

Severe iron-deficiency anemia in infants and young children (IDA)

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 SEVERE IRON DEFICIENCY ANEMIA IN INFANTS AND YOUNG CHILDREN

Report all otherwise healthy infants and young children from six months to 36 months of age with severe iron-deficiency anemia defined as:

Hemoglobin < 80g/L and low mean corpuscular volume (MCV; below normal for age),

plus one of the following:

- low ferritin
- low iron
- high transferrin receptor
- high free-erythrocyte protoporphyrin
- correction of anemia with iron therapy

Exclusion criteria

- Chronic disease known to be associated with anemia
- Diseases associated with malabsorption
- Conditions associated with blood loss, such as trauma, surgery, and frequent bloodletting
- Known congenital hemoglobinopathy
- Known disorders of clotting
- Blood loss due to acute or chronic disease causing gastrointestinal bleeding

Month first seen _____

SECTION 1 – DEMOGRAPHIC INFORMATION

1.1 Date of diagnosis of severe IDA: ____ / ____ / ____
DD MM YYYY

1.2 Date of birth: ____ / ____ / ____ 1.3 Sex: Male ____ Female ____
DD MM YYYY

1.4 Postal code of home address, first 3 characters only: ____

1.5 Where did the child spend more of his/her life? Province/Territory: _____ Unknown ____

1.6 Did the child's family immigrate to Canada? Yes ____ No ____ Unknown ____

If yes, specify country: _____ Date arrived in Canada: ____ / ____
MM YYYY

1.7 Does the child have a caregiver other than the parent(s)?

Yes ____ No ____ If yes, specify: Relative (specify) _____ Child care personnel ____

1.8 Ethnicity – mother: Aboriginal ____ – If known: First Nations ____ Innu ____ Inuit ____ Métis ____

Asian (specify): _____ Black ____ Caucasian ____

Latin American ____ Middle Eastern ____ Unknown ____ Other (specify) _____

1.9 Ethnicity – father: Aboriginal ____ – If known: First Nations ____ Innu ____ Inuit ____ Métis ____

Asian (specify): _____ Black ____ Caucasian ____

Latin American ____ Middle Eastern ____ Unknown ____ Other (specify) _____

SECTION 1 – DEMOGRAPHIC INFORMATION (cont'd)

1.10 What is the highest level of education completed by the child's mother?

Primary school ____ High school ____ College/University ____

SECTION 2 – MEDICAL HISTORY**Yes No Unknown**

2.1 Age of mother at delivery: ____ years

2.2 Gestational age: ____ weeks

2.3 Did the child have other medical conditions?

If yes, specify: _____

2.4 Does the child have any food allergies/intolerances or restrictions?

If yes, specify: _____

2.5 Was the child on medications at the time of anemia being recognized?

If yes, specify: _____

SECTION 3 – NUTRITION AND HEALTH HISTORY**Yes No Unknown**

3.1 Current height: ____ cm or ____ inches; weight: ____ kg or ____ lbs.

3.2 Was the child ever breast fed?

If yes, specify duration: ____ months Exclusively ____ Partly ____

3.3 What best describes the child's **current milk feeding** (check all that apply):

3.3.1 Breast milk

3.3.2 Commercial infant formula

If yes, specify: cow's milk protein-based iron-containing ____

non iron-containing ____ soy protein-based formula ____

age when started: _____ stopped: _____

amount per day (on average): _____ mL or _____ oz

3.3.3 Cow's milk

If yes, specify: 3.25% ____ partly skimmed milk (1% and 2%) ____

age when started: _____ stopped: _____

amount per day (on average): _____ mL or _____ oz

3.3.4 Homemade evaporated milk formula

3.3.5 Goat's milk

None ____ Other: _____

3.4 Does the child drink juice?

If yes, age when started: _____ age when stopped: _____

Amount per day (on average): _____ mL or _____ oz

3.5 Does the child drink tea?

3.6 Does the child use a bottle during the day?

If no, age when stopped: ____ months; never used (breast to cup) ____

3.7 Does the child use a bottle in bed?

If yes: occasionally ____ most of the time ____

SECTION 3 – NUTRITION AND HEALTH HISTORY (cont'd)

| | Yes | No | Unknown |
|--|-----|-----|---------|
| 3.8 Does the child use a cup/sip cup? | ___ | ___ | ___ |
| If yes, age when introduced: _____ months | | | |
| 3.9 What best describes the child's current solid feeding (check all that apply): | | | |
| Commercial infant cereal/puree ___ | | | |
| Age when cereal started _____ | | | |
| Age when cereal stopped _____ | | | |
| Table foods ___ None ___ Unknown ___ | | | |
| 3.10 Are any of the following consumed less than 5 times/week? | | | |
| • Meat | ___ | ___ | ___ |
| • Cereals or bread | ___ | ___ | ___ |
| 3.11 Prior to identification of IDA, did the child receive iron supplementation? | ___ | ___ | ___ |
| 3.12 Did/does the child have any dental cavities? | ___ | ___ | ___ |
| 3.13 During pregnancy, did the mother | | | |
| • drink cow's milk or goat's milk? | ___ | ___ | ___ |
| • receive iron supplementation? | ___ | ___ | ___ |
| 3.14 After delivery, did the mother | | | |
| • drink cow's milk or goat's milk? | ___ | ___ | ___ |
| • receive iron supplementation? | ___ | ___ | ___ |

SECTION 4 – PRESENTATION

4.1 What were the presenting signs and symptoms that prompted obtaining the initial complete blood count (CBC)?
(check all that apply)

Infectious illness ___ Poor weight gain ___ Poor energy ___ Fever ___ Underweight ___

Developmental delay ___ Pallor ___ Irritability ___ Routine ___ Other _____

SECTION 5 – INVESTIGATIONS AT PRESENTATION

| Blood parameter | Results prior to treatment (units) | Blood parameter | Results prior to treatment (units) |
|-----------------|------------------------------------|---------------------------------|------------------------------------|
| Hemoglobin | _____ | Free-erythrocyte protoporphyrin | _____ |
| MCV | _____ | Reticulocyte count | _____ |
| Platelet | _____ | Other _____ | _____ |
| Ferritin | _____ | Other _____ | _____ |
| Iron | _____ | Other _____ | _____ |
| Transferrin | _____ | Other _____ | _____ |

SECTION 6 – COMPLICATIONS

| | Yes | No | Unknown |
|---|-----|-----|---------|
| 6.1 Did/does the child have evidence of (check all that apply): | | | |
| 6.1.1 Stroke? | ___ | ___ | ___ |
| If yes, describe _____ | | | |
| 6.1.2 Heart failure? | ___ | ___ | ___ |
| If yes, describe _____ | | | |

SECTION 6 – COMPLICATIONS (cont'd)

| | Yes | No | Unknown |
|----------------------------|-----|-----|---------|
| 6.1.3 Developmental delay? | ___ | ___ | ___ |
| If yes, describe: _____ | | | |
| 6.1.4 Other _____ | | | |

SECTION 7 – MANAGEMENT

| | Yes | No | Unknown |
|---|-----|-----|---------|
| 7.1 Please describe measures taken (check all that apply): | | | |
| 7.1.1 Prescription for oral iron supplementation | ___ | ___ | ___ |
| If yes: dose _____ frequency _____ duration _____ days | | | |
| 7.1.2 Specific dietary treatment/recommendations | ___ | ___ | ___ |
| If yes, specify _____ | | | |
| 7.1.3 Assessment/treatment in an emergency department | ___ | ___ | ___ |
| 7.1.4 Hospitalization | ___ | ___ | ___ |
| If yes, specify total length of stay: _____ days | | | |
| 7.1.5 Blood transfusion | ___ | ___ | ___ |
| 7.1.6 Consultation with paediatric hematologist | ___ | ___ | ___ |
| 7.2 Did child respond to treatment by achieving Hb \geq 80 g/L within 4 months? | ___ | ___ | ___ |

SECTION 8 – REPORTING PHYSICIAN

First name _____ Surname _____

Address _____

City _____ Province _____ Postal code _____

Telephone number _____ Fax number _____

E-mail _____ Date completed _____

___ 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.

Thank you for completing this form.