IN BALANCE

Balancing Treatment and Prevention for Better Child and Youth Mental Health

New Brunswick
Nouveau-Brunswick

New Brunswick Health Council | Conseil de la santé du Nouveau-Brunswick

Who we are

New Brunswickers have a right to be aware of the decisions being made, to be part of the decision-making process, and to be aware of the outcomes delivered by the health system and its cost. The New Brunswick Health Council will foster this transparency, engagement, and accountability by engaging citizens in a meaningful dialogue, measuring, monitoring, and evaluating population health and health service quality, informing citizens on health system performance and recommending improvements to the Minister of Health.

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INTRODUCTION

Through its evaluation work, the New Brunswick Health Council (NBHC) has observed that communities that focus on achieving the right balance between the treatment of mental illnesses and the promotion of mental health (including prevention efforts) show better outcomes for children and youth.

This concept is not a novel idea, nor is it a controversial one. Despite our best efforts, however, the system struggles to effectively balance these two essential contributors to mental health and substance use by children and youth.

In a balanced approach, mental illnesses are effectively screened, treated and managed. In a balanced approach, mental health promotion and prevention efforts focus on enhancing children and youth protective factors (i.e. their resilience). Ultimately, the balance is achieved by integrating assets from community partners and from publicly funded services, together in the service of children and youth.

"Though great programs usually focus on one system at a time – such as improving a child's psychological wellbeing or making a child's community safer – great program designers are always aware of the other systems that need to be changed when solving wicked problems."
- Michael Ungar, 2015

DEFINITIONS RELATED TO MENTAL HEALTH

"Depression is not the same as having a bad day"

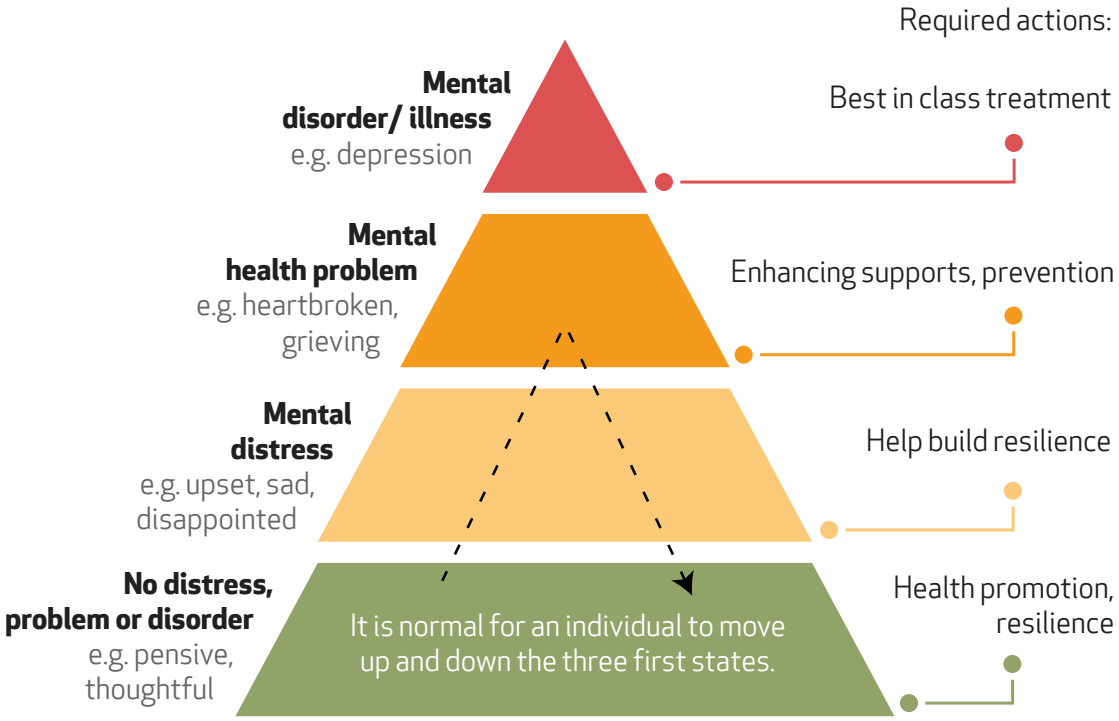
Content on this page was adapted with permission from teenmentalhealth.org

Mental Disorder/Illness: Refers to clinically diagnosed illnesses requiring evidence-based treatments from trained health care providers.

Mental Health Problem: Refers to the reactions we have to huge life challenges that may task our ability to adapt. A mental health problem is not the same as a mental disorder/illness.

Mental Distress: Refers to the common, expected, and normal response to the stresses of everyday life. Mental distress is normal and happens to everyone, it is necessary for adaptation and building resilience.

The inter-relationship of mental health states



THE NEW BRUNSWICK CONTEXT

INTEGRATED SERVICE DELIVERY

Over a decade ago, the province of New Brunswick identified, "a strong need to provide better services and programs for children and youth with multiple needs."[1] In response, it introduced Integrated Service Delivery (ISD), a governance and service delivery framework that enables its partners to better collaborate together to meet the needs of children and youth.

ISD is an integral part of the Network of Excellence, an integrated continuum of services and supports for children and youth that spans from "universal and prevention services" to "specialized services."

With the provincial implementation of service delivery according to the ISD framework, children and youth should have received "appropriate services and treatment, at the right time and intensity" and the province anticipated a reduction in "more intense and costly tertiary services."[1]

ISD PARTNERS
Department of Education and Early Childhood Development
Department of Health
Department of Public Safety
Department of Social Development
All seven school districts
Horizon Health Network
Vitalité Health Network

TIMELY ACCESS TO MENTAL HEALTH SERVICES

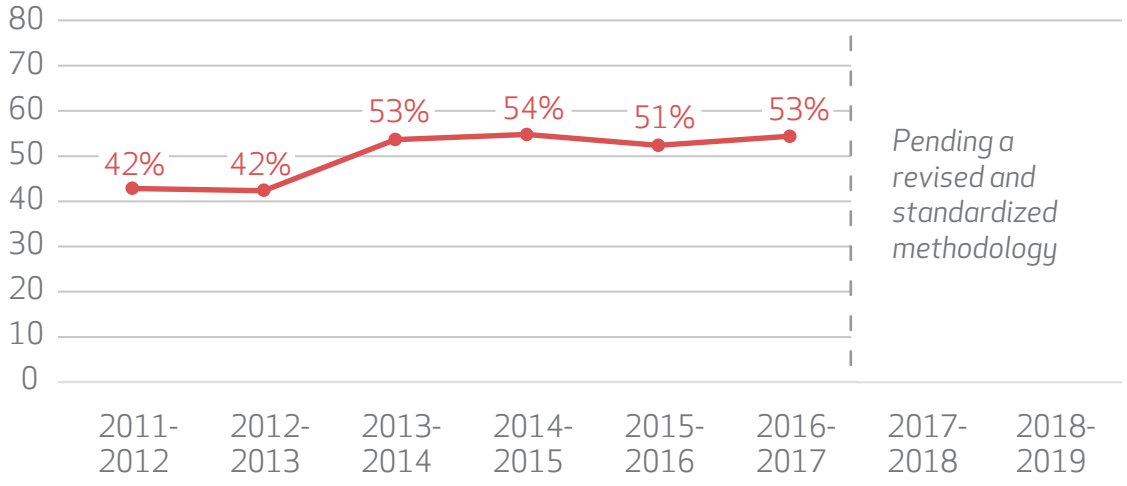
Despite best efforts in implementing ISD, our system continues to struggle to screen and treat the incoming cases of children and youth with needs in a timely manner.

In previous years, the NBHC monitored and reported on indicators of timely access to mental health services, such as presented in Figure 1. In 2016-2017, however, the Department of Health made the decision to rework the methodology of this indicator and it was no longer calculated this way. As this document was being prepared, the Department of Health and the Regional Health Authorities had not yet agreed on an alternative indicator that is standardized and validated.

There is a lack of clarity on the current level of access to service. Meanwhile, we are able to highlight the variability between health regions (zones) for 2016-2017, the last year it was reported: children and youth able to receive service within 30 days ranged from 36% to 69% (Figure 2).

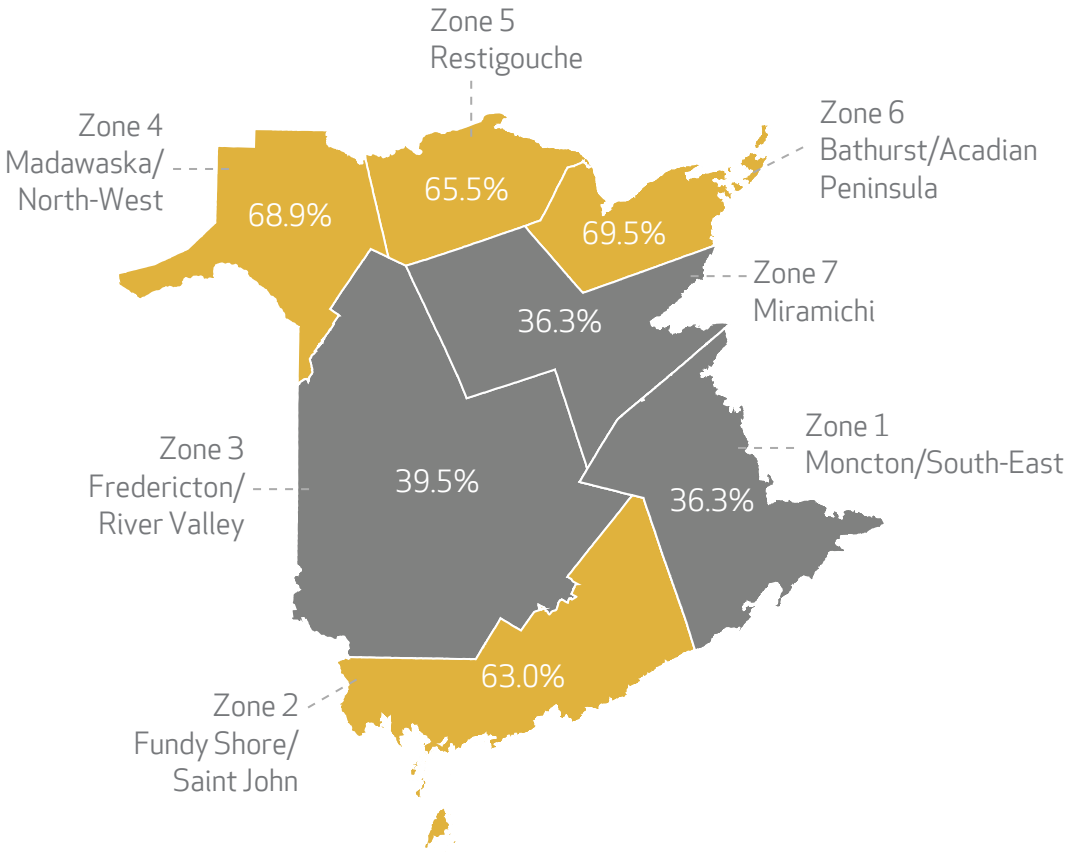
There is currently a lack of clarity on timely access to services

Figure 1. **Percentage of service delivery done within 30 days (from referral to first visit) for child and youth mental illness in N.B.**



What we do know is that service delivery varies greatly by health zone

Figure 2. **Percentage of service delivery done within 30 days (from referral to first visit) for child and youth mental illness, by health zone (2016-2017)**

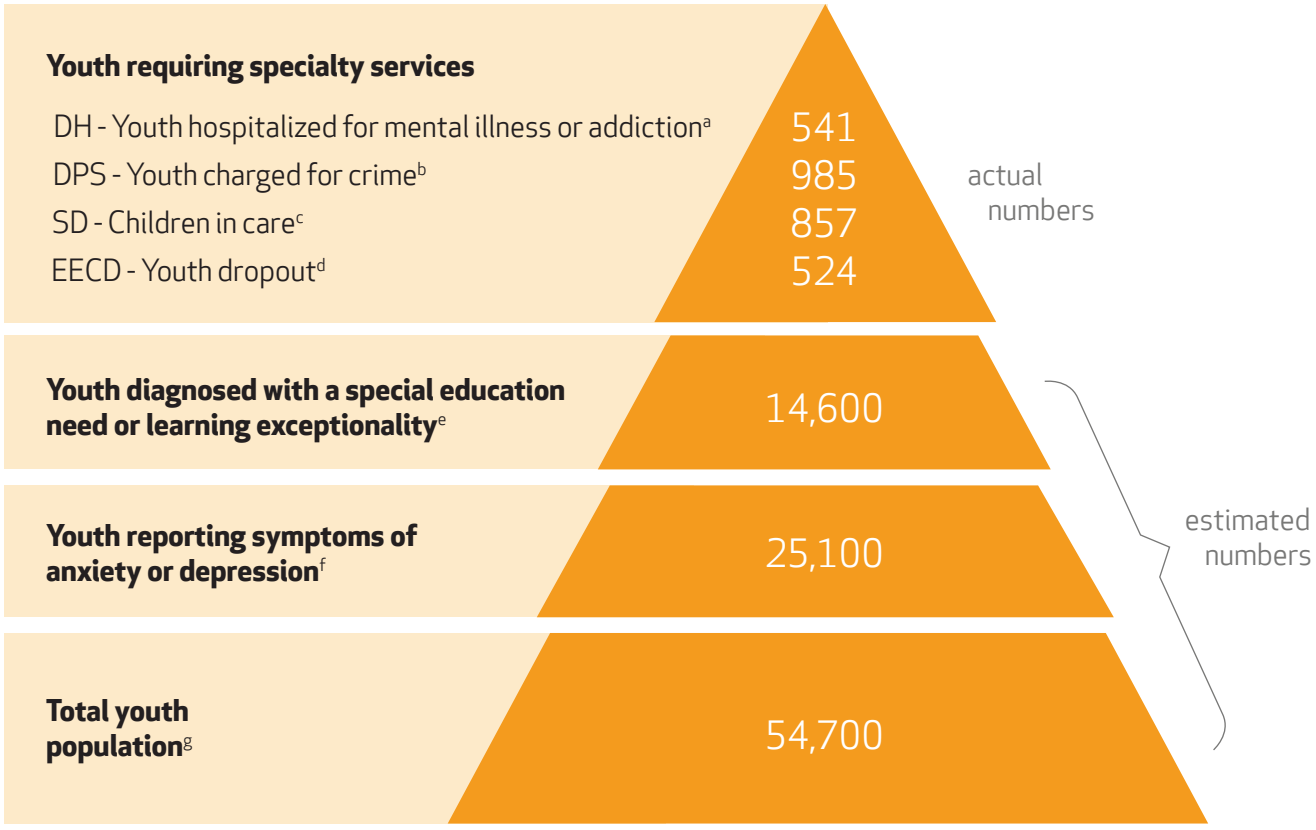


THE PYRAMID OF INTERVENTION IN NEW BRUNSWICK

All children and youth have mental health needs. Their basic psychological needs[2] may be met by their family, their friends and their school. What happens when children and youth do not have their needs met? What happens when children and youth needing services receive untimely or inappropriate services?

To illustrate this, The Pyramid Model was used to portray the current state of things in our province, using available data (see Figure 3).

Figure 3. **Number of youth at each tier of the pyramid of intervention**



DH: Department of Health
DPS: Department of Public Safety
SD: Department of Social Development
EECD: Department of Education and Early Childhood Development

Note: Numbers reference slightly different age groups. See footnotes on next page.

Each tier of the pyramid represents groups of youth with different mental health needs. The base tier represents the total youth population, which includes healthy and well youth. Moving up the pyramid, the diagram shifts to subgroups of youth with increasing needs. The specialty services presented in the top tier represent services directly related to each of the four government departments partnering in ISD.

For many reasons, including biology, there will always be children and youth requiring specialty services. Nevertheless, our objective should be to minimize the number of children and youth moving up the pyramid of intervention.

For example, when a youth (with or without a mental illness) first feels the need to see or talk to someone about a mental or emotional problem, they should be able to do so before their need escalates into something more complex (higher up in the pyramid). As a second example, a youth clinically diagnosed and treated for a mental illness, such as bipolar disorder, needs healthy supports around them so they can continue to take their prescribed medication and avoid preventable hospitalization.

To accomplish this, there needs to be supports or services for *all* children and youth at *all tiers of the pyramid*. It is through resilience and the enhancement of protective factors that this report proposes we achieve the desired balance.

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a. Includes youth 12 to 17 with: organic disorders, substance-related disorders, schizophrenic and psychotic disorders, mood disorders, anxiety disorders, personality disorders, and other disorders. Source: Separations from general hospitals involving mental illness/addiction as the primary diagnosis, ages 12 to 17, Discharge Abstract Database, 2018-2019.
b. Source: Total actual cases, 12 to 17 years of age. Statistics Canada. Table 35-10-0177-01 Incident-based crime statistics.
c. Includes children and youth 0-19 in: child placement facility or centre, foster home, group home, independent living-basic rate, provisional home, and other (without a placement, emergency home and independent living). Source: Department of Social Development, March 2019.
d. Source: Grades 7 to 12 Drop-out statistics, 2017-2018 school year, Department of Education and Early Childhood Development.
e. Includes youth 11-17 with a diagnostic of: autism / Asperger syndrome, behavioural disorder, blind or low vision, deaf or hard-of-hearing, attention deficit hyperactivity disorder (ADHD) or attention deficit disorder (ADD), intellectual disability, physical disability, mental health disorder, gifted, and other. Sources: 11-17 years of age population estimates 2018 & New Brunswick Student Wellness Survey 2018-2019.
f. Sources: 11-17 years of age population estimates 2018 & New Brunswick Student Wellness Survey 2018-2019.
g. Total population 11 to 17 years of age. Statistics Canada. Table 17-10-0005-01 Population estimates on July 1st, 2018.

BALANCING TREATMENT AND PROMOTION THROUGH RESILIENCE

The goal of ISD partners is to enhance the system's capacity to respond in a timely, effective and integrated manner to the strengths, risks and needs of children, youth and their families (i.e. the right service intensity at the right time).[1]

In order to do this for children and youth at each tier of the pyramid, ISD partners will need support from Public Health and community partners, so that collaboratively, they can act on two fronts:

1. Effectively screening, treating and managing illnesses
2. Promoting mental health by enhancing protective factors (i.e. resilience)

Acting on these two fronts represents the balance proposed in this report.

The treatment and management of illnesses happen in the top half of the pyramid of intervention presented previously. The promotion of mental health happens when we work on enhancing resilience through protective factors *in each tier of the pyramid*, for children and youth with or without an illness.

Every child or youth faces challenges in their life. When they are poorly equipped (for example not having a healthy support system in place), they might begin using unhealthy coping strategies like drugs and alcohol. This can happen whether or not they have a mental illness. When they are well equipped to face those challenges (i.e. resilience), they have an increased chance of remaining healthy and well.

Enhancing protective factors can help prevent the onset of illness and build resilience. It also prevents children and youth from moving up the pyramid of intervention, and improves coping for those living with a mental illness.

FOR REFLEXION

What services or supports do we have in New Brunswick for children and youth in the lower tiers of the pyramid of intervention?

Figures 4 and 5 present information by health region on the resilience* and the mental health needs of New Brunswick youth. The health regions where youth have higher levels of resilience are also those where a significantly lower proportion of them reported needing to see or talk to someone for a mental or emotional problem in the 12 months prior to the survey.

FOR REFLEXION

What are the characteristics of the youth from those regions? What contributes to building such resilience?

Figure 4. **Youth resilience**

Percentage of youth in grades 6-12 who have moderate to high levels of resilience, by health zone

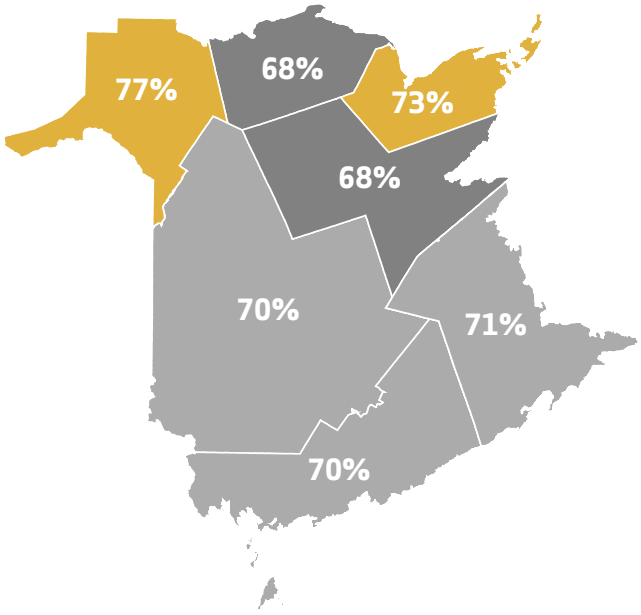
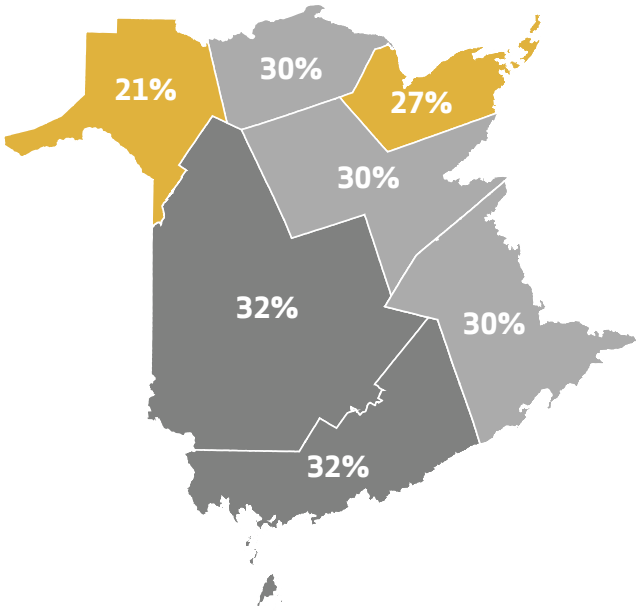


Figure 5. **Youth needing help**

Percentage of youth in grades 6-12 who said they needed to see or talk to someone for a mental or emotional problem, by health zone



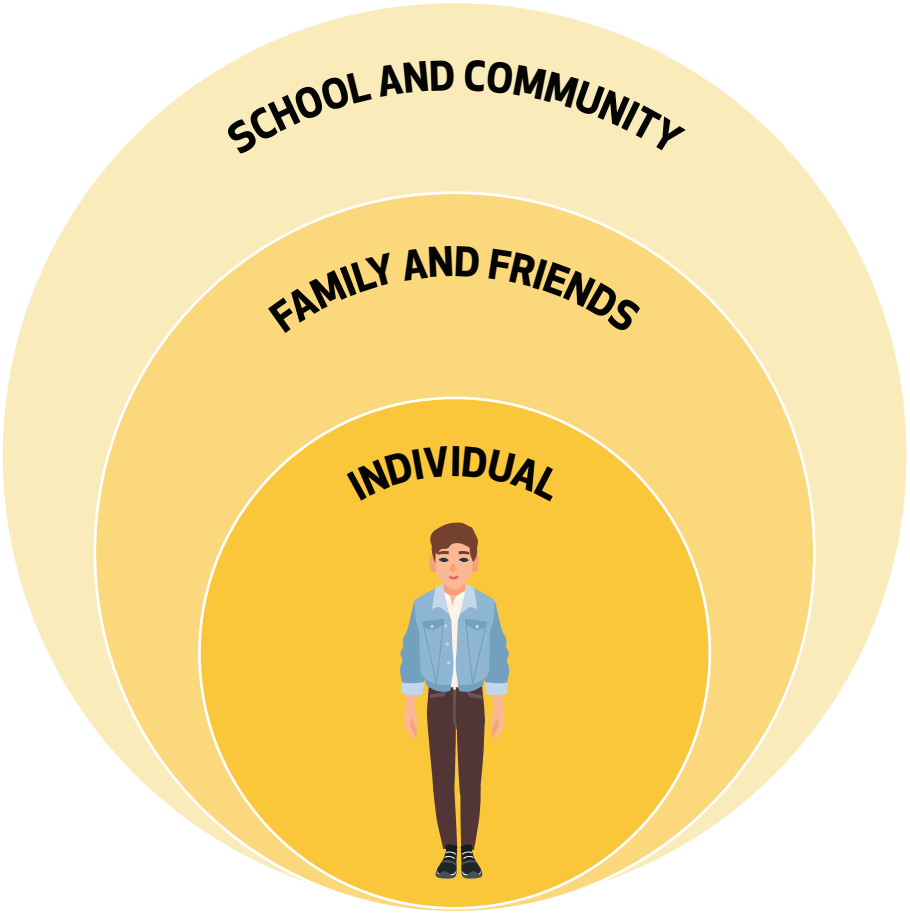
*More information on resilience and how it is measured is available in a previous publication: *Protective factors as a path to better youth mental health* (2016)

UNDERSTANDING RESILIENCE AND KEY RELATED CONCEPTS

Resilience is the capacity to "effectively cope with, or adapt to, stress and challenging life situations."[3] As such, it is the process by which children and youth use internal and external resources available to them (protective factors) to overcome difficulties (risk factors).

Protective factors are attributes, like skills, strengths or resources, that help shield children and youth from the development or worsening of undesirable health conditions and enhance their capacity to cope. For example, adequate sleep is an important element in protecting someone against symptoms of mood disorders such as anxiety and depression.

Figure 6. **Spheres of protective factors contributing to resilience**



- *Protective factors are not just within:* Protective factors can be attributes of our own selves (i.e. physical activity), but they can also be attributes coming from family and friends (i.e. support), or our community (i.e. school connectedness). See Figure 6.

- *Protective factors have a cumulative effect:* A child or youth can accumulate as many protective factors as there are, and their effect will be cumulative. Generally, thriving children and youth will have several protective factors at each of the spheres described.

- *Protective factors are temporal:* Most protective factors are temporal, meaning that the set of protective factors that a child or youth has can change with time. Children and youth can gain or lose protective factors, and the quality of a given protective factor can also improve or worsen if, for example, they move to a new community.

It is worth noting that in addition to protective factors, there are also risk factors.

Risk factors are attributes that contribute to the development or worsening of undesirable conditions. For example, risk factors include oppositional behaviours, familial conflict and social isolation.

VARIABILITY IN PROTECTIVE AND RISK FACTORS IN NEW BRUNSWICK

Each community in New Brunswick has its respective context, strengths and challenges. Some communities have better health outcomes than others. Sometimes the differences between communities are small, sometimes they can be important or even concerning.

The design of supports and services should be tailored to the needs of the children and youth served. Since the needs of children and youth are likely to vary across the province, then so should the service delivery.

Figure 7. **Disparities between two New Brunswick communities**

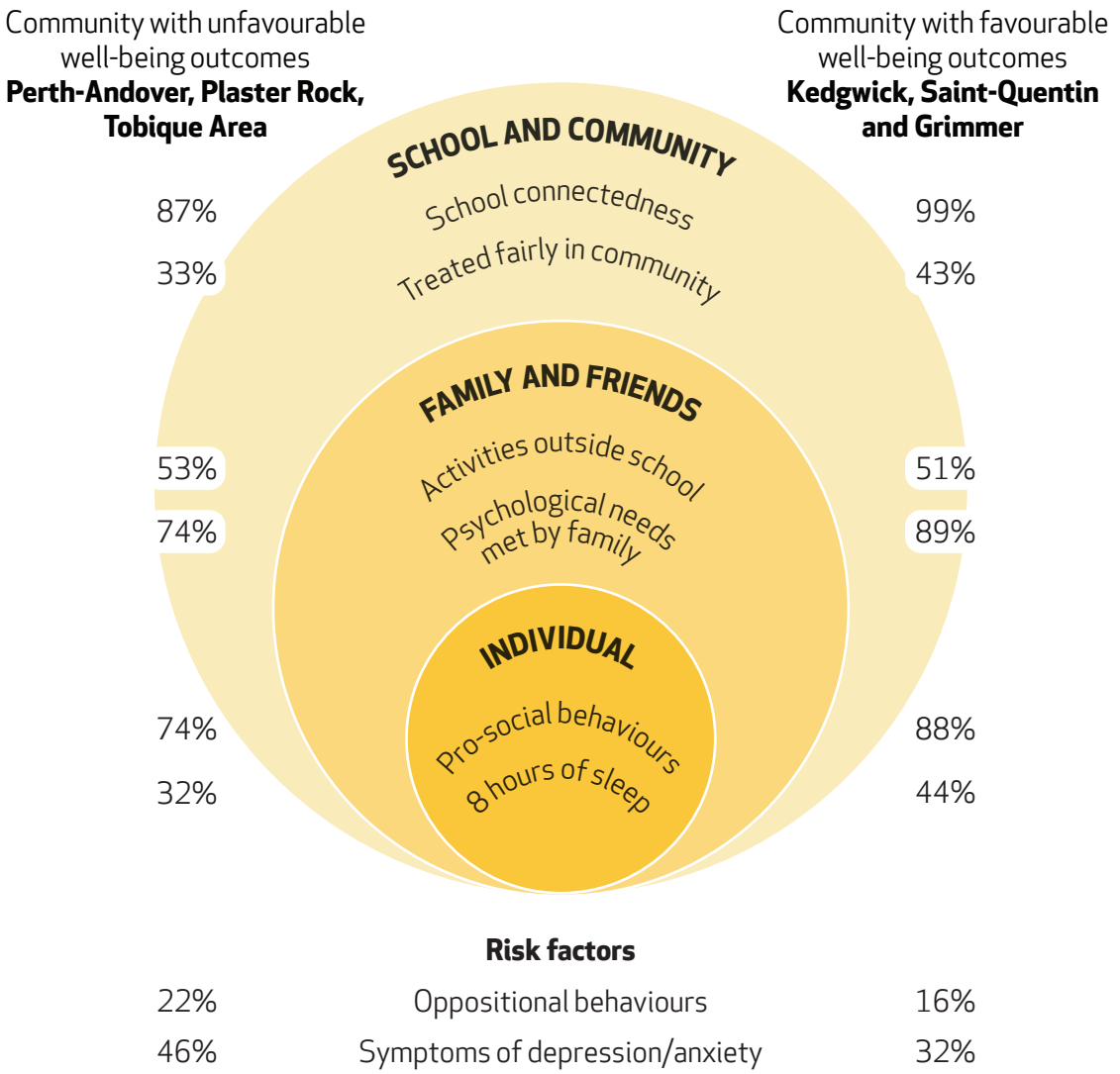


Figure 7 illustrates such disparities as they relate to protective and risk factors. The figure compares data for two communities* that were selected for their favourable or unfavourable results on three well-being outcomes: self-reported health, mental fitness, and resilience. Perth-Andover's results were among the most unfavourable in the province, while Kedgwick had among the most favourable results.

Both communities are comparable in size and socio-economic conditions. The key difference to note is that Kedgwick has considerably better results than Perth-Andover on almost all protective and risk factors shown.

A more exhaustive list of protective and risk factors is available for all NBHC communities in Appendix 2. When comparing communities, or even health zones, one should keep in mind the context of the geography being compared. This includes, but is not limited to, population size, socio-economic conditions, cultural and historical factors such as growth in the immigrant population, etc. Such contextual information for each of the 33 NBHC communities can be found in the *My Community at a Glance* community profiles produced by the NBHC. Contextual information for each of the seven health regions can be found in Appendix 3

It is essential that ISD partners have a common understanding of the current state of things in their respective geographic region. This means understanding the reality and the needs of the children and youth they serve, as well as understanding the resources they have available and the gaps that need to be addressed. Furthermore, to pursue better outcomes for children and youth mental health, priorities need to be identified, and targets need to be established.

FOR REFLEXION

Should the supports and services offered (frequency, type, intensity, resources) be the same in two communities with different outcomes and needs?

*In 2011, the NBHC divided the province in 33 communities to be able to communicate relevant information locally. Details on the NBHC communities and how they were developed are available on our website (nbhc.ca/maps-health-zones-and-nbhc-communities).

FURTHER REFLEXIONS

1. What are the current proactive measures in New Brunswick enhancing the protective factors of children and youth in support of better mental health?
2. How do the current measures (or lack thereof) impact the system and the services it can deliver?
3. What barriers are getting in the way of New Brunswick fully and efficiently implementing mental health promotion and proactive measures?
4. Who is or should be accountable for implementing and monitoring mental health promotion and proactive measures and their impact?

THE ICELANDIC MODEL

When a whole country decides to build on protective factors

In 1997, Iceland had one of the highest rates of substance use among European teenagers. To address the issue, they developed a theoretically grounded and evidence-based approach to adolescent substance use prevention[4] whereby they focused on strengthening a broad range of parental, school and community protective factors. Each community changed their environments so that youth were less likely to adopt deviant behaviours. They strongly engaged with parents to promote the importance of youth spending time with their parents. They worked hard to give alternative options for productive activities such as sports, arts, etc. Over 20 years, the program has dramatically reduced the substance use of Icelandic youth to be among the lowest in Europe. For example, the percentage of grade 10 students getting "drunk" decreased from 42% in 1998 to 7% in 2018. The program has since generated great interest elsewhere in the world, with 110 communities in 27 countries that have adopted the model. More information can be found online at: https://planetyouth.org/.

NOW WHAT? WHAT CAN I DO?

Moving forward, it will be essential for New Brunswick to address child and youth mental health by taking balanced action: effectively screening, treating, and managing mental illnesses, while promoting mental health through the enhancement of protective factors (i.e. resilience). To do this, everyone from children and youth themselves to managers and directors of our services will have a role to play.

What can managers/directors do?

- Identify and gather the essential information for planning your services based on the needs of the children and youth you serve. What resources do you have? What are the needs of the children and youth you are serving? What are your service challenges and opportunities?
- Plan your services based on the needs of the children and youth you serve, meaning that the type, amount and intensity of supports and services are tailored by the needs of your specific geographic region.
- Measure, monitor, and evaluate your performance by using provincially standardized measures, including a measure of timely access to services, and begin addressing the geographic inequity within our province.

What can service providers do?

- Have information on community groups and services available in your area and collaborate with them so they can help you bridge possible gaps and enhance the protective factors (i.e. resilience) of children and youth in each tier of the pyramid of intervention.
- Identify what outcomes or targets let you know, personally, that your efforts are achieving the desired results.

What can schools do?

- Ensure teachers and staff have the mental health literacy training they require.
- Continue to use the results from the New Brunswick Student Wellness Survey to identify and address the needs of your students.

What can families do?

- Establish a healthy dose of structure and consequences.[5]
- Connect in a way that respects where your child is in their development; identify which approach worked in the past and try to do more of that in the future.[5]

What can friends do?

- Spend time having fun with your friends.
- Reach out to someone who needs a friend.

What can children and youth do?

- Get good quality sleep, eat well, move; it really is that important.
- Volunteer; helping others benefits you just as much.
- Reach out when things get difficult. For example, check out The Link Program: thelinkprogram.com/en/helping-tree/map

REFERENCES

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2 - Ryan, R. M., & Deci, E. L. (2017). *Self-Determination Theory*. New York: The Guilford Press.

3 - Centre for Addiction and Mental Health (2020). *Resilience is an important aspect of mental well-being*. Retrieved September 2019 from https://www.camh.ca/en/health-info/guides-and-publications/growing-up-resilient

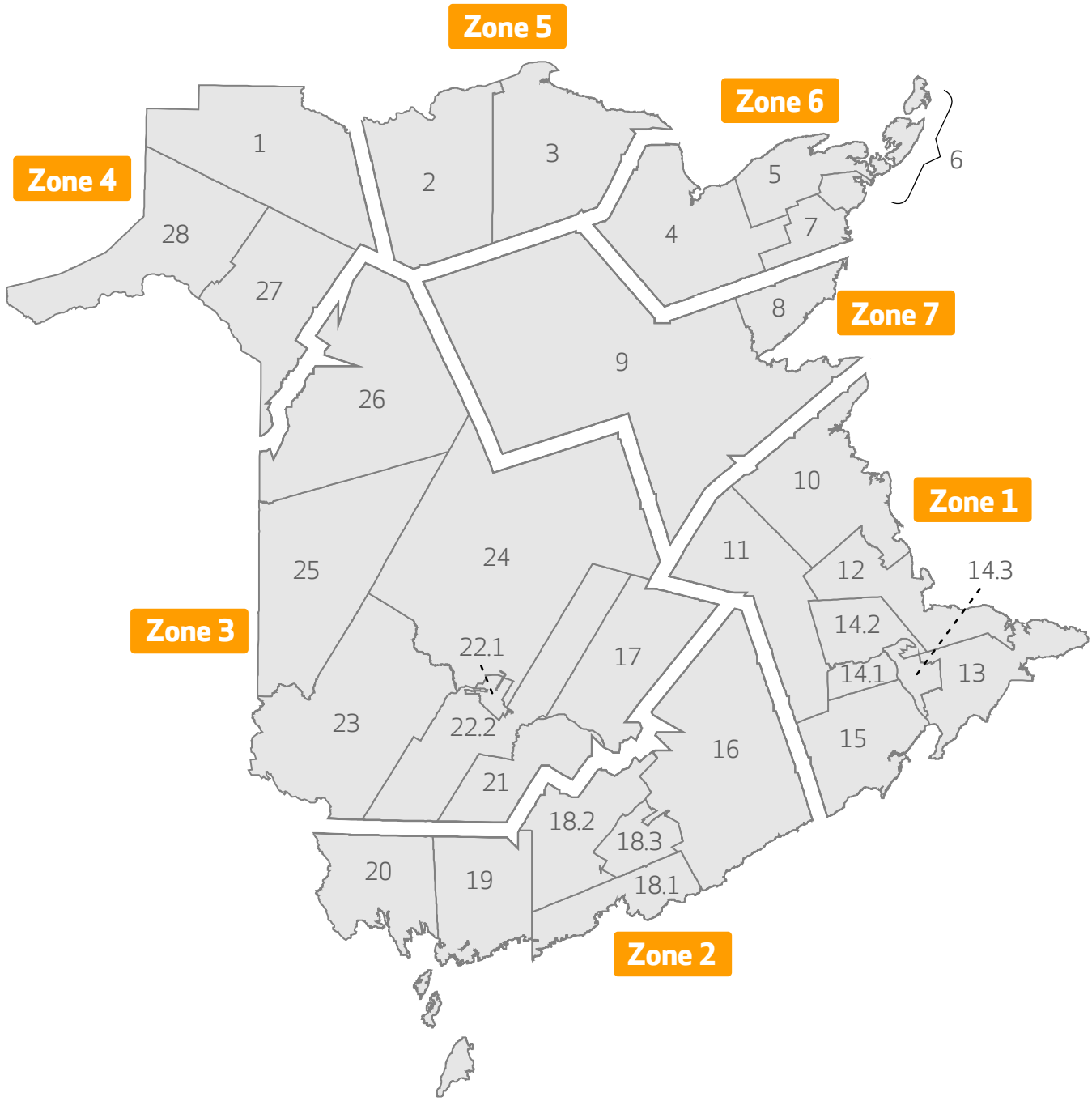
4 - Sigfúsdóttir, I. D., Thorlindsson, T., Kristjánsson, A. L., Roe, K. M. & Allegrante, J. P. (2008). Substance use prevention for adolescents: the Icelandic Model. *Health Promotion International*, 24, 16-25. doi:10.1093/heapro/dan038

5 - Ungar, M. (2015). *I Still Love You: Nine things Troubled Kids Need from Their Parents*. Toronto: Dundurn.

Appendix 1 - Health zones and communities

To provide a better understanding of local differences, the NBHC presents information at either the health zone level or the community level. The boundaries of the seven health zones were established by provincial legislation, while the 33 communities were created by the NBHC (by further dividing up the seven established health zones).

The community boundaries were determined using the catchment areas of health care centres, community health centres and hospitals. No community has fewer than 5,000 people to ensure data availability, stability and anonymity.



Health Zone 1: Moncton/South-East Area

10	Bouctouche, Richibucto, Saint-Louis de Kent Area
11	Salisbury, Petitcodiac, Harcourt Area
12	Shediac, Saint-Antoine, Beaubassin East Area
13	Sackville, Dorchester, Port Elgin Area
14.1	Riverview and Coverdale
14.2	Moncton
14.3	Dieppe and Memramcook
15	Hillsborough, Riverside-Albert, Alma Area

Health Zone 2: Fundy Shore and Saint John Area

16	Sussex, Norton, Sussex Corner Area
18.1	Saint John, Simonds and Musquash
18.2	Grand Bay-Westfield, Westfield, Greenwich Area
18.3	Quispamsis, Rothesay, Hampton Area
19	St. George, Grand Manan, Blacks Harbour Area
20	St. Stephen, Saint Andrews, Campobello Island Area

Health Zone 3: Fredericton and River Valley Area

17	Minto, Chipman, Cambridge-Narrows Area
21	Oromocto, Gagetown, Fredericton Junction Area
22.1	Fredericton
22.2	New Maryland, Kingsclear, Lincoln Area
23	Nackawic, McAdam, Canterbury Area
24	Douglas, Saint Marys, Doaktown Area
25	Florenceville-Bristol, Woodstock, Wakefield Area
26	Perth-Andover, Plaster Rock, Tobique Area

Health Zone 4: Madawaska and North-West Area

1	Kedgwick, Saint-Quentin and Grimmer
27	Grand Falls, Saint-Léonard, Drummond Area
28	Edmundston, Rivière-Verte, Lac Baker Area

Health Zone 5: Restigouche Area

2	Campbellton, Atholville, Tide Head Area
3	Dalhousie, Balmoral, Belledune Area

Health Zone 6: Bathurst and Acadian Peninsula Area

4	Bathurst, Beresford, Petit-Rocher Area
5	Caraquet, Paquetville, Bertrand Area
6	Shippagan, Lamèque, Inkerman Area
7	Tracadie-Sheila, Saumarez and Saint-Isidore

Health Zone 7: Miramichi Area

8	Neguac, Alnwick, Esgenoopetitj Area
9	Miramichi, Rogersville, Blackville Area

Appendix 2 - Protective factors, risk factors and outcomes, by community

	N.B.	Communities*								
		1	2	3	4	5	6	7	8	9
INDIVIDUAL PROTECTIVE FACTORS										
High level of pro-social behaviour	85	88	82	81	87	88	86	88	88	85
Eating 5 or more servings of vegetables or fruit	42	39	37	29	43	40	42	46	41	35
More than two hours per day of recreational screen time	71	66	77	77	69	73	76	74	74	74
60 minutes of daily moderate or vigorous physical activity	19	16	18	13	19	17	17	15	22	18
Sleeping 8 hours or more every night	37	44	36	36	37	41	45	44	41	32
FAMILY/FRIENDS PROTECTIVE FACTORS										
Mental fitness needs highly satisfied by family	79	89	81	78	82	82	84	85	87	78
Mental fitness needs highly satisfied by friends	81	81	81	79	82	81	84	85	83	80
Participating in activities or groups inside school	54	57	52	55	58	58	59	50	55	54
Participating in activities or groups outside school	55	51	51	56	56	50	52	52	60	49
COMMUNITY PROTECTIVE FACTORS										
Mental fitness needs highly satisfied by school	57	74	55	59	60	70	68	65	63	56
High level of school connectedness	92	99	91	90	94	95	99	96	92	92
Taking part in volunteer activities in the last 12 months	72	83	66	68	76	80	77	78	82	73
Reporting being treated fairly in their community	37	43	36	29	38	38	40	35	38	38
Needing to see or talk to someone for a mental/emotional problem	30	19	28	33	30	27	23	25	23	31
Needed to see or talk to someone about a mental/emotional problem but not seeing someone	9	4	7	8	8	5	3	6	6	10
OUTCOMES										
Reporting their learning needs are met at school	80	90	81	81	82	89	82	86	83	83
High and moderate levels of resilience	71	77	72	62	74	70	74	74	67	68
Reporting that their health is "Very good" or "Excellent"	60	72	62	56	64	71	70	70	65	57
High and moderate levels of mental fitness	78	91	77	77	81	80	84	84	82	77
IMPACT/RISK FACTORS										
Smoking daily or occasionally	14	15	18	18	14	11	15	10	12	17
Having tried E-cigarettes (electronic cigarettes, vape)	29	34	30	32	31	27	36	31	26	35
Consuming 5 or more drinks at one time, at least once a month	15	30	22	19	17	17	23	14	15	23
Using cannabis in the last 12 months	21	16	24	20	22	16	19	9	10	24
Victims of dating violence in the last 12 months	17	11	17	15	18	15	15	15	9	16
Reporting symptoms of depression in the last 12 months	38	23	36	34	33	30	27	28	24	39
Reporting symptoms of anxiety in the last 12 months	38	24	36	41	39	41	36	34	36	38
High level of oppositional behaviours	15	16	20	22	14	14	15	13	15	15

Source: New Brunswick Student Wellness Survey, 2018-2019 edition

*See Appendix 1 for names

Communities*																								
10	11	12	13	14.1	14.2	14.3	15	16	17	18.1	18.2	18.3	19	20	21	22.1	22.2	23	24	25	26	27	28
INDIVIDUAL PROTECTIVE FACTORS																							
83	79	85	82	83	85	93	80	83	81	83	87	88	84	83	82	86	85	83	85	82	74	86	89
33	33	44	39	41	45	58	32	37	40	42	37	42	34	37	35	47	33	38	36	36	30	45	52
74	71	68	71	74	71	65	69	68	66	76	61	68	76	70	77	70	61	72	69	69	71	66	61
15	21	18	18	22	19	22	24	18	20	19	18	21	16	22	19	20	25	23	21	22	17	19	20
36	33	41	34	34	37	50	31	40	38	31	53	37	29	38	34	32	35	35	37	40	32	47	43
FAMILY/FRIENDS PROTECTIVE FACTORS																							
76	71	82	80	75	79	86	76	76	74	74	80	79	75	79	71	79	79	82	79	78	74	82	87
77	74	82	81	78	81	87	78	79	75	80	81	84	80	80	79	83	76	83	82	80	78	83	85
51	52	58	59	55	53	52	59	49	58	55	74	53	58	56	47	54	50	58	56	55	56	62	58
53	55	63	53	56	54	65	57	52	51	55	81	59	51	51	50	57	50	54	53	52	53	57	57
COMMUNITY PROTECTIVE FACTORS																							
54	44	59	53	50	59	66	44	51	51	53	65	54	45	54	48	56	47	57	54	55	41	63	70
90	88	92	93	89	93	95	81	89	89	92	93	92	83	93	88	92	85	92	92	92	87	93	96
74	64	76	73	68	68	84	69	65	64	68	82	73	68	74	65	72	67	73	74	69	68	77	79
32	31	37	34	34	38	43	28	37	36	35	52	40	36	38	35	40	32	37	37	37	33	42	38
32	34	22	29	33	30	28	27	32	30	33	30	31	33	31	38	32	35	34	27	29	23	25	21
9	10	5	8	9	8	8	11	12	11	10	6	9	10	9	13	9	15	10	9	8	7	9	4
OUTCOMES																							
82	73	83	77	76	81	85	64	76	77	79	91	78	69	78	76	78	76	81	84	81	72	83	85
67	62	70	70	69	72	79	61	66	65	68	81	75	67	69	63	74	65	73	70	71	64	73	79
52	52	64	58	52	60	75	48	55	49	54	58	63	54	56	53	63	62	55	58	59	56	71	75
74	67	81	76	72	79	86	73	73	70	74	78	78	71	77	70	79	75	78	77	77	70	82	87
IMPACT/RISK FACTORS																							
21	17	10	13	14	10	9	18	18	15	16	3	12	15	13	16	11	17	18	13	15	19	9	13
40	33	24	30	30	22	20	37	31	26	37	10	31	34	26	30	25	25	36	30	30	33	23	30
25	20	15	15	16	11	11	25	17	11	15	1	12	17	12	13	9	16	18	14	15	15	13	14
30	25	17	20	22	18	13	31	30	18	26	2	22	27	21	24	20	27	27	17	20	24	11	12
19	19	12	14	23	16	10	14	21	16	21	16	16	21	19	21	14	19	18	11	15	17	13	13
40	46	29	41	43	37	24	41	43	41	45	27	39	44	38	49	38	41	42	35	38	41	29	26
42	41	35	39	41	36	33	39	39	37	42	29	36	45	36	44	39	35	38	35	34	32	32	33
18	19	14	11	18	12	13	17	18	17	19	4	13	21	15	17	13	15	19	17	14	22	11	14

Appendix 3 - Contextual information by health zone

	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6	Zone 7	N.B.
ACCESS TO COMMUNITY SUPPORTS AND SERVICES								
Students in grades 6 to 12 who report that they needed to see or talk to someone for a mental or emotional problem in the last 12 months[1]								
Percent	30	32	32	21	30	27	30	30
Estimated number	4,550	4,301	4,414	680	458	1,236	878	16,402
...but did not see someone[1]								
Percent	8	10	10	5	7	6	10	9
Estimated number	1,213	1,344	1,379	162	107	275	293	4,920
DEMOGRAPHIC CONTEXT OF THE HEALTH REGION								
Total population 11 to 17 years of age (Population estimates 2018)[2]	15,165	13,442	13,794	3,240	1,528	4,576	2,927	54,672
Prevalence of low income based on the Low-income measure, after tax (LIM-AT) (%)[3]	15.4	17.6	16.7	18.3	21.4	19.5	17.6	17.1
Immigrant population (%)[3]	5.0	5.3	6.4	3.3	1.6	1.4	1.8	4.6
Population with Indigenous/Aboriginal identity (%)[3]	4.0	1.8	4.8	3.2	8.2	4.0	8.5	4.0

Sources:

1. New Brunswick Student Wellness Survey, 2018-2019 edition
2. Statistics Canada, Demography Division, customized data
3. Statistics Canada, Semi-Custom Profile - 2016 Census