

# Fragile X syndrome (FXS)

## CANADIAN PAEDIATRIC SURVEILLANCE PROGRAM

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## REPORTING INFORMATION

(To be completed by the CPSP Senior Coordinator)

Report number: \_\_\_\_\_

Month of reporting: \_\_\_\_\_

Province: \_\_\_\_\_

Today's date: \_\_\_\_\_

**Please complete the following sections for the case identified above.  
Strict confidentiality of information will be assured.**

### CASE DEFINITION FOR FRAGILE X SYNDROME

Report any new patient less than 18 years of age with diagnosed fragile X syndrome (FXS) meeting the following criteria:

- 1) **Genetic criteria:** Male or female, with laboratory confirmation of a CGG repeat allele in the full mutation size range (>200 repeats), including mosaicism

**AND**

- 2) **Clinical criteria, one** of the following:
- Global developmental delay, manifesting as the clinical impression of delays in two or more domains of development **or**
  - Intellectual disability, mild, moderate or severe, diagnosed through standardized psychological testing **or**
  - Asymptomatic infant, tested because of a positive family history, including prenatally diagnosed cases

### Exclusion criteria

Clinical evidence of global developmental delays or intellectual disability with laboratory confirmation of a CGG repeat allele in the normal or premutation size range.

Month first seen \_\_\_\_\_

## SECTION 1 – DEMOGRAPHIC INFORMATION

1.1 Date of birth: \_\_\_\_ / \_\_\_\_ / \_\_\_\_ 1.2 Sex: Male \_\_\_\_ Female \_\_\_\_  
DD MM YYYY

1.3 Province/Territory of residence: \_\_\_\_\_

1.4 Postal code of home address – first three digits only: \_\_\_\_ \_ \_

1.5 Ethnicity

First Nations \_\_\_\_ Innu \_\_\_\_ Inuit \_\_\_\_ Métis \_\_\_\_ Chinese \_\_\_\_ Japanese \_\_\_\_

Other Oriental \_\_\_\_ East Indian \_\_\_\_ Black \_\_\_\_ Caucasian \_\_\_\_ Latin American \_\_\_\_

Middle Eastern \_\_\_\_ Other, specify: \_\_\_\_\_ Unknown \_\_\_\_

## SECTION 2 – CLINICAL PRESENTATION

2.1 Age of patient at first parental concern: \_\_\_\_ years \_\_\_\_ months

2.2 Date of fragile X test result: \_\_\_\_ / \_\_\_\_ / \_\_\_\_  
DD MM YYYY

2.3 Did you order the diagnostic test: Yes \_\_\_\_ No \_\_\_\_

If not, specify who did: Family doctor \_\_\_\_ Other paediatrician \_\_\_\_ Neurologist \_\_\_\_ Geneticist \_\_\_\_  
Psychiatrist \_\_\_\_ Other \_\_\_\_\_

**SECTION 2 – CLINICAL PRESENTATION (cont'd)**

2.4 Reason for referral to you (reporting physician) – check all that apply:

- Depressed mood
- Developmental delay (delayed milestones)
- Intellectual disability
- Attention deficit hyperactivity disorder
- Anxiety
- Autism spectrum features (social, language and repetitive behaviours)
- Seizures
- Other, specify: \_\_\_\_\_

2.5 Referral source

- Family physician       Medical geneticist       Neurologist       Psychiatrist
- Public health nurse       Family member       Speech therapist       Physiotherapist
- Occupational therapist       Infant/child development professional
- Other, specify: \_\_\_\_\_

**SECTION 3 – CLINICAL FINDINGS**

3.1 Physical features at presentation – check all that apply:

- Tall stature (height >95-98 percentile)       Height \_\_\_\_\_ cm      Percentile on growth chart \_\_\_\_\_
- Macrocephaly (HC >98 percentile)       HC \_\_\_\_\_ cm      Percentile on growth chart \_\_\_\_\_
- Long face       High-arched palate       Large or prominent ears       Macro-orchidism
- Pes planus (flat feet)       Hyper-extensible finger joints

3.2 Medical diagnoses – check all that apply, current or past:

	Yes	No	Unknown
• Seizures	___	___	___
• Gastroesophageal reflux	___	___	___
• Cleft palate	___	___	___
• Mitral valve prolapse	___	___	___
• Inguinal hernia	___	___	___
• Scoliosis	___	___	___
• Sleep apnea	___	___	___
• Recurrent otitis media	___	___	___
• Hearing loss	___	___	___
• Speech/communication problems	___	___	___
• Eye/vision problems	___	___	___
If yes, specify: _____			
• ADHD	___	___	___
• Anxiety	___	___	___
• Autism spectrum disorder*	___	___	___
• Other mental health problems	___	___	___
If yes, specify: _____			

\*Autism spectrum disorder confirmed using standardized assessment tools (ADI-R and ADOS)

**SECTION 3 – CLINICAL FINDINGS (cont'd)**

3.3 Indicate the classification of intellectual disability confirmed by standardized psychometric testing:

3.3.1 Age at most recent psychometric testing: \_\_\_\_\_ years \_\_\_\_\_ months

3.3.2 Full-scale IQ or general conceptual ability: \_\_\_\_\_

3.3.3 Description of classification of intellectual disability:

severity unspecified \_\_\_\_\_ mild (IQ 50-55 to 70) \_\_\_\_\_ moderate (IQ 35-40 to 50-55) \_\_\_\_\_  
 severe (IQ 20-25 to 35-40) \_\_\_\_\_ profound (IQ <20 or 25) \_\_\_\_\_

3.4 Indicate which of the following have been used in the patient's care – check all that apply:

**Yes No Unknown**

- Developmental paediatrician \_\_\_\_\_
- Psychologist \_\_\_\_\_
- Psychiatrist \_\_\_\_\_
- Paediatric neurologist \_\_\_\_\_
- Clinical geneticist \_\_\_\_\_
- Genetic counseling of family members \_\_\_\_\_
- Occupational therapist \_\_\_\_\_
- Speech therapist \_\_\_\_\_
- Autism intervention program \_\_\_\_\_
- Support group for FXS \_\_\_\_\_
- Specialty FXS clinic \_\_\_\_\_
- Other, specify: \_\_\_\_\_

3.5 Current medications and non-prescription products

**Yes No Unknown**

- Medications \_\_\_\_\_
- Non-prescription medications \_\_\_\_\_
- Natural health products \_\_\_\_\_
- Vitamins \_\_\_\_\_
- Other \_\_\_\_\_

If yes, specify name and dosage:

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**SECTION 4 – FAMILY HISTORY**

4.1 Indicate whether there are family members diagnosed with the following:

**Yes No Unknown**

**Fragile X syndrome**

\_\_\_\_\_

If yes, specify relationship to child: \_\_\_\_\_

**FXPOI (fragile X-associated primary ovarian insufficiency)**

\_\_\_\_\_

Associated with fragile X premutation in females and including irregular menstrual cycles, infertility, and menopause before age 40 years

If yes, specify relationship to child: \_\_\_\_\_

**SECTION 4 – FAMILY HISTORY (cont'd)**

**Yes No Unknown**

**FXTAS** (fragile X-associated tremor-ataxia syndrome)

\_\_\_ \_\_\_ \_\_\_

Associated with fragile X premutation primarily affecting older males and including balance problems, intention tremor, and cognitive impairment

If yes, specify relationship to child: \_\_\_\_\_

**SECTION 5 – ADDITIONAL COMMENTS OR FEEDBACK**

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

I agree to be contacted by the research team for further information.

I do not wish to be contacted by the research team for further information.

**SECTION 6 – REPORTING PHYSICIAN**

First name \_\_\_\_\_ Surname \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ Province \_\_\_\_\_ Postal code \_\_\_\_\_

Telephone number \_\_\_\_\_ Fax number \_\_\_\_\_

E-mail \_\_\_\_\_ Date completed \_\_\_\_\_

**Thank you for completing this form.**