

A photograph of three young children outdoors, each holding a magnifying glass to their eye. The child on the left is a boy wearing a blue cap and a magnifying glass with a black handle. The child in the center is a girl with dark hair in pigtails, wearing a magnifying glass with a clear handle. The child on the right is a girl with blonde hair, wearing a magnifying glass with a green handle. The background is a blurred outdoor setting with green foliage.

# HOW ARE QUEBEC'S YOUNGEST CHILDREN FARING?

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2017 Highlights

OBSERVATOIRE  
des tout-petits



Fondation Lucie  
et André Chagnon

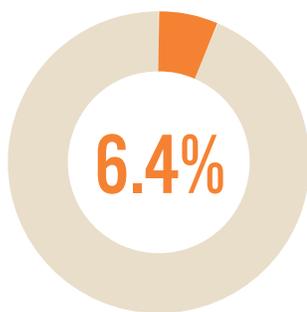
# HOW ARE QUEBEC'S YOUNGEST CHILDREN FARING?

This document presents the highlights of the 2017 Portrait of Young Children in Quebec. Produced by the Early Childhood Observatory (*Observatoire des tout-petits*), this portrait describes the conditions surrounding children's birth, their physical and mental health and their development. The following pages present the indicators that have shown the most significant variation over the past years and those which give the most cause for concern. In addition, whenever data from previous years are available, they are compared to current figures.

To consult the 2017 Portrait in its entirety, visit the Observatory's website at [tout-petits.org/portrait2017](http://tout-petits.org/portrait2017).



The number of children between the ages of 0 and 5 living in Quebec in 2016.



This age group accounts for 6.4% of the population of Quebec.



The number of births in the province of Quebec rose from

**81,962** in 2006 **to** **86,400** in 2016

The annual number of births has been on the decline for a few years, however, remaining below those recorded between 2009 and 2013, when the annual number of births exceeded 88,000.



\* Provisional data for 2014 to 2016

# PREGNANCY AND CHILDBIRTH

## THE PAST 30 YEARS HAVE SEEN AN **IMPROVEMENT** IN NEWBORN HEALTH IN QUEBEC.

### LOW BIRTHWEIGHT



**5.9%** of babies born in 2013 weighed under 2.5 kg (5.5 lb) at birth.

This figure was 6.5% in 1980 and has remained below 6% since 1999.

### STILLBIRTHS

**4,4**  
**1 000**

In 2015, **4.4 out of 1,000** babies were stillborn.

In 1976, the rate of stillbirths was 7.8 out of every 1,000 births.

Since the World Health Organization's goal is to reduce the stillbirth rate to less than 10 out of every 1,000 births by 2035, Quebec's stillbirth rate is already relatively low.

### BREASTFEEDING

The proportion of mothers who breastfed or attempted to breastfeed their most recent child\* rose from

**72.6%**  
in 2000-2001



**89.0%**  
in 2013-2014

However, among the group of mothers who began breastfeeding their baby at birth, **only 61.8% were still nursing at 4 months**. In addition, 73% of the mothers who introduced other liquid or solid foods while they were breastfeeding did so before their baby reached 6 months.

The World Health Organization recommends that babies be exclusively breastfed for the first six months of their lives. Once solid foods have been introduced, breastfeeding may continue for another two years or more.

\* Women between the ages of 15 and 55 who gave birth during the previous five years. Note that as of 2003, proportions may be overestimated due to high partial non-response.

Sources: Ministère de la Santé et des Services sociaux, Fichier des naissances (electronic). Tab report Plan national de surveillance produced by the Infocentre de santé publique at the Institut national de santé publique du Québec, May 29, 2017; Institut de la statistique du Québec, *Registre des événements démographiques*, Statistics Canada, Canadian Community Health Survey (CCHS), 2000-2001 and 2013-2014, share files, adapted by the Institut de la statistique du Québec.

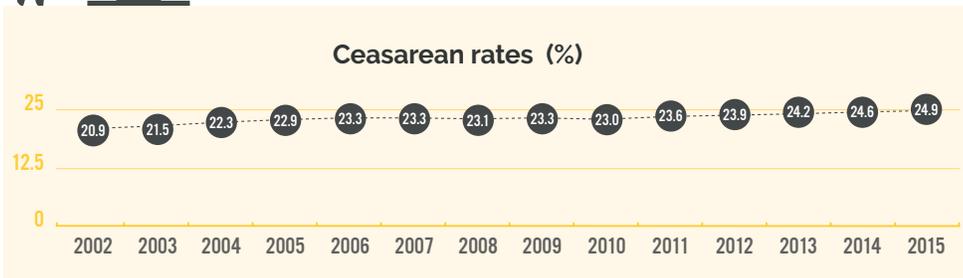
## CERTAIN DEVELOPMENTS GIVE CAUSE FOR CONCERN, HOWEVER.

### CAESAREAN BIRTHS



**24.9%** In 2015, 24.9% of all births in Quebec were by caesarean section.<sup>1</sup>

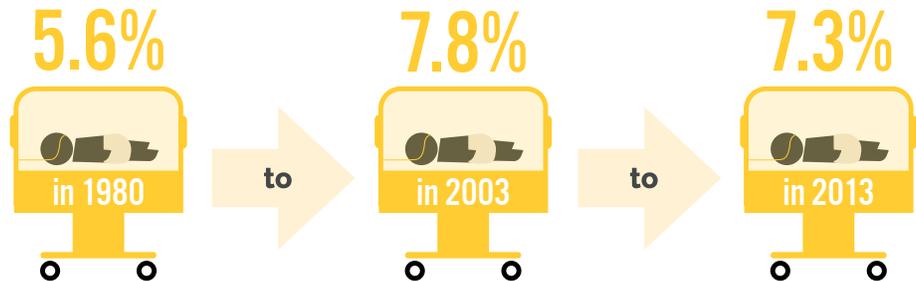
This represents an increase of 19% over the 2002 rate of 20.9%.



According to the World Health Organization, a rate of caesarean births over 10% is not associated with any reduction in mother or baby mortality. The international community therefore considers the ideal proportion of caesarean births to be between 10 and 15%.

### PREMATURE BIRTHS

In spite of a slight decline in the past years, the rate of premature births is still higher than it was in the early 1980s.



<sup>1</sup> The percentage shown for this indicator refers to the number of caesarean sections for every 100 births.

Sources: Discharge Abstract Database, Canadian Institute for Health Information (CIHI); MED-ÉCHO hospitalization database, ministère de la Santé et des Services sociaux; Institut de la statistique du Québec, *Registre des événements démographiques*.

# PHYSICAL HEALTH

VERY YOUNG CHILDREN **ARE FARING BETTER** THAN THEY WERE TEN YEARS AGO IN CERTAIN ASPECTS OF THEIR PHYSICAL HEALTH.



## ASTHMA

(number of hospitalizations for every 100,000 children between 0 and 4)

369

in 2007-2010

to

162

in 2013-2016



## ACCIDENTAL INJURY

(number of hospitalizations for every 100,000 children between 0 and 4)

371

in 2007-2010

to

346

in 2013-2016

## INFECTIOUS DISEASES

Several vaccine-preventable infectious diseases are also on the decline.

There has been a reduction in the number of cases of whooping cough, diphtheria, tetanus, rubella (German measles), congenital rubella, invasive meningococcal infections, acute hepatitis B, Haemophilus influenzae type b (Hib) infections, mumps and measles.

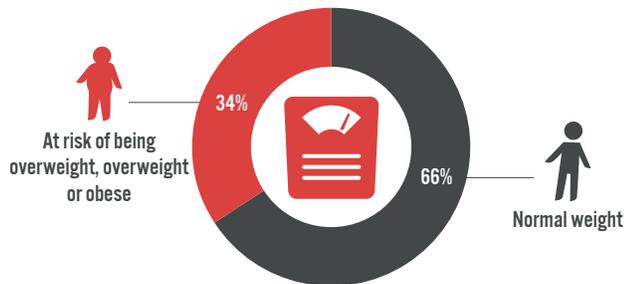
There have been several outbreaks of mumps and measles during the past few years, however.



Sources: Ministère de la Santé et des Services sociaux, Quebec hospitalization database MED-ÉCHO (electronic); Bureau de surveillance et de vigie de la Direction de la protection de la santé publique, DGSP, Ministère de la Santé et des Services sociaux, based on reports published by the Infocentre de l'INSPQ, extraction of MAD0 files from July 17, 2017.

## OBESITY AND INSUFFICIENT PHYSICAL ACTIVITY AMONG VERY YOUNG CHILDREN ARE A **SERIOUS CAUSE FOR CONCERN.**

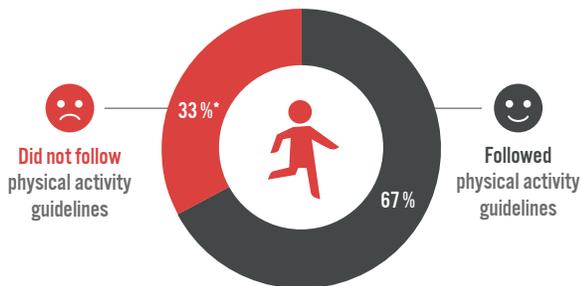
**1/3** In 2012-2015, one out of three children between 36 and 60 months was at risk of being overweight, was overweight or was obese. That statistic translates into approximately 58,000 children.



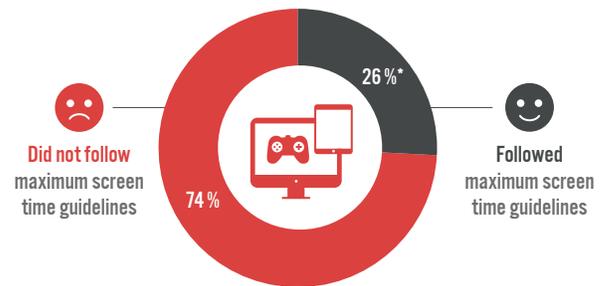
According to the *Canadian Physical Activity Guidelines*, children between the ages of 3 and 4 should accumulate at least 180 minutes of physical activity at any intensity spread throughout the day. Five-year-olds should accumulate at least 60 minutes of moderate to vigorous physical activity every day.

The *Canadian Sedentary Behaviour Guidelines* also recommend that recreational screen time be limited to under an hour per day for children between 2 and 4 and to two hours a day for 5-year-olds.

**1/3** In 2012-2015, approximately one-third of children between the ages of 3 and 5 did not follow the recommendations for physical activity,



and **3/4** and three-quarters failed to follow the recommendations for maximum screen time.



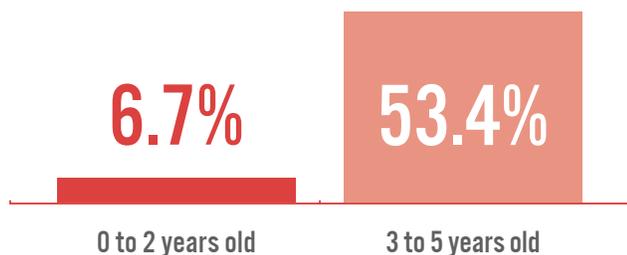
\* Coefficient of variation between 15% and 25%: interpret with caution.

Source: Statistics Canada, *Canadian Health Measures Survey* (CHMS), Cycles 3 (2012-2013) and 4 (2014-2015) combined, adapted by the Institut de la statistique du Québec.

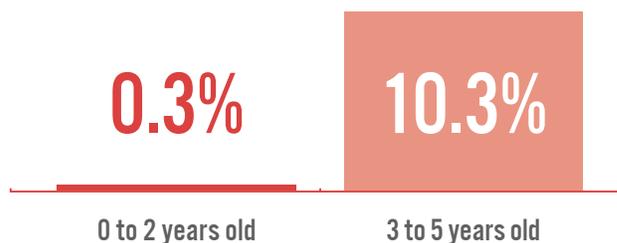
The Canadian Dental Association recommends that children be seen by a dentist within 6 months of the eruption of their first tooth or by one year of age.



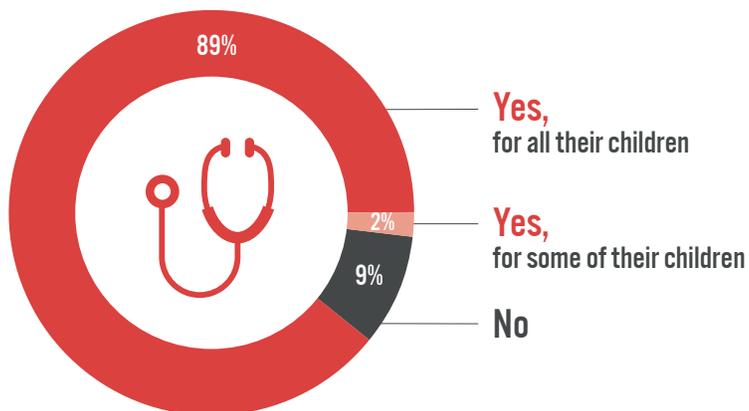
In 2016, proportionally more children between 3 and 5 had their teeth examined by a dentist.



Proportionally more children between 3 and 5 also received dental treatment (having a tooth filled, for example).



## STATISTICS ON SERVICE ACCESSIBILITY FOR VERY YOUNG CHILDREN ARE ALSO **WORRYING.**



**1/10**

In 2015, close to one out of 10 Quebec families (9%) said they did not have a family doctor or pediatrician for their children between 0 and 5 years of age.

Sources : Institut de la statistique du Québec, *Enquête québécoise sur l'expérience des parents d'enfants de 0 à 5 ans 2015*; Régie de l'assurance-maladie du Québec (RAMQ), Direction de l'analyse et de la gestion de l'information, fichier des services rémunérés à l'acte.

# MENTAL HEALTH

## YOUNG CHILDREN'S MENTAL HEALTH IS AN AREA THAT NEEDS TO BE MONITORED.

### MENTAL HEALTH DISORDERS

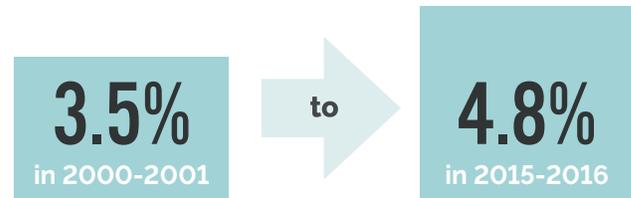
The most common mental disorders found in very young children are those that affect behaviour and emotion.



**22,010** children between the ages of 1 and 5 had been diagnosed with a mental disorder in 2015-2016.

The majority of diagnoses are for specific developmental delays (e.g.: speech and language development disorders, specific motor delay) and behavioural disorders (e.g.: stammering/stuttering, tics, sleep disorders). Mental disorders also include several other diagnoses such as autism, anxiety, depression and ADHD.

Since 2000-2001, the proportion of very young children diagnosed with a mental disorder has increased significantly, rising from



**Since very little data is available to evaluate the mental health of very young children, the extent of the situation may be underestimated.**

**Source:** Institut national de santé publique du Québec (INSPQ), Quebec Integrated Chronic Disease Surveillance System (QICDSS), Quebec hospitalization database (MED-ÉCHO - Maintenance et exploitation des données pour l'étude de la clientèle hospitalière), physician claims database and health insurance registry (FIPA - fichier d'inscription des personnes assurées).

## ANXIETY AND DEPRESSIVE SYMPTOMS



**1,794** children between 1 and 5 had been diagnosed with an anxiety disorder or depressive symptoms in 2015-2016.

The proportion of children in this category has remained stable at around 0.4% since the early 2000s.

The most prevalent anxio-depressive disorders among very young children are social phobia, separation anxiety, generalized anxiety and depression.

## AUTISM SPECTRUM DISORDER



**3,716** children between the ages of 1 and 5 had been diagnosed with an autism spectrum disorder (ASD) in 2015-2016.

Since the early 2000s, the proportion of children who have received this diagnosis has shown a marked increase, rising from

**0.16%** in 2000-2001 **to** **0.82%** in 2015-2016

## ATTENTION DEFICIT DISORDER WITH OR WITHOUT HYPERACTIVITY (ADD/ADHD)



**3,555** children between the ages of 1 and 5 had been diagnosed with ADHD in 2015-2016.

The proportion of children with this diagnosis has risen significantly since the early 2000s, from

**0.4%** in 2000-2001 **to** **0.8%** in 2015-2016

In order to be diagnosed with an attention deficit disorder (ADD), a child must present six symptoms of inattention. If he or she also presents six symptoms of hyperactivity or impulsivity, the diagnosis becomes attention deficit hyperactive disorder (ADHD).

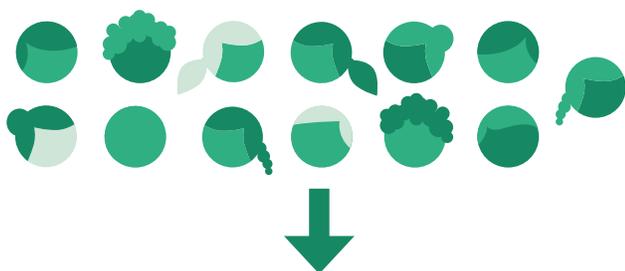
Since it is normal for very young children to display a certain degree of inattention or hyperactivity, the symptoms presented must be severe, unusual for the child's age, persistent, and affect the child's functioning. Since it is difficult to diagnose ADD/ADHD in children under 6, clinicians are usually extremely cautious in diagnosing toddlers and preschoolers.

Source: Institut national de santé publique du Québec (INSPQ), Quebec Integrated Chronic Disease Surveillance System (QICDSS), Quebec hospitalization database (MED-ÉCHO - Maintenance et exploitation des données pour l'étude de la clientèle hospitalière), physician claims database and health insurance registry (FIPA - fichier d'inscription des personnes assurées).

# DEVELOPMENT

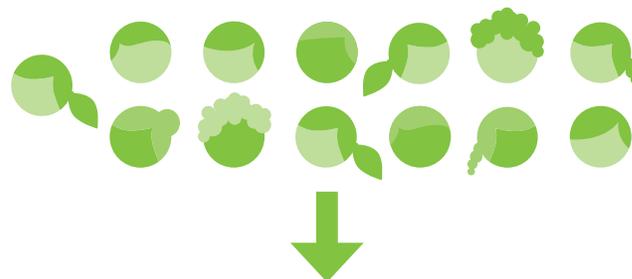
## THE STATISTICS ON EARLY CHILDHOOD DEVELOPMENT ARE **WORRYING.**

**26%** of Québec children in kindergarten were vulnerable in at least one domain of their development in 2012.



**Half** of this number were vulnerable in just **one domain** of development.

Among the children who were vulnerable in a single domain of their development, the most common were **physical health and well-being** and **communication skills and general knowledge**.



The **other half** were vulnerable in **more than one domain** of development.

The following combinations of vulnerability were particularly common:

- Social competence **and** emotional maturity
- Language & cognitive development **and** communication skills & general knowledge

## WHAT DO WE MEAN WHEN WE SAY A CHILD IS “VULNERABLE”?

During the *Quebec Survey of Child Development in Kindergarten (Enquête québécoise sur le développement des enfants à la maternelle or EQDEM)*, children were evaluated by their kindergarten teacher. A child was considered to be vulnerable in a given domain of development if he or she was among the 10% of Quebec children with the lowest scores in that domain.

## WHAT FACTORS WERE STUDIED IN EACH DOMAIN?



### **Physical health and well-being**

Teachers evaluated children's overall physical development, motor skills, food and clothing, cleanliness, punctuality and alertness.



### **Emotional maturity**

Teachers evaluated children's behaviour towards others, their ability to help others, fear, anxiety, aggressive behaviour, hyperactivity and inattention, and expression of emotions.



### **Social competence**

Teachers evaluated children's social skills, self-confidence, sense of responsibility, respect for peers, adults and rules and routines, work skills and autonomy, and curiosity.



### **Language and cognitive development**

Teachers evaluated children's interest and skills in reading, writing and arithmetic, and appropriate use of language.



### **Communication skills and general knowledge**

Teachers evaluated children's ability to communicate understandably, enunciate clearly and their general knowledge.

Certain groups of children are more likely to be **vulnerable in at least one domain** of their development.

Percentage of children who are vulnerable in at least one domain of development



\* The Deprivation Index of an area of residence includes a material dimension (average income, education and employment) and a social dimension (marital status and structure of household: people who are widowed, divorced, living alone or in single-parent families).

Source: Institut de la statistique du Québec, *Quebec Survey of Child Development in Kindergarten 2012*.

**Certain vulnerable children in kindergarten did not receive the services of a non-teaching professional.**

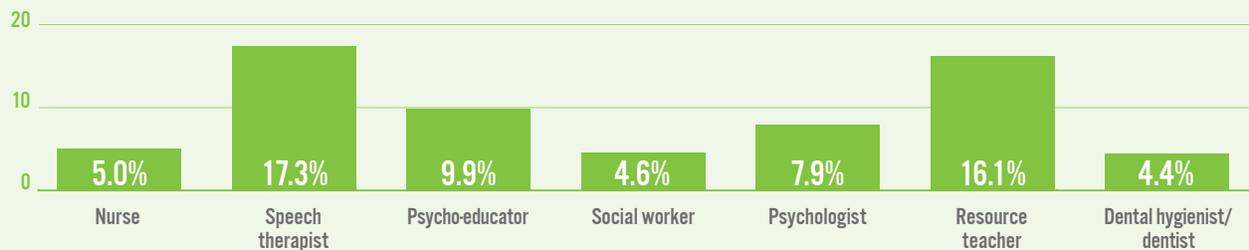


**1/2**

**Among children in 5-year-old kindergarten, one out of two developmentally vulnerable children did not receive services from a non-teaching professional between the beginning of the school year and the time of the survey in 2012.**

Professional services most frequently used by developmentally vulnerable children in 5-year-old kindergarten were those offered by **speech therapists** and **resource teachers**.

**Percentage of developmentally vulnerable children in kindergarten who received assistance from a...**



Certain types of professionals were frequently mentioned in the "Other" category: resource teachers and dental care professionals. These two categories were therefore added to the indicator based on data compiled. It is important to note, however, that the number of professionals in these two categories may be underestimated, as they were initially not offered as a response option for the question.

There is no way of knowing if services received by children were individual or group services. Children recognized as living with a disability or with an adaptation or learning difficulty (students with special needs, or EHDA) at the time of the survey are also not included in the calculations.

Source: Institut de la statistique du Québec, *Quebec Survey of Child Development in Kindergarten 2012*.

# SOMETHING CAN BE DONE

This portrait, a report on the state of health and development of Quebec's youngest children, enables us to know a little bit more about the well-being of children between the ages of 0 and 5.

The situation described here includes both positive and negative points. Generally speaking, babies are coming into the world under better conditions. There has also been improvement in certain areas of young children's physical health, including asthma, accidental injury and infectious diseases. Some of the collective measures that have been implemented over the past several years may have contributed to these improvements (such as the OLO program [nutritional aid for pregnant women], SIPPE program [integrated perinatal and early childhood services] and EMMIE program [motivational interviewing in the maternity ward for the immunization of children]).

Certain situations continue to give cause for concern, however: the rate of caesarean births, outbreaks of measles, excess weight and obesity, mental health and early childhood development. Data in our portrait also show that obtaining access to a family doctor, pediatrician or even a non-teaching professional is difficult for certain children.

Something can be done, however. Change is possible. The scientific literature has documented the existence of collective drivers that we can use to take action in areas that affect young children's health, well-being and development—whether it be by improving the socioeconomic environment of the very young, providing better access to healthcare or quality daycare, ensuring better training for professionals, conducting awareness campaigns or offering more support to parents.

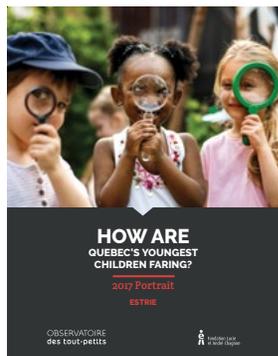
The data presented in this portrait and their evolution remind us, more than ever, of the importance of ensuring that the development and well-being of the youngest Quebecers remains a priority for Quebec society.

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## Visit our website to consult:



A comprehensive 236-page report



Extracts providing regional data for each of Quebec's 17 regions



Visuals for your presentations and social media

These documents are all available on our website at [tout-petits.org/portrait2017](http://tout-petits.org/portrait2017)

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**The 2016 Portrait, entitled *What kind of environments are Quebec's youngest children growing up in?* is also available for consultation.**



This report and the related documents are all available on our website at [tout-petits.org/portrait2016](http://tout-petits.org/portrait2016)

# OBSERVATOIRE des tout-petits

The mission of the Early Childhood Observatory is to help ensure that the development and well-being of Quebec's very youngest children has a place on the province's list of social priorities. In order to do so, the Observatory compiles the most rigorous data on 0-5 year-olds which it then disseminates to incite dialogue on collective actions in this area.

[Tout-petits.org](http://Tout-petits.org)



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