

# Mothers too soon

## Groundbreaking analysis exposes relationship between poverty and teenage pregnancy

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Picture the narrow sliver of Hamilton's inner city that runs from the foot of the escarpment to the waterfront between Sherman Avenue and Wentworth Street. It's a gritty stretch burdened with the weight of heavy industry, cheap housing and high rates of poverty.

It's also where one in seven babies delivered between 2006 and 2010 was born to a teen mom, one of the highest rates among all Ontario cities. During that period, nearly 100 of the 668 expectant moms living between Sherman and Wentworth who gave birth were teenage girls.

Across the bay, there's a small chunk in the northeast corner of Burlington, an upscale neighbourhood known as The Orchard where the average home value pushes \$400,000.

There were 774 women in this neighbourhood who gave birth between 2006 and 2010.

Not a single one was a teenage girl.

The differences between the Sherman-Wentworth corridor and the Burlington neighbourhood are glaringly, almost painfully, obvious.

In the Sherman-Wentworth area, the median household income is less than \$36,000, half of all children live below the poverty line, nearly 25 per cent of all income is provided by government transfers and more than one in four adults don't have a high school diploma.

Meanwhile, in the Burlington neighbourhood, the median household income is nearly \$106,000, less than 7 per cent of the neighbourhood lives below the poverty line, just 3 per cent of all income is provided by the government and nearly half of all adults have university degrees.

Nothing better illustrates the complex problem of teen moms and teen pregnancies in Ontario than these two neighbourhoods, mere miles away from each other but worlds apart.

Now, a groundbreaking Spectator examination of maternal health data from 535,000 provincial birth records clearly shows the solid connections that exist between income, education, poverty levels and the rates of teen mothers in Ontario, at both neighbourhood and community levels.

The data has been dissected into thousands of neighbourhoods that span the entire province, allowing health factors to be compared with social and economic variables.

The comprehensive analysis of four years of birth outcomes in Ontario expands on the findings of The Spectator's landmark Code Red series, published last year.

Code Red highlighted the strong connections that exist between poor health and poverty across Hamilton neighbourhoods. The series exposed glaring disparities in health between city neighbourhoods, including a 21-year difference in life expectancies.

The results of The Spectator's massive new investigation of birth outcomes are just as sobering.

Across the province, in community after community and neighbourhood after neighbourhood, the patterns are disturbingly similar to those exposed in Code Red for Hamilton.

Teen mother rates in Ontario are highest in places where incomes and education achievements are low and poverty levels are high, while low rates of teen mothers are closely tied to higher incomes, higher levels of educational achievement and lower poverty levels.

“The reality is that children born to teenage moms don't tend to do as well, and they tend to end up being teenage moms themselves,” said Dr. Chris Mackie, a Hamilton associate medical officer of health.

“Often, they aren't able to be economically successful and have the supports they need for the child to grow up and be healthy,” Mackie added. “It's really not a great start in life.”

The Spectator's findings have implications for Ontario's health ministry, public health units and social programs operated by municipalities.

“If I were taking the perspective of those people who have to allocate money for social service projects, it's a problem — it's a big problem,” said Carlin Miller, a University of Windsor psychology professor who has studied the issue of teen pregnancies.

“Teen pregnancies not only change the life course of the teen mother but for generations afterwards,” Miller added. “It's not just one girl who's affected, it's generations that are affected.”

## Meet Kristen

Life was supposed to turn out differently for her. She was the one in her family expected to go to college, become a lawyer, buy a house, get married, then have a child.

Instead, by 16, Kristen had run away from her central Mountain home, doing drugs, bouncing from foster home to foster home — at least eight, she figures — all the while painfully aware her life was out of control.

There was one bit of stability, though — a steady boyfriend she'd been seeing for a year and a half.

She made sure the sex was safe. Her boyfriend had different plans.

“I found out that he decided to poke holes in the condoms we were using to get me pregnant,” she said. “He figured it would make me stay with him.”

Just days before she gave birth, Kristen's boyfriend put a knife to her throat and threatened to kill her and the baby if she tried to leave. He later threw their newborn son at her in the hospital.

“He was that type of guy.”

Kristen was pregnant at 16, a mother at 17, pregnant again at 17, a second-time mother at 18, then pregnant a third time at 19.

The latter pregnancies were planned, Kristen admits. She always wanted three kids, and it was important they were close in age, “so they can help each other.”

“I was an only child, so I know what it's like to be alone and not have anyone to hang out with.”

Kristen has been with her new guy — the father of the younger two children — for three years.

At 20, she now has three children — none of whom are in her care.

She gave up her eldest for adoption when he was 18 months old.

“I'm happy with the decision there, because I was so young. It's much better for him.”

The others — a two-year-old and an eight-month-old — were taken by Children's Aid and now she's fighting to get them back.

Kristen has lived on her own for more than a year, finished high school and has plans for college. Eventually, she'd like a job that allows her to help other young moms.

In spite of it all, Kristen is confident she's straightened out her life. "I can't complain because it made me out to be who I am today."

"A lot of people would say 'Why would you think about getting pregnant at such a young age?' But if you can be a mother at that age, then you're clearly more mature than half of the people out there."

From 2006 to 2010, the rate of teen mothers for the amalgamated City of Hamilton was 4.8 per cent, significantly higher than the provincial average of 3.7 per cent.

But Hamilton's overall rate masks some glaring differences that exist within the city.

For the five suburban communities of Stoney Creek, Ancaster, Dundas, Flamborough and Glanbrook, the teen mother rate was less than 2 per cent.

For the former City of Hamilton, the rate was 6.4 per cent.

Between Queen Street and Kenilworth Avenue in the lower city, however, the rate jumps to just over 10 per cent.

In fact, there are 16 neighbourhoods in the amalgamated city with teen mom rates 10 per cent or higher.

Fifteen of the 16 are located in the lower part of the old city.

Conversely, there are 10 neighbourhoods in the Hamilton metropolitan area, which includes Burlington and Grimsby, where the rate of teen moms was 0 per cent.

Four of the neighbourhoods are in Burlington, two are in Flamborough and two are in Stoney Creek.

The concentration of teen moms in Hamilton's lower inner city is shocking.

One look at the social and economic data for the lower inner city from Queen to Kenilworth, and it's easy to see the common factors.

- The median household income for the area is around \$37,000, barely half of the provincial average.
- More than a third of all children between Queen and Kenilworth live in poverty, almost three times higher than the provincial average.
- Nearly one in four families is headed by a single mom, and 20 per cent of all income for the area comes from the government, which is double the Ontario average.
- One in every seven students between Queen and Kenilworth ends up a high-school dropout.

It all adds up to an “opportunity deficit,” as it's called in academic literature.

“It doesn't make any difference if you get pregnant or not because there are no opportunities ahead of you,” said Lea Caragata, a Wilfrid Laurier University professor of social work who has studied the issue of teen parenting.

Her assessment is blunt:

“You've probably already blown it in high school, you're out of it, you're hanging around,” said Caragata.

“If you work ... you've got a few hours here, a few hours there at minimum wage, you probably still live at home or you move around and couch surf with friends, and you've got no prospects.

“So, in a life context like that, pregnancy doesn't matter. It's not like you were doing anything anyway.

“For those middle-class kids in Ancaster, pregnancy will ruin their prospects and their aspirations and their parents' aspirations for them,” she added.

“But for these kids, it doesn't make any difference. And that's the heartbreak.”

## **Meet Dr. David Price**

He is the chair of McMaster's Department of Family Medicine.

He's also the founding director of the Maternity Centre on James Street South, which prides itself on helping difficult cases, such as recently arrived pregnant immigrant women and at-risk teens.

“We see a lot of the kids who have run away from home or left home for whatever reason, whether it's economic, whether it's violence or abuse or dysfunctional families,” said Price.

“But also, the degree of high school completion is pretty low in this group.

“It limits what the kids themselves can do,” he added. “They end up in low-paying jobs and it just sort of perpetuates the cycle.

“It's a helluva lot of work looking after a child, so if you're 15 and all of your energy goes toward raising a child, there's not a lot of energy left to go to school, to do those other things.”

A few months ago, he delivered the baby of a 13-year-old.

“I think there's nobody who would disagree that's an issue,” said Price.

“Having a child at 13 in our society, that's a challenge.

“It's like a baby having a baby.”

“When you're trying to describe options to a 13- or 14-year-old, it's a real challenge because they don't have the education and the understanding of physiology to understand when you're presenting different medical treatment options or even ethical options,” said Price.

“Should you have prenatal screening? What are you going to do with the results of the prenatal screening? How is that going to impact how you feel about your unborn baby?”

“All of those things, which are challenging enough for a mature, well-educated 25-year-old, it must be extraordinarily difficult for a 13- or 14-year-old,” said Price.

Between 80 to 85 women a year who pass through the Maternity Centre are teens, which is roughly one-third of the teens who give birth each year in Hamilton.

“It's become the go-to place for the kids,” said Price. “I think that the word has gotten out that if you are pregnant, you come to our clinic.”

Consider this: According to provincial data, from April 2006 to March 2007, there were approximately 4,350 teens who gave birth in Ontario.

Of those, 616 — or about 14 per cent — were giving birth for the second time.

There were 554 teen girls aged 16 and under who gave birth — 26 of them for at least the second time.

## **Meet Morgan**

She is one of those teens who showed up at the Maternity Centre.

Morgan hadn't planned to get pregnant at 15.

She wasn't on birth control, but she thought — somehow — she and her boyfriend were protected.

So when she started to miss her period, she chalked it up to stress because that had happened before.

When she went to the doctor to get checked, she said the news was “like a slap in the face.”

At first, she laughed. Then she was scared.

“How the heck am I going to tell my mom?” she wondered.

She thought about having an abortion. Her boyfriend didn't want the baby, and she knew she'd miss out on a lot if she went through with the pregnancy.

She was nowhere close to finishing high school, and besides, she's never really liked kids.

But she decided it was meant to be.

She figured having a kid wouldn't mess up her plans, anyway — not that she really had any.

“I didn't know what I was going to be doing then. I don't really know what I'm doing now,” Morgan said. “I'm not going to know for a few years. So I'm just going to have a kid with me, following me.”

It's not unusual to see a teenager toting a baby through Morgan's north Hamilton neighbourhood. In fact, in the blocks surrounding her home near Wentworth, north of the railway tracks, there's almost a one-in-five chance any infant you see has a teenage mom.

Now 16, Morgan lives in a house with her six-month-old son, a handful of siblings and her mother, who also was a teen when she gave birth to the first of her seven children.

The father of Morgan's baby doesn't come around much anymore.

“He's not really in the picture. He doesn't do anything,” she said.

It's not anything new for her — her own dad wasn't there for her family, either.

In spite of the circumstances, Morgan doesn't worry much about the future. She's getting a baby-bonus cheque and works part time at a call centre.

Eventually, she says, she'll go back to school and her sister — or someone — will be around to babysit.

She's adamant things will work out for her and her son. And she certainly doesn't doubt she's old enough to shoulder the responsibility of raising him.

“I take care of him just as good as anyone else does,” she said. “Age doesn't really matter when it comes to having a kid. It's about responsibility and maturity.”

Across Ontario's vast north, there's an epidemic of teen mothers and teen pregnancies, particularly on remote native reserves.

Of the 20 communities with the highest provincial rates of teen moms, 19 of them are located in the Far North, and 17 are native reserves.

In fact, the top 30 communities with the highest rates of teen mothers are either native reserves, communities in the Far North, or both.

For those 30, the rates of teen moms are as much as 11 times higher than the provincial average of 3.7 per cent.

The five communities with the highest rates of teen moms are located in the sprawling Kenora district, the northwestern chunk of the province that extends to the shore of Hudson Bay.

All five are remote native reserves accessible only by airplane for most of the year.

About one in three births on those five reserves between 2006 and 2010 was to a teen mom.

At Sandy Lake First Nation, for example, 40 per cent of the mothers giving birth were teens.

Contrast this to the rates of teen moms in the wealthy suburbs of the Greater Toronto Area.

In Vaughan, for instance, the rate of teen moms between 2006 and 2010 was well below 1 per cent. During that span, more than 12,300 women living in Vaughan gave birth. Just 76 of them were teens.

Or consider this comparison.

There were nearly as many teen mothers on the small remote native reserve of Pikangikum — population 2,400 — as there were in the entire Town of Oakville — population 172,000.

In Pikangikum, 47 of 144 mothers were teens.

In Oakville, 48 of 7,151 mothers were teens.

At Six Nations, southwest of Hamilton, Canada's most heavily populated native reserve, the rate of teen mothers was nearly 17 per cent — the 27th highest of Ontario's 420 communities.

Boredom, isolation, substance use, lack of opportunities and education — particularly in the Far North — contribute to the elevated rates of teen mothers on reserves.

But cultural differences also play a role, according to native leaders.

“We certainly don't encourage (teen pregnancy),” said Julie Wilson, supervisor of Six Nations' Maternal and Child Centre, “but I think it's viewed differently when it happens because there is a huge respect in this culture for life, for babies, for children.

“That's what you leave — that's your family, that's your blood,” said Wilson.

“It's not that anyone really wants their daughter to have a teen pregnancy, but there is a lot more understanding in that it is a gift from the Creator and it is a special life.”

While teen motherhood is an epidemic in Ontario's Far North, it's almost non-existent in the bedroom communities surrounding Toronto.

In Vaughan and Markham, the rate of teen moms is 0.6 per cent — in other words, just six of every 1,000 mothers is a teen.

In Oakville, Caledon and Richmond Hill, the rate is 0.7 per cent.

In Burlington, the teen mom rate is 1.4 per cent. In Milton, it's 1.1 per cent.

“Kids who have a certain level of privilege use birth control because not getting pregnant matters,” said Caragata, the Laurier professor.

Teen pregnancy statistics support her claim.

In the Far North, teen pregnancy rates, like those of teen moms, are hugely elevated.

In the Kenora district, there were 53 pregnancies for every 1,000 girls between the ages of 15 and 19 in 2009, compared to the Ontario average of just under 29 per 1,000.

In the Timmins-Cochrane district, the rate was 64 per 1,000 and in Thunder Bay, it was nearly 48 per 1,000.

Hamilton's teen pregnancy rate was 35.6 for every thousand girls 15 to 19, which is 25 per cent higher than the provincial average.

In fact, the rate actually rose slightly from 2001 to 2009.

By contrast, the teen pregnancy rate for both Halton and York regions was 15 per 1,000 girls ages 15 to 19 in 2009.

Girls in wealthier regions of the province are also more likely to terminate their pregnancies, according to provincial data.

In York, 80 per cent of pregnancies to girls ages 15 to 19 ended in abortion in 2009. In Halton, the figure was 75 per cent.

Meanwhile, in the Kenora district, just 21 per cent of pregnancies in girls 15 to 19 ended in abortion. For the Timmins-Cochrane district, the rate was 24 per cent.

In Hamilton, about 61 per cent of those pregnancies were aborted, close to the provincial rate of 59 per cent.

## **Meet Nina**

Things are different where she's from.

In her home country — the Czech Republic — it's not unusual for a teenager to have a baby. Her mom was 17 when she had her.

When she met a good Czech guy, Nina didn't think it was out of the norm to get pregnant — even if they'd been together only a few months.

She was 15.

“I just got really close to him and his family,” she said. “I used to go there all the time and even slept over a couple of times. I felt like I wanted to be with this guy forever, so we just planned to have a baby.”

“I think it's better to be young than older,” she added. “I still have young parents and I like it that way. It's better that way because I want to spend my whole life with my child.”

Nina's son, Nicolas, is a year old and his dad is long gone.

He left in Nina's third trimester, returning to England to serve time in jail for a crime she didn't know about at the time — and won't disclose.

It was a blow — but she said her son helped her get through it.

“It's him that I need to be taking care of and living for. It gets my mind off other things. Without him, it would be way harder.”

Nina lives with her dad and his new wife on the Mountain. She's got a new boyfriend, too — a guy she said she met on the dance floor of a club last summer.

For Nina, it's their different religious backgrounds, rather than the baby, that complicates the relationship.

“He knows I'm a good girl. And his parents do, too, so they're not really stopping anything.”

Nina said her child motivates her to stay out of trouble, and it was he who drove her to go back to school at Grace Haven — a local centre for pregnant teens and young moms.

She's almost done Grade 9 now and thinks she'd like to become a cosmetician one day.

“This is making me stronger, pushing me more to school and I'm just not doing stupid things,” she said. “I think having a child makes everything better for me.”

Not far from the rail yards near the old downtown of what was once Fort William, there's a piece of Thunder Bay known as Victoriaville.

The neighbourhood is home to a near-vacant mall, a methadone clinic and a homeless shelter with a soup kitchen that serves 500 meals a day.

Of the province's 2,100 municipal neighbourhoods, it had the highest rate of teen mothers.

One in four babies in Victoriaville was born to a teen mom between 2006 and 2010.

Based on Statistics Canada census data, it appears about one of every three teen girls living in the neighbourhood had a baby at some point between 2006 and 2010.

The stories of Hamilton and Thunder Bay are similar in some important ways, at least when it comes to their local economies.

Both have watched their traditional industrial bases gradually erode.

Once a major shipping hub, many of Thunder Bay's grain elevators stand abandoned along the waterfront.

“There were lumber mills and pulp and paper mills, and all that's really declined,” said Lee Sieswerda, an epidemiologist with the Thunder Bay District Health Unit. “In the same way as Hamilton has seen that hit in terms of employment, we've seen the same kind of thing.

“If teen pregnancy is more common around disadvantaged people and we've seen a real hit to our economy, it kind of follows that teen pregnancy would follow along with that decline.”

One critical difference in Thunder Bay is the much higher concentration of aboriginals, many of them young people.

About one in eight people in Victoriaville is native, the same proportion as Thunder Bay itself.

Statistics also show the Canada-wide fertility rate for aboriginal teen girls is seven times higher than the national average.

“You have a group that has high fertility among teen moms and a larger proportion of that particular subpopulation in the city, so it's not too surprising that you end up with a higher teen pregnancy rate,” said Sieswerda.

Six of the 12 neighbourhoods in Ontario with the highest rates of teen moms are located in Thunder Bay, Hamilton and Sault Ste. Marie, another steelmaking hub that has suffered from substantial job losses over the past three decades.

Drill down to the level of Ontario's neighbourhoods and the disparities in teen mom rates between rich and poor are obvious.

Take Victoriaville, for instance.

The median household income there, according to the last census, was \$16,200 — below the poverty line and far behind the Ontario average of

\$60,500.

In Victoriaville, two of every three children live in poverty, more than 40 per cent of all income comes from government transfers and nearly one in three families is headed by a single mom.

In fact, take the five Ontario neighbourhoods with the highest rates of teen mothers and look at their average characteristics.

All five have teen mom rates that range between 21 and 25 per cent. Together, their median household income is just over half of the provincial average, and both their poverty rate and the proportion of income that comes from government transfers are more than twice the provincial norm.

Compare that with the five neighbourhoods at the other end of the scale — located in Burlington, Oakville, Vaughan, Markham and Toronto.

Of the 4,461 women who gave birth in those five neighbourhoods, not one was a teenager. The median household income is nearly 50 per cent higher than the provincial average, the rate of government transfer income is half the Ontario rate and less than one in 10 families is headed by a single mom.

## **Meet Jane Howard**

She is a nurse with Health Initiatives for Youth Hamilton, known formerly as the Planned Parenthood Society.

It's a nonprofit charitable organization aimed primarily at teens that provides testing for pregnancy and sexually transmitted diseases, as well as pregnancy-options counselling.

"It distresses me that I'm seeing younger and younger teenagers who want to get pregnant," Howard said. "They come in for a pregnancy test and it's negative and I'll say 'Have you thought about some birth control?' and they'll say 'No, I want to get pregnant.'

"When I ask why, they say 'I'd like to have a baby, my boyfriend and I would like to have a baby.'

"Do you have a place to live? How are you going to support them?" Howard will ask. "'Well, my mom said we can stay with her.'"

She remembers the time three young girls were sitting together in the waiting room.

"I overheard them and one said 'I'm coming in for a pregnancy test,' and

the others said 'So are we — wouldn't it be fun if we were all pregnant together?'

"I thought 'Oh my goodness, is that the social community network now? That we're all going to be pregnant?' And I don't think any of them were — that week."

Or there was the time Howard's daughter and two-month-old granddaughter visited the office while a young teen girl was present.

"She said 'Isn't she cute, can I hold her?' and I said sure."

The baby began to cry and the teen immediately handed her back, as if the baby had caught fire.

"My daughter and I were laughing, thinking hopefully that's a form of birth control," said Howard. "No, a few months later, she walked in and she was pregnant."

"Obviously, it wasn't a deterrent. It didn't occur to her that she could be in that boat if she didn't get on some birth control. She didn't and now she has two kids. And she's 18."

While Howard deals with teen pregnancies — and near misses — every working day, she can only make a best guess at the underlying psychology.

"Young women, who maybe don't have the family life they would like to have, think that they can make their own family and have somebody to love," said Howard.

Across Ontario, the connections between teen motherhood rates and socioeconomic circumstances are clear.

Understanding why these connections exist is much murkier.

There is growing interest worldwide in trying to understand the social determinants of health — the notion that a person's physical health is intimately tied to a number of factors that don't appear to have anything to do with health at first glance.

Early-childhood development, housing, employment and working conditions, race, gender, income — and more importantly, income inequity — they're some of the dozen or so social determinants that can have an effect on health.

“Is teen pregnancy the outcome or is it a symptom of this larger constellation of things we call the social determinants of health?” asked Sieswerda, the Thunder Bay epidemiologist.

“It’s a good question. Has anybody figured out how to address the social determinants of health?”

Several of these social determinants pop up in the teen mom discussion.

For starters, there is a multi-generational component linked to the issue. Teen moms are more likely to have been the product of teen moms themselves, and they’re more likely to watch their own children become teen parents.

Mackie, a Hamilton associate medical officer of health, pointed out education also plays a role. So does poverty, which is another problem that crosses generations.

“And there aren’t a lot of interventions to break the cycle of poverty,” Mackie added.

Sometimes, it’s just a nasty collision of a variety of problems.

“A lot of adolescent moms ... come from a very disadvantaged background,” said Debbie Sheehan, director of the family health division for City of Hamilton Public Health Services. “And by disadvantaged, I’m not just talking about finances.

“Many of them come with past histories of being physically abused, sexually abused, neglected, those types of things.

“From environments,” she added, “where there’s a lot of physical violence, not necessarily directed at themselves, but with intimate-partner violence, perhaps against their mother.”

These are the types of teens who become part of Hamilton’s nurse-family partnership program.

It’s an intensive home-visiting model that matches a public health nurse with a low-income, first-time mother — and Hamilton is the only location in Ontario to offer the program.

“What we find is that many of them have this life-changing event of having their first kid and it’s pretty easy for that to go badly because kids are so complicated and challenging,” said Mackie.

The nurses begin following the expectant mother midway through the

pregnancy, then continue working with mother and baby until the child turns two.

The goal is to improve the health of the child, help increase the young parents' self-sufficiency and provide education and counselling support on health and parenting issues.

“Many of the graduates from our nurse-family partnership program are going on to go back to school, to get jobs,” said Mackie. “Some of them are aiming to be nurses, because they're inspired by these mentors.

“The thing that's remarkable for me is that you haven't changed that person's income,” he added. “You've just given them what they might not have had and that's a good friend, almost so close as to become family, but somebody who can give them hope and give them mentorship and a little bit of guidance.”

## **Meet Kathleen**

She's a bright, well-spoken young woman who's not afraid to speak candidly about her life.

“I'm 20 and I have two kids under the age of two,” she said. “It's a very busy household. There's a lot of temper tantrums — by everybody — but there's also a lot of laughter.”

She was 17 when she got pregnant for the first time. “We just weren't being smart about it.”

Her boyfriend was 20 and he had a good job with an automotive company, so they got a place of their own.

“My first big dilemma was what am I going to do about school?” she said. “I decided my best option was to stop going to school at that point.

“I figured if I was going to work so hard and just end up missing classes anyway, then I'm just exerting energy into something that's not going to be productive for me in the end.”

But the stress of life as a young family was too much, so they separated. Kathleen then dated another man, became pregnant and had a second child.

“He was a different story, he just couldn't get it together,” she said. “He couldn't get a job, he just couldn't get used to the idea of being a dad.”

Kathleen and the father of her first child have since reconciled. They're

taking small steps toward living together as a family.

“With my first child, I felt the tremendous weight of being a statistic on my shoulders,” said Kathleen. “All the time, people were judging you or telling you that you shouldn't be a parent. It was really frustrating for us because we had so much more than a lot of young parents.”

“Yes, I understood that there are some young parents who aren't prepared,” she added, “but we worked really hard to separate ourselves from being like that young family with a newborn living at home with their parents.”

Talk to any group of pregnant teens or teen moms and you'll quickly notice they share one common characteristic — a relentless, almost blinding optimism for the future that can seem oddly out of place with their current circumstances.

“The No. 1 thing a teen mom will say to you is that their goal is to be the best mother possible,” said Sheehan. “Always. It's so important to them.

“And often, people don't even think to ask that question. Assumptions get made.

“They'll say that often — ‘People judged me,’” Sheehan added. “Yes, I'm an adolescent, and yes, I'm young to be a mother, but I am a mom now or a mom-to-be, and I want to be a good mom.”

It raises the question: Is teen motherhood a problem?

“That really comes to the heart of the question here, and you're going to get a lot of different perspectives on that,” said Mackie.

Certainly, there are health risks for young mothers. Teen moms have higher rates of postpartum depression. They also have a higher risk of delivering premature or low-birth-weight babies, and low-birth-weight babies are at greater risk for developing lifelong health problems.

Studies that have followed the children of teenage mothers for decades have also shown that they have an increased risk of becoming high school dropouts, suffer higher levels of unemployment and violent offending.

From a community standpoint, it takes financial resources and staff to provide support for teen families, and that support might need to extend beyond one generation.

It explains why municipalities across the province, including Hamilton, have put a lot of time, effort and money into programs designed to keep

teenagers from becoming pregnant.

Is teen motherhood a problem? It sure sounds like it.

“But once they are pregnant,” said Sieswerda, the Thunder Bay epidemiologist, “there’s not a lot of point in continuing to call it a problem.”

## **HOW WE DID IT**

An application was made to BORN (Better Outcomes Registry & Network) Ontario for access to all Ontario birth outcomes and maternal health data for the four fiscal years spanning 2006-07 to 2009-10.

BORN Ontario maintains newborn and maternal information for each birth in Ontario through the Niday Perinatal Database.

Data for approximately 535,000 births over the four-year period for the entire province were turned over to Neil Johnston, a faculty member in McMaster University’s Department of Medicine, who is also associated with the Firestone Institute for Respiratory Health and St. Joseph’s Healthcare. He also runs the Ontario Physician Human Resources Data Centre for the province’s health ministry.

Johnston also collaborated on The Spectator’s Code Red series. He assisted on a pro bono basis and maintained exclusive control of the raw data.

Patrick DeLuca, another Code Red collaborator, once again provided statistical analysis and mapping expertise for the new project. DeLuca is a member of McMaster’s Centre for Spatial Analysis and he, too, agreed to assist on a pro bono basis.

The BORN data was assembled into spreadsheets for analysis at two levels.

The data was aggregated up to the level of municipalities and small communities, including native reserves. There are 420 municipalities and communities represented in the data.

The information was also broken down to the level of neighbourhoods — or census tracts, as defined by Statistics Canada — for each of Ontario’s 19 census metropolitan areas.

There are more than 2,100 neighbourhoods represented across the province and they account for more than 80 per cent of all Ontario births.

Birth and maternal health outcomes could then be compared to StatsCan social and economic data at both the municipal and neighbourhood levels.