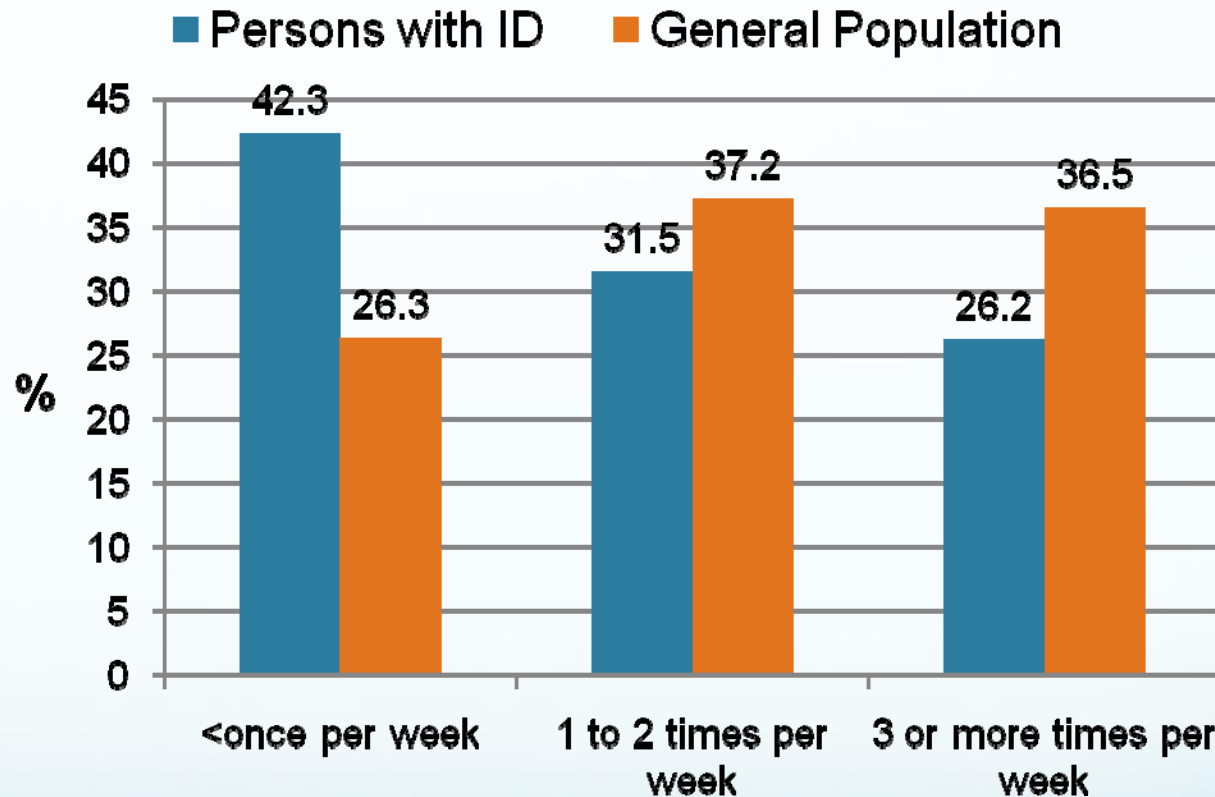
- 1% of the sample used in the last 12 months
- Type :
  - Cannabis (n=3)
  - Amphetamin (n=1)
- Frequency :
  - 1 to 6 times per month (n=5)
  - 7 to 13 times per month (n=1)

# Perceptions of nutritional habits



- Significant differences BUT
  - Proxy respondents for 92.4% of persons with ID
    - ...likely the ones preparing meals and judging the nutritional value of what they are preparing

# Frequency of Physical Activity

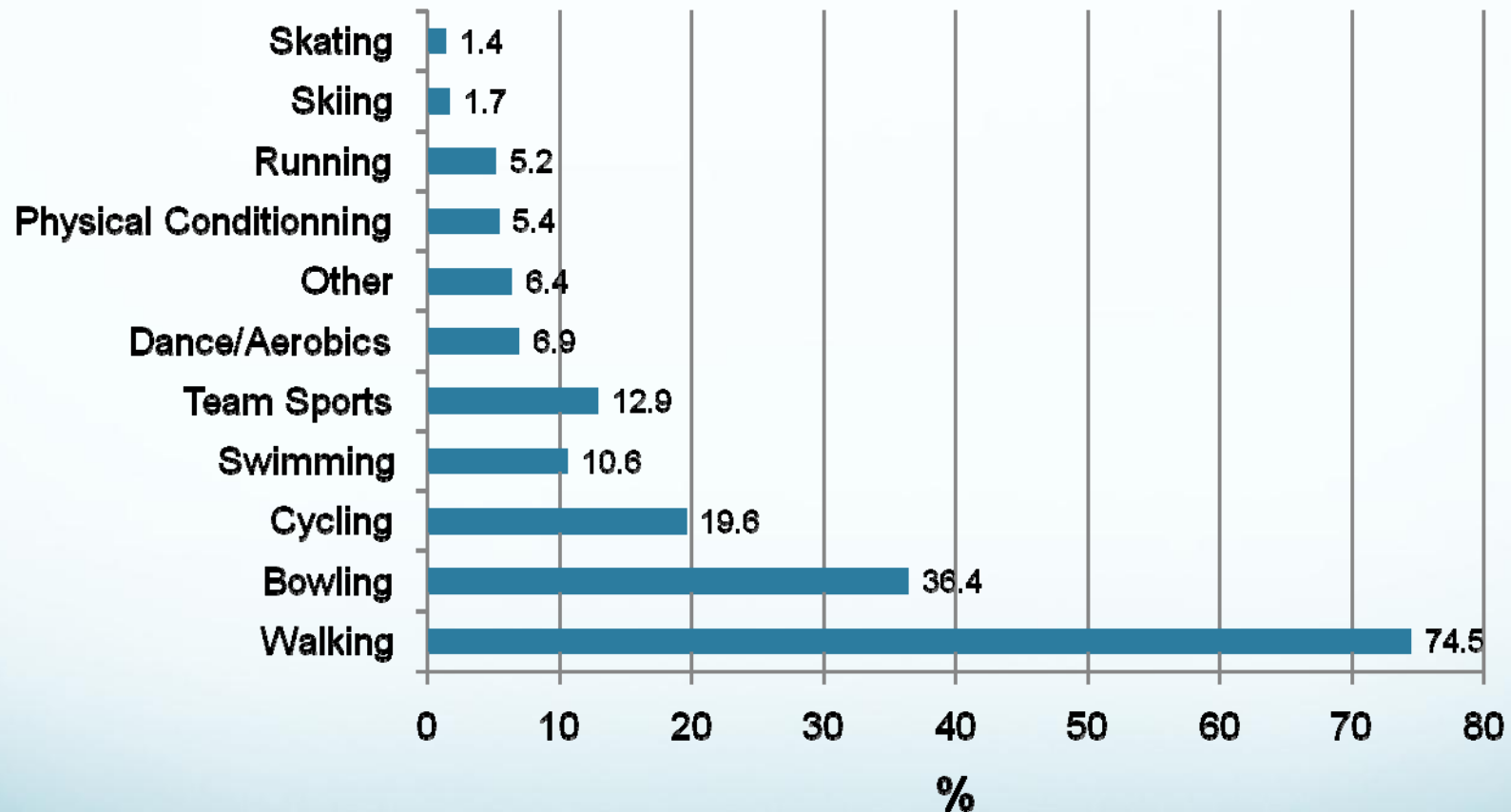


- Among those 18 years and older, the frequency of physical activity is significantly lower than that reported in the general population.

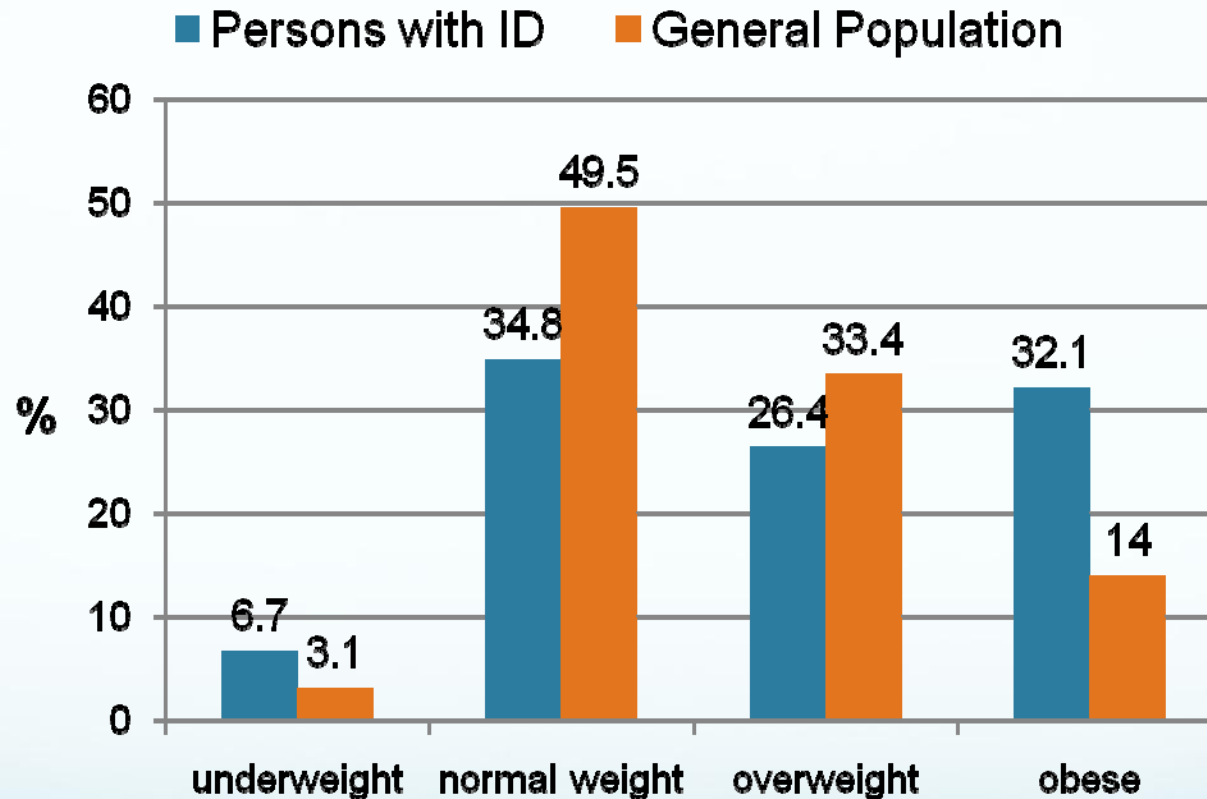
$$\chi^2(2) = 111.516, p < .001$$

# Types of Physical Activities Among Persons with ID

(not mutually exclusive)



# Weight (as per BMI) among those 18 years and older



- Significant differences at the two extremes.
- $\chi^2(3) = 254.527, p < .001$

# Summary and Discussion

- Persons with ID in Québec have a variety of physical and mental health problems.
  - 78.9% have physical health problems
  - 40.9% have mental health problems
- Diagnosed physical health conditions are fairly comparable to those found in the general population
  - After accounting for the effect of DS on cardiac and thyroid disorders
- The possibility of misdiagnoses and/or missed diagnoses remains
  - Conditions where pain or discomfort is a key symptom (back problems, arthritis and food allergies) are less commonly diagnosed.
- A high proportion (81.2%) of persons with ID in our sample have seen a general practitioner in the past 12 months.

- The lower uptake for the **Pap Test** is consistent with results reported by Lewis et al. (2002).
- The uptake of **mammography** is not significantly different from that reported in the general population but this finding may lack precision and reliability due to the small sample size.
  - An alternate explanation: All 50+ year old women in Quebec receive a written invitation to make an appointment for mammography at no cost.
- The difference in **prostate cancer screening** uptake may be due to differences in the questions used across the surveys.
- Similarly the difference in **influenza vaccination** uptake may be due to the difference in timing of the two surveys (ID survey was during the AH1N1 epidemic while EcoSanté data were collected prior to it).

- Many studies have reported similarly low rates of **drug and alcohol consumption** (see Robertson et al., 2000; Winter et al., 2009; McGuire et al., 2007).
  - The low rates of consumption in our sample could be due to:
    - the proportion (20.9%) who live in highly supervised residences (see Rimer, 1994; McGuire et al., 2007)
    - the more severe level of ID (Winter et al., 2009)
      - Only 32.7% had mild ID
- Our results suggesting excellent to very good **nutrition** are inconsistent with previously published findings (see Robertson et al., 2000; Winter et al., 2009; Haveman et al., 2010; Mann et al., 2006) but could be an artifact of the survey being completed by proxies.

- Our finding that persons with ID are less likely to be **physically active** is consistent with previously published research (see Finlayson et al., 2009; Stanish et al., 2005; Lin et al., 2010).
- The **weight/BMI** distribution we observed among persons with ID (more underweight and more obese) requires further examination given the published literature on the topic:
  - Women with ID are more likely to be obese (see Schooler, 2004; Ito, 2006; Moore, 2004; Rimmer, 2006).
  - Hove (2004) notes that persons dependent on others for their meals tend to be underweight, while those who exercise more choice and independence in accessing food are more likely to be obese.
  - Others have found that age (Melville et al., 2008), level of ID, and living arrangement (Maakant, 2008; Geller, 2009) do not have an impact on weight/BMI.

# Conclusion

- The health behaviours, health status and health care utilization of persons with ID in Québec follow very similar patterns to those observed elsewhere.
- The study points out significant disparities in health when persons with ID are compared to the general population in Québec.
- The survey provides a baseline against which to measure impact of changes to the provision of health and social supports to persons with ID in Québec.

Questions

