# Child and Youth Data Laboratory (CYDL) Report for Experiences of Albertan Youth Project

# **Key findings**

This report is an overview of the educational experiences of 272,588 Albertan youth aged 12 to 20 years registered in Alberta's K-12 education system in 2008/09. Educational achievement was categorized as above, meeting, or below expectations for a student's age and grade. School authority types included public, separate, Francophone, charter, private, and other. No data were available for students who attended schools on First Nations reserves or in Lloydminster. See *Definitions and Notes* for details.

The report describes how educational achievement and school authority type varied by age, gender, region of residence, socio-economic status, mental health status, and health service use. The cross-ministry service use of youth registered in K-12 education was also studied.

- 79% of youth 12 to 17 years old and 17% of youth aged 18 to 20 were registered in the K-12 education system. 68% of students were meeting educational expectations, 19% were below expectations, and 11% were exceeding expectations.
- Overall, most students were meeting or above educational expectations. Students performing below educational expectations were more likely to be male, to live in a lower socio-economic status neighbourhood, to have received services for a mental health condition, to visit an emergency room, or to be hospitalized during the year.
- Poor educational performance was associated with receiving maltreatment-related intervention services, receiving Family Support for Children with Disabilities services, being charged with an offence (particularly multiple charges), being involved in corrections (particularly custody), or receiving income support at some point during the year 2008/09.
- 73% of youth were registered in public schools, and 22% in separate schools. School authority type varied with age, region of residence, socio-economic status, educational achievement, mental health status, and emergency room use.
- Students facing challenges, such as receiving intervention services, being charged with an offence, or receiving income support, were more likely to be registered in public schools than any other school authority type.



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#### **Context**

The benefits of an education are well documented. Graduating successfully from high school, for example, is associated with greater financial security and lower unemployment rates. <sup>1</sup> Education provides access to the resources, knowledge and support that are necessary for positive health outcomes. <sup>2</sup> High school graduates make more use of preventative medical services, make fewer multiple visits to doctors and have better general health status than non-graduates. <sup>3</sup>

Canadian results from an OECD study show that gender, socio-economic status, region of residence and child intervention status are factors associated with educational achievement. Among Canadian youth at age 15, girls perform significantly better than boys in reading, whereas boys perform better in math. <sup>4</sup> Performance in science is better among students from higher socio-economic status backgrounds than among those from lower socio-economic status backgrounds. <sup>4</sup>

Previous reports have shown that, while Albertan students tend to achieve above the national average on a range of educational outcomes, rural Albertan students have significantly lower reading scores than their urban counterparts. <sup>5</sup> Provincial test scores and high school completion rates are also consistently lower for youth in care compared to other Albertan youth. <sup>6</sup>

# The project

The current project, **Experiences of Albertan Youth**, is focused on basic understanding of the experiences of Albertan youth within and across ministries, as they relate to key indicators (age, gender, socio-economic status, educational achievement, and mental health status). It is the first project in a planned series that will link and analyze administrative data on children and youth in Alberta to inform policy, programs, and research.

# List of reports for the project

Socio-economic status of Albertan youth
Educational experiences of Albertan youth
Mental health status of Albertan youth
Family Support for Children with Disabilities services
received by Albertan youth
Maltreatment-related investigations among Albertan
youth

Maltreatment-related intervention services received by Albertan youth

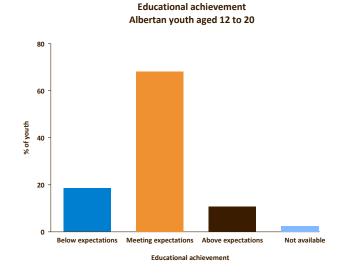
Physician visits by Albertan youth

Emergency room visits by Albertan youth
Hospitalizations of Albertan youth
Offence charges among Albertan youth
Corrections involvement among Albertan youth
Post-secondary students in Alberta
Income support among Albertan youth
Educational experiences of Albertan youth with income
support activity
Least advantaged and most advantaged Albertan youth

#### **Educational achievement (Table 2)**

This analysis and the following eleven analyses describe the educational achievement of 272,588 youth (aged 12 to 20 years) who were registered in Alberta's education system in 2008/09. An educational achievement rating was not available for 2.5% of the population. See *Definitions and Notes* (p. 21).

 Over two thirds (68%) of students were meeting educational expectations, 19% were performing below expectations, and 11% were exceeding educational expectations.



# Educational achievement by age Albertan youth aged 12 to 20 Below expectations Meeting expectations Above expectations Not available Age (years)

#### Educational achievement by age (Table 3)

Student achievement was determined differently for each age group. The performance of younger youth was primarily evaluated using provincial tests scores, whereas number of credits and course grades were primarily used to evaluate older youth.

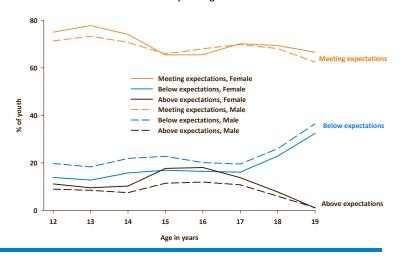
- About 15% of students between 15 and 16 years, and 12% of 17 year olds were achieving above educational expectations. These rates are higher than for other ages.
- About one-third of older students (aged 19 and 20 years) were performing below expectations, a higher rate than for younger students.

# Educational achievement by age and gender (Table 4)

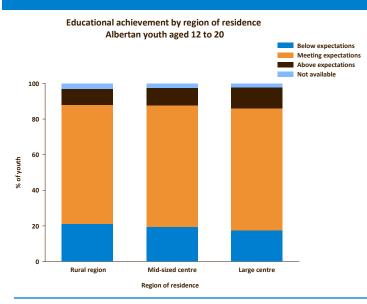
Due to small numbers, data for 20 year old youth are not shown in this analysis.

- Between the ages of 12 and 14 years, female students were slightly more likely to be meeting educational expectations than males.
- Between the ages of 14 and 17 years, female students were more likely to perform above expectations compared to males.
- Between 12 and 19 years, male students were consistently more likely to perform below expectations compared to females.

#### Educational acheivement by age and gender Albertan youth aged 12 to 19







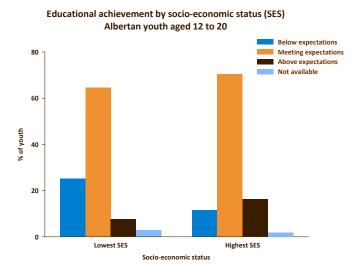
# Educational achievement by region of residence (Table 5)

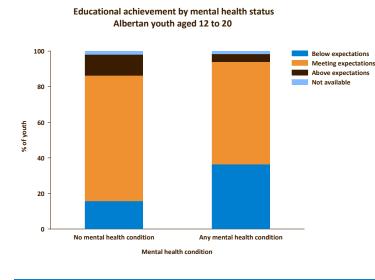
- Across all regions, the large majority of students was meeting or performing above educational expectations.
- However, as community size increased, the proportion of students performing below expectations decreased and the proportion of students achieving above expectations increased.
- 12% percent of students living in large centres (Edmonton and Calgary) were achieving above expectations.

# Educational achievement by socio-economic status (Table 6)

Socio-economic status captures the social and material environments in which youth lived. In this report, "lowest socio-economic status" refers to the lowest group while "highest" refers to the highest group. See *Definitions and Notes* (p. 21).

 Students living in the lowest socio-economic status neighbourhoods were more likely to perform below expectations (25%) and less likely to perform above expectations (8%) than students living in the highest socio-economic status neighbourhoods (12% and 16%, respectively).





# Educational achievement by mental health status (Table 7)

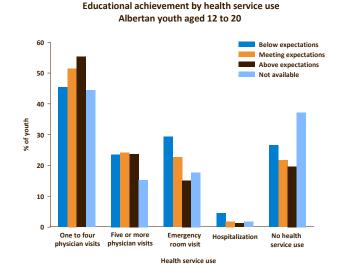
Mental health status refers to presence or absence of a mental health condition. Mental health conditions are defined as receipt of services related to mental health conditions; that is, receipt of services is used here as a proxy for confirmed presence of a mental health condition. See *Definitions and Notes* (p. 22).

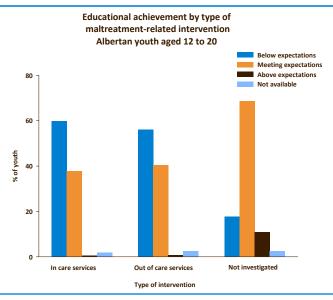
 36% of students with a mental health condition were performing below expectations during 2008/09. Less than 5% of students with a mental health condition were achieving above educational expectations.

# Educational achievement by health service use (Table 8)

This analysis describes youth (aged 12 to 20 years) registered in the Alberta Health Care Insurance Plan in 2008/09.

- Among youth exceeding educational expectations, 55% saw a physician between one and four times in the year, compared to 45% performing below expectations.
- Compared to other students, students performing below educational expectations were more likely to visit emergency rooms or hospitals at least once.





# Educational achievement by type of maltreatment-related intervention (Table 9)

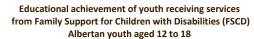
This analysis considers youth (aged 12 to 20 years) who received a maltreatment-related intervention from Human Services in 2008/09. A maltreatment-related intervention occurs when the safety or wellbeing of a youth is threatened. See *Definitions and Notes* (p. 22).

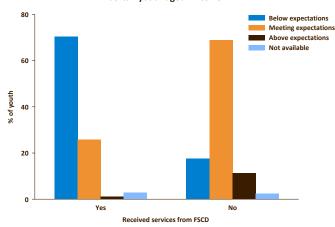
 Among youth not investigated, 18% were performing below educational expectations, compared to 56% of youth receiving out of care services, and 60% of youth receiving in care services.

# Educational achievement of youth receiving services from Family Support for Children with Disabilities (Table 10)

This analysis considers youth (aged 12 to 18 years) who received services from Family Support for Children with Disabilities (FSCD) in 2008/09. Some youth receiving FSCD services had disabilities that would be expected to directly affect their school performance.

 70% of youth receiving FSCD services were performing below expectations, compared to 18% of youth not receiving services. 28% of youth receiving FSCD services were meeting or exceeding expectations compared to 80% of youth not receiving services.





# Educational achievement by number of charges Albertan youth aged 12 to 17 Below expectations Meeting/above expectations Not available No charge One charge Two or three charges Number of charges

# Educational achievement by number of charges (Table 11)

This analysis considers youth (aged 12 to 17 years) who were charged with an offence in 2008/09.

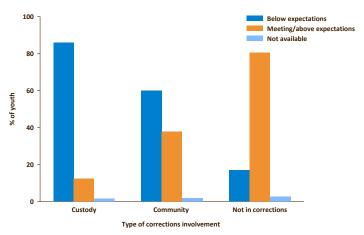
- More charges were associated with poorer educational achievement.
- Among youth with no charges, 17% were performing below expectations, compared to 81% of youth with four or more charges.

# Educational achievement by type of corrections involvement (Table 12)

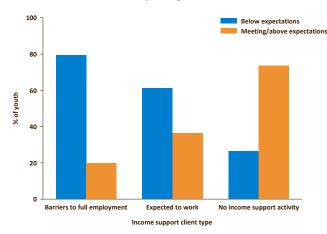
This analysis considers the educational achievement of youth (aged 12 to 17 years) who were registered in Alberta's K-12 education system and who were in custody (in which a sentence is served in a young offender facility) or had a community sentence or pretrial supervision in 2008/09.

 Among youth not involved in corrections, 17% were performing below educational expectations, compared to 63% of youth with a community sentence/pre-trial supervision, and 86% of youth in custody.

#### Educational achievement by type of corrections involvement Albertan youth aged 12 to 17



#### Educational achievement of youth with any income support activity by client type, Albertan youth aged 18 to 20



# Educational achievement of youth with any income support activity by client type (Table 13)

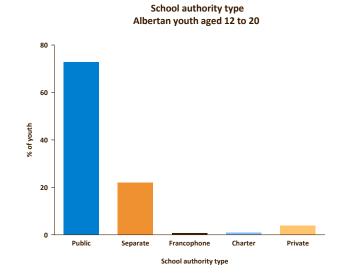
This analysis describes youth aged 18 to 20 years with any income support activity from Human Services during 2008/09 by client type. Client type categories include *expected to work* (clients looking for work, or unable to work in the short term) and *barriers to full employment* (clients having difficulty finding work due to disabilities or other barriers).

 Among youth with no income support activity, 28% were performing below expectations, compared to 62% of youth expected to work, and 80% of youth who experienced barriers to full employment.

#### School authority type (Table 14)

This analysis and the following eleven analyses consider youth (aged 12 to 20 years) registered in Alberta's K-12 education system, and the school authority type in which they were enrolled in 2008/09. See *Definitions and Notes* (p. 23).

 The vast majority (73%) of students were registered in public schools. 22% of students were registered in separate schools, and less than 5% were attending either Francophone (0.6%), charter (0.8%), private (3.8%), or other schools (0.1%, not shown).



# School authority type by age Albertan youth aged 12 to 20 Public Separate Francophone Charter Private 40 - 20 - 12 13 14 15 16 17 18 19-20 Age (years)

#### School authority type by age (Table 15)

The *other* school authority type was not included in this analysis due to small numbers for some ages.

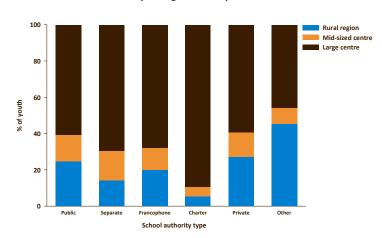
- Across all ages, at least 69% of students were registered in public schools. 81% of older youth (19 to 20 years) were registered in public schools.
- Almost one-quarter of youth between 12 and 14 years were registered in the separate school system.
- The highest percentages of youth registered in private schools were among 12 year olds (5%) and youth between 19 and 20 years (5%).

# School authority type by region of residence (Table 16)

To provide context, 63% of students between 12 and 20 years were living in large centres (Edmonton and Calgary), 15% lived in mid-sized centres, and 22% lived in rural regions across Alberta.

- Almost 90% of all charter school students were located in large urban centres. The majority of public (61%), separate (69%), and Francophone (68%), and private (59%) school students were also located in large centres (Edmonton and Calgary).
- Other authority types (45%) had the largest proportion of students in rural areas.

#### School authority type by region of residence Albertan youth aged 12 to 20 years



# Albertan youth aged 12 to 20 Lowest SES Low middle Middle High middle Highest SES

Private

School authority type by socio-economic status (SES)

100

80

40

20

# School authority type by socio-economic status (Table 17)

Socio-economic status captures the social and material environments in which youth lived. See *Definitions and Notes* (p. 21).

- Almost 30% of students in both private and charter schools were living in the most privileged socio-economic status neighbourhoods.
- 36% of students registered in other school authority types, and over one-quarter of students attending Francophone schools, were living in the most deprived socio-economic status areas.

# School authority type by educational achievement (Table 18)

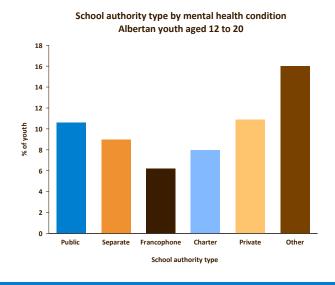
Separate

 Across all school authority types, the majority of students were either meeting or exceeding educational expectations.

School authority type

- Compared to all other school authority types, charter schools had the greatest proportion of students (19%) achieving above educational expectations.
- Private (25%) and public (20%) institutions had the highest proportion of students performing below educational expectations.

# School authority type by educational achievement Albertan youth aged 12 to 20 Below expectations Meeting expectations Above expectations 40 Public Separate Francophone Charter Private School authority type



# School authority type by mental health condition (Table 19)

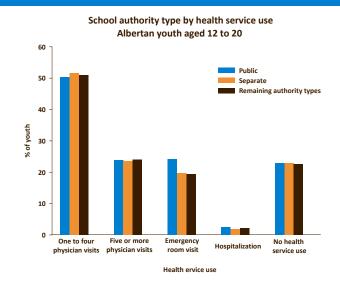
Mental health conditions are defined as receipt of services related to mental health conditions; that is, receipt of services is used here as a proxy for confirmed presence of a mental health condition. See *Definitions and Notes* (p. 22).

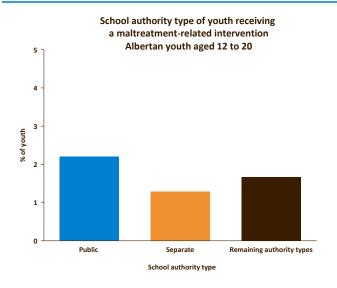
- Representing the highest proportion among all school authority types, 16% of students registered in *other* schools had a mental health condition.
- Francophone schools had the lowest proportion of students with a mental health condition (6%).

# School authority type by health service use (Table 20)

This analysis describes youth (aged 12 to 20 years) registered in the Alberta Health Care Insurance Plan in 2008/09.

- Emergency room visits varied with school authority type. Among youth enrolled in public schools, 27% had visited an emergency room at least once during the year, compared to 22% of separate school students, and 21% of students enrolled in the remaining school authority types.
- Across all school authority types, about 23% of youth had no health service use during the year.





# School authority type of youth receiving a maltreatment-related intervention (Table 21)

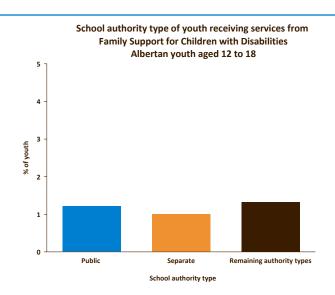
This analysis considers youth (aged 12 to 20 years) who received a maltreatment-related intervention in 2008/09. A maltreatment-related intervention occurs when the safety or well-being of a youth is threatened. See *Definitions and Notes* (p. 22).

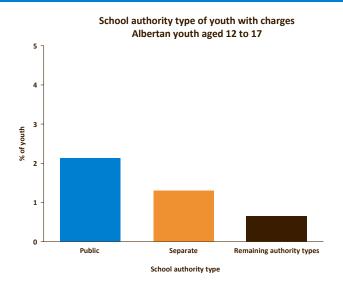
 2.2% of youth (4,360 youth) registered in public schools were receiving maltreatment-related intervention services. Fewer registered in separate schools (1.3%, 765 youth) and the remaining authority types (1.7%, 242 youth) received these services.

# School authority type of youth receiving services from Family Support for Children with Disabilities (Table 22)

This analysis describes the school authority type of youth (aged 12 to 18 years) who received services from Family Support for Children with Disabilities (FSCD) in 2008/09.

The representation of youth receiving FSCD services was similar across school authority types, with the highest proportion in public schools (1.2%; 2,332 youth), followed by remaining school authority types (1.3%; 224 youth) and separate schools (1%, 614 youth).





# School authority type of youth with charges (Table 23)

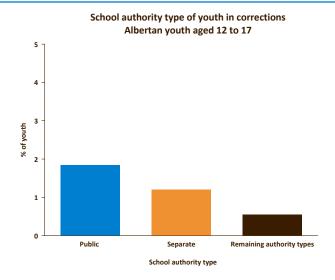
This analysis describes the school authority type of youth aged 12 to 17 years who were charged with an offence in 2008/09.

 2.1% of students (3,760 youth) in public schools had been charged with at least one offence.
 Students charged with at least one offence were less likely to be registered in separate schools (1.3%, 745 youth) and the remaining school authority types (0.65%, 114 youth).

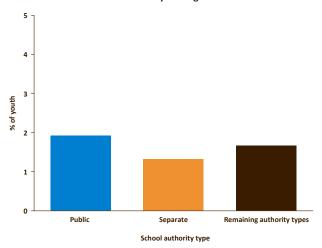
# School authority type of youth involved with corrections (Table 24)

This analysis describes the school authority type of youth aged 12 to 17 years who were in custody (in which a sentence is served in a young offender facility) or with a community sentence or pre-trial supervision in 2008/09.

 1.8% (3,236 youth) of youth in public schools were involved with corrections. Smaller proportions comprised the student population enrolled in separate schools (1.1%, 665 youth), and the remaining school authority types (0.6%, 94 youth).



# School authority type of youth with any income support activity Albertan youth aged 18 to 20



# School authority type of youth receiving income support (Table 25)

This analysis describes the school authority type of youth aged 18 to 20 years with any income support activity in 2008/09.

 1.9% (443 youth) of students in public schools had any income support activity, while smaller proportions of students enrolled in separate schools (1.3%, 73 youth), and the remaining school authority types (1.7%, 33 youth) had any income support activity.

## **Tables - Educational achievement**

Table 1. Number and percent of youth registered in Alberta's education system by age, Albertan

youth aged 12 to 20 years, 2008/09

	Education		Age in years	
		12 to 17	18 to 20	Total
Number of youth	Total population in Education	243,108	29,480	272,588
	Total Albertan youth population	307,702	170,672	478,374
Percent of youth	Total population in Education	79.0	17.3	57.0

Table 2. Number and percent of youth registered in the Alberta education system and educational achievement, Albertan youth aged 12 to 20 years,

2008/09

	Educationa	al achievement
		Total
Number of youth	Below expectations	50,631
	Meeting expectations	185,841
	Above expectations	29,382
	Not available	6,734
	Total	272,588
Percent of youth	Below expectations	18.6
	Meeting expectations	68.2
	Above expectations	10.8
	Not available	2.5
	Total	100.0

Table 3. Number and percent of youth registered in Alberta's education system by educational achievement and age, Albertan

youth aged 12 to 20 years, 2008/09

	<b>Educational achievement</b>		Age in years								
		12	13	14	15	16	17	18	19	20	Total
Number of youth	Below expectations	3,043	6,514	8,194	8,779	8,225	7,957	5,027	2,233	659	50,631
	Meeting expectations	13,180	31,523	31,378	28,907	30,031	31,248	14,094	4,203	1,277	185,841
	Above expectations	1,803	3,746	3,817	6,365	6,705	5,461	1,397	71	17	29,382
	Not available	751	2,581	1,693	630	311	266	211	191	100	6,734
	Total	18,777	44,364	45,082	44,681	45,272	44,932	20,729	6,698	2,053	272,588
Percent of youth	Below expectations	16.2	14.7	18.2	19.7	18.2	17.7	24.3	33.3	32.1	18.6
	Meeting expectations	70.2	71.1	69.6	64.7	66.3	69.6	68.0	62.8	62.2	68.2
	Above expectations	9.6	8.4	8.5	14.3	14.8	12.2	6.7	1.1	0.8	10.8
	Not available	4.0	5.8	3.8	1.4	0.7	0.6	1.0	2.9	4.9	2.5
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

# Tables (educational achievement continued)

Table 3a. Number and percent of youth registered in Alberta's education system by educational achievement and gender, Albertan youth aged 12 to 20 years, 2008/09

	Educational achievement		Gender	
		Female	Male	Total
Number of youth	Below expectations	21,548	29,083	50,631
	Meeting expectations	91,420	94,421	185,841
	Above expectations	16,628	12,754	29,382
	Not available	3,279	3,455	6,734
	Total	132,875	139,713	272,588
Percent of youth	Below expectations	16.2	20.8	18.6
	Meeting expectations	68.8	67.6	68.2
	Above expectations	12.5	9.1	10.8
	Not available	2.5	2.5	2.5
	Total	100.0	100.0	100.0

Table 4. Number and percent of youth registered in Alberta's education system by educational achievement and age

and gender, Albertan youth aged 12 to 19 years, 2008/09

	<b>Educational achievement</b>				P	lge in year	rs			
Female		12	13	14	15	16	17	18	19	Total
Number of youth	Below expectations	1,214	2,590	3,324	3,604	3,624	3,515	2,215	1,102	21,188
	Meeting expectations	6,572	15,804	15,639	13,938	14,458	15,341	6,716	2,265	90,733
	Above expectations	976	1,934	2,160	3,770	3,981	3,009	752	35	16,617
	Not available	367	1,253	788	298	160	134	116	102	3,218
	Total	9,129	21,581	21,911	21,610	22,223	21,999	9,799	3,504	131,756
Percent of youth	Below expectations	13.3	12.0	15.2	16.7	16.3	16.0	22.6	31.5	16.1
	Meeting expectations	72.0	73.2	71.4	64.5	65.1	69.7	68.5	64.6	68.9
	Above expectations	10.7	9.0	9.9	17.5	17.9	13.7	7.7	1.0	12.6
	Not available	4.0	5.8	3.6	1.4	0.7	0.6	1.2	2.9	2.4
Male		12	13	14	15	16	17	18	19	Total
Number of youth	Below expectations	1,829	3,924	4,870	5,175	4,601	4,442	2,812	1,131	28,784
	Meeting expectations	6,608	15,719	15,739	14,969	15,573	15,907	7,378	1,938	93,831
	Above expectations	827	1,812	1,657	2,595	2,724	2,452	645	36	12,748
	Not available	384	1,328	905	332	151	132	95	89	3,416
	Total	9,648	22,783	23,171	23,071	23,049	22,933	10,930	3,194	138,779
Percent of youth	Below expectations	19.0	17.2	21.0	22.4	20.0	19.4	25.7	35.4	20.7
,	Meeting expectations	68.5	69.0	67.9	64.9	67.6	69.4	67.5	60.7	67.6
	Above expectations	8.6	8.0	7.2	11.3	11.8	10.7	5.9	1.1	9.2
	Not available	4.0	5.8	3.9	1.4	0.7	0.6	0.9	2.8	2.5
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

#### Tables (educational achievement continued)

Table 5. Number and percent of youth registered in Alberta's education system by educational achievement and

region of residence, Albertan youth aged 12 to 20 years, 2008/09

	<b>Educational achievement</b>		Region of residence						
		Rural	Mid-sized centre	Large centre	Total				
Number of youth	Below expectations	12,783	7,952	29,615	50,350				
	Meeting expectations	40,536	27,964	117,254	185,754				
	Above expectations	5,341	3,898	20,129	29,368				
	Not available	1,910	1,094	3,726	6,730				
	Total	60,570	40,908	170,724	272,202				
Percent of youth	Below expectations	21.1	19.4	17.4	18.5				
	Meeting expectations	66.9	68.4	68.7	68.2				
	Above expectations	8.8	9.5	11.8	10.8				
	Not available	3.2	2.7	2.2	2.5				
	Total	100.0	100.0	100.0	100.0				

Table 6. Number and percent of youth registered in Alberta's education system by educational achievement and socio-

economic status, Albertan youth aged 12 to 20 years, 2008/09

	Educational achievement	Socio-economic status					
		Lowest SES	Low middle	Middle	High middle	Highest SES	Total
Number of youth	Below expectations	15,484	6,894	13,486	7,310	6,374	49,548
	Meeting expectations	39,607	20,049	49,706	35,417	39,046	183,825
	Above expectations	4,670	2,368	7,126	5,882	9,065	29,111
	Not available	1,724	918	1,835	1,121	1,039	6,637
	Total	61,485	30,229	72,153	49,730	55,524	269,121
Percent of youth	Below expectations	25.2	22.8	18.7	14.7	11.5	18.4
	Meeting expectations	64.4	66.3	68.9	71.2	70.3	68.3
	Above expectations	7.6	7.8	9.9	11.8	16.3	10.8
	Not available	2.8	3.0	2.5	2.3	1.9	2.5
	Total	100.0	100.0	100.0	100.0	100.0	100.0

Table 7. Number and percent of youth registered in Alberta's education system by educational

achievement and mental health status, Albertan youth aged 12 to 20 years, 2008/09

	Educational achievement	N	/lental health status	
		No mental health condition	Any mental health condition	Total
Number of youth	Below expectations	34,110	8,935	43,045
	Meeting expectations	152,638	14,127	166,765
	Above expectations	25,517	1,085	26,602
	Not available	4,106	393	4,499
	Total	216,371	24,540	240,911
Percent of youth	Below expectations	15.8	36.4	18
	Meeting expectations	70.5	57.6	69
	Above expectations	11.8	4.4	11
	Not available	1.9	1.6	1.9
	Total	100.0	100.0	100.0

#### Tables (educational achievement continued)

Table 8. Number and percent of youth registered in Alberta's education system by educational achievement and health service use, Albertan youth aged 12 to 20 years, 2008/09

	Health service use*	Educational achievement						
		Below expectations	Meeting expectations	Above expectations	Not available	Total		
Number of youth	One to four physician visits	23,000	95,722	16,238	2,989	137,949		
	Five or more physician visits	11,935	45,061	6,963	1,027	64,986		
	Emergency room visit	14,854	42,118	4,425	1,194	62,591		
	Hospitalization	2,258	3,361	341	114	6,074		
	No health service use	13,466	40,317	5,779	2,507	62,069		
	Total	50,631	185,841	29,382	6,734	272,588		
Percent of youth	One to four physician visits	45.4	51.5	55.3	44.4	50.6		
	Five or more physician visits	23.6	24.2	23.7	15.3	23.8		
	Emergency room visit	29.3	22.7	15.1	17.7	23.0		
	Hospitalization	4.5	1.8	1.2	1.7	2.2		
	No health service use	26.6	21.7	19.7	37.2	22.8		

<sup>\*</sup>Health service use categories are not mutually exclusive

Table 9. Number and percent of youth registered in Alberta's education system by educational achievement and type of maltreatment-related intervention, Albertan youth aged 12 to 20 years, 2008/09

	Educational achievement	Intervention outcome				
		In care	Out of care	Total	Netinuestianted	
		services	services	TOTAL	Not investigated	
Number of youth	Below expectations	1,846	1,279	3,125	47,506	
	Meeting expectations	1,168	926	2,094	183,747	
	Above expectations	14	20	34	29,348	
	Not available	56	58	114	6,620	
	Total	3,084	2,283	5,367	267,221	
Percent of youth	Below expectations	59.9	56.0	58.2	17.8	
	Meeting expectations	37.9	40.6	39.0	68.8	
	Above expectations	0.5	0.9	0.6	11.0	
	Not available	1.8	2.5	2.1	2.5	
	Total	100.0	100.0	100.0	100.0	

Table 10. Number and percent of youth registered in Alberta's education system by educational achievement and services received from Family Support for Children with Disabilities (FSCD), Albertan youth aged 12 to 18 years, 2008/09

	Educational achievement	Rece	Receiving services from FSCD		
		Yes	No	Total	
Number of youth	Below expectations	2,228	45,511	47,739	
	Meeting expectations	817	179,544	180,361	
	Above expectations	33	29,261	29,294	
	Not available	92	6,351	6,443	
	Total	3,170	260,667	263,837	
Percent of youth	Below expectations	70.3	17.5	17.7	
	Meeting expectations	25.8	68.9	68.3	
	Above expectations	1.0	11.2	11.5	
	Not available	2.9	2.4	2.6	
	Total	100.0	100.0	100.0	

#### Tables (educational achievement—continued)

Table 11. Number and percent of youth registered in Alberta's education system by educational achievement and number of

charges, Albertan youth aged 12 to 17 years, 2008/09

	Educational achievement			Number of charges		
		One	Two or three	Four or more	Total	No charges
Number of youth	Below expectations	1,076	841	966	2,883	39,829
	Meeting/above expectations	986	452	209	1,647	192,517
	Not available	35	32	22	89	6,143
	Total	2,097	1,325	1,197	4,619	238,489
Percent of youth	Below expectations	51.3	63.5	80.7	62.4	16.7
	Meeting/above expectations	47.0	34.1	17.5	35.7	80.7
	Not available	1.7	2.4	1.8	1.9	2.6
	Total	100.0	100.0	100.0	100.0	100.0

Table 12. Number and percent of youth registered in Alberta's education system by educational achievement and

type of corrections involvement, Albertan youth aged 12 to 17 years, 2008/09

	Educational achievement		Type of correc	ctions involvement	
		Custody	Community	Any corrections involvement	No corrections involvement
Number of youth	Below expectations	564	2,364	2,418	40,294
	Meeting/above expectations	82	1,489	1,504	192,660
	Not available	10	71	73	6,159
	Total	656	3,924	3,995	239,113
Percent of youth	Below expectations	86.0	60.2	60.5	16.9
	Meeting/above expectations	12.5	37.9	37.6	80.6
	Not available	1.5	1.8	1.8	2.6
	Total	100.0	100.0	100.0	100.0

Table 13. Number and percent of youth registered in Alberta's education system by educational achievement

and any income support activity and client type, Albertan youth aged 18 to 20 years, 2008/09

	Educational achievement*	Educational achievement* Client type					
		Barriers to full employment	Expected to work	Total	No income support activity		
Number of youth	Below expectations	336	77	413	7,506		
	Meeting/above expectations	84	46	130	20,929		
	Total	423	126	549	28,435		
Percent of youth	Below expectations	79.4	61.1	75.2	26.4		
	Meeting/above expectations	19.9	36.5	23.7	73.6		

<sup>\*</sup>The "Not available" category was not included due to small cell counts

# Tables - School authority type

Table 14. Number and percent of youth registered in the Alberta education system by school authority type, Albertan youth aged 12 to 20 years,

2008/09	School au	thority type
		Total
Number of youth	Public	198,320
	Separate	59,756
	Francophone	1,699
	Charter	2,268
	Private	10,322
	Other	223
	Total	272,588
Percent of youth	Public	72.8
	Separate	21.9
	Francophone	0.6
	Charter	0.8
	Private	3.8
	Other	0.1
	Total	100.0

Table 15. Number and percent of youth registered in Alberta's education system by school authority type and age,

Albertan youth aged 12 to 20 years, 2008/09

	School authority type*		Age in years								
		12	13	14	15	16	17	18	19 to 20	Total	
Number of youth	Public	12,989	31,093	31,931	32,311	33,605	33,419	15,984	6,988	198,320	
	Separate	4,405	10,272	10,270	10,121	9,814	9,828	3,941	1,105	59,756	
	Francophone	178	357	332	281	228	198	82	43	1,699	
	Charter	301	663	579	302	189	143	50	41	2,268	
	Private	902	1,977	1,968	1,663	1,432	1,340	630	410	10,322	
	Total	18,775	44,362	45,080	44,678	45,268	44,928	20,687	8,587	272,588	
Percent of youth	Public	69.2	70.1	70.8	72.3	74.2	74.4	77.3	81.4	72.8	
	Separate	23.5	23.2	22.8	22.7	21.7	21.9	19.1	12.9	21.9	
	Francophone	0.9	0.8	0.7	0.6	0.5	0.4	0.4	0.5	0.6	
	Charter	1.6	1.5	1.3	0.7	0.4	0.3	0.2	0.5	0.8	
	Private	4.8	4.5	4.4	3.7	3.2	3.0	3.0	4.8	3.8	
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	

<sup>\*</sup>Due to low cell counts, the "other" school authority category was not included in this table.

# Tables (school authority type continued)

Table 16. Number and percent of youth registered in Alberta's education system by school authority type and region of

residence, Albertan youth aged 12 to 20 years, 2008/09

	Region of residence			Scho	ol authority t	уре		
		Public	Separate	Francophone	Charter	Private	Other	Total
Number of youth	Rural region	48,737	8,474	338	126	2,794	101	60,570
	Mid-sized centre	29,329	9,833	207	119	1,400	20	40,908
	Large centre	119,926	41,419	1,151	2,023	6,103	102	170,724
	Total	197,992	59,726	1,696	2,268	10,297	223	272,202
Percent of youth	Rural region	24.6	14.2	19.9	5.6	27.1	45.3	22.3
	Mid-sized centre	14.8	16.5	12.2	5.2	13.6	9.0	15.0
	Large centre	60.6	69.3	67.9	89.2	59.3	45.7	62.7
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table 17. Number and percent of youth registered in Alberta's education system by school authority type and socio-

economic status, Albertan youth aged 12 to 20 years, 2008/09

	Socio-economic status		School authority type								
		Public	Separate	Francophone	Charter	Private	Other	Total			
Number of youth	Lowest SES	47,292	11,279	444	385	2,007	78	61,485			
	Low middle	22,944	5,822	188	153	1,077	45	30,229			
	Middle	52,610	15,849	460	627	2,565	42	72,153			
	Middle high	34,924	12,445	297	441	1,596	27	49,730			
	Highest SES	37,762	13,877	281	656	2,923	25	55,524			
	Total	195,532	59,272	1,670	2,263	10,168	217	269,121			
Percent of youth	Lowest SES	24.2	19.0	26.6	17.0	19.7	35.9	22.8			
	Low middle	11.7	9.8	11.3	6.8	10.6	20.7	11.2			
	Middle	26.9	26.7	27.5	27.7	25.2	19.4	26.8			
	Middle high	17.9	21.0	17.8	19.5	15.7	12.4	18.5			
	Highest SES	19.3	23.4	16.8	29.0	28.7	11.5	20.6			
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0			

#### Tables (school authority type continued)

Table 18. Number and percent of youth registered in Alberta's education system by school authority type and educational achievement, Albertan youth aged 12 to 20 years, 2008/09

	Educational achievement			School auth	ority type		
		Public	Separate	Francophone	Charter	Private	Total
Number of youth	Below expectations	39,433	8,661	247	234	2,056	50,631
	Meeting expectations	135,245	42,972	1,198	1,594	4,832	185,841
	Above expectations	20,395	6,980	165	429	1,413	29,382
	Total	195,073	58,613	1,610	2,257	8,301	265,854
Percent of youth	Below expectations	20.2	14.8	15.3	10.4	24.8	19.0
	Meeting expectations	69.3	73.3	74.4	70.6	58.2	69.9
	Above expectations	10.5	11.9	10.2	19.0	17.0	11.1
	Total	100.0	100.0	100.0	100.0	100.0	100.0

Due to the unavailability of adequate information, an educational achievement rating was not possible to determine for about 20% of students in private schools and for smaller proportions in the remaining school authority types. None of the students enrolled in the "other" school authority category received an educational achievement rating.

Table 19. Number and percent of youth registered in Alberta's education system by school authority type and mental health

status, Albertan youth aged 12 to 20 years, 2008/09

	Mental health status		School authority type							
		Public	Separate	Francophone	Charter	Private	Other	Total		
Number of youth	Any mental health condition	18,486	4,754	86	174	1,011	29	24,549		
	No mental health condition	156,637	48,020	1,297	1,994	8,272	152	216,468		
	Total	175,123	52,774	1,383	2,168	9,282	181	241,017		
Percent of youth	Any mental health condition	10.6	9.0	6.2	8.0	10.9	16.0	10.2		
	No mental health condition	89.4	91.0	93.8	92.0	89.1	84.0	89.8		
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0		

Table 20. Number and percent of youth registered in Alberta's education system by school authority type and health service use, Albertan youth aged 12 to 20 years, 2008/09

	Health service use*		School at	uthority type	
		Public	Separate	Remaining authority types	Total
Number of youth	One to four physician visits	99,710	30,841	7,398	137,949
	Five or more physician visits	47,461	14,043	3,482	64,986
	Emergency room visist	48,091	11,683	2,817	62,591
	Hospitalization	4,672	1,090	312	6,074
	No health service use	45,186	13,617	3,266	62,069
	Total	198,320	59,756	14,512	272,588
Percent of youth	One to four physician visits	50.3	51.6	51.0	50.6
	Five or more physician visits	23.9	23.5	24.0	23.8
	Emergency room visit	24.2	19.6	19.4	23.0
	Hospitalization	2.4	1.8	2.1	2.2
	No health service use	22.8	22.8	22.5	22.8

<sup>\*</sup>Health service use categories are not mutually exclusive

#### Tables (school authority type continued)

Table 21. Number and percent of youth registered in Alberta's education system by school authority type and maltreatment-related intervention outcome, Albertan youth aged 12 to 20 years, 2008/09

	School authority type		Intervention	n outcome	
		In care	Out of care services	Total	Not investigated
Number of youth	Public	2,567	1,793	4,360	193,960
	Separate	371	394	765	58,991
	Remaining authority types	146	96	242	14,270
	Total	3,084	2,283	5,367	267,221
Percent of youth	Public	83.2	78.5	81.2	72.6
	Separate	12.0	17.3	14.3	22.1
	Remaining authority types	4.7	4.2	4.5	5.3
	Total	100.0	100.0	100.0	100.0

Table 22. Number and percent of youth registered in Alberta's education system by school authority type and youth receiving Family Support for Children with Disabilities (FSCD), Albertan youth aged 12 to 18 years, 2008/09

	School authority type		Receiving services from FSC	D .
		Yes	No	Total
Number of youth	Public	2,332	189,000	191,332
	Separate	614	58,037	58,651
	Remaining authority types	224	13,630	13,854
	Total	3,170	260,667	263,837
Percent of youth	Public	73.6	72.5	72.5
	Separate	19.4	22.3	22.2
	Remaining authority type	7.1	5.2	5.3
	Total	100.0	100.0	100.0

Table 23. Number and percent of youth registered in Alberta's education system by school authority type and number of charges, Albertan youth aged 12 to 17 years, 2008/09

**Number of charges** School authority type One Two or three Four or more Total No charges Public Number of youth 986 3,760 171,588 1,697 1,077 Separate 363 215 167 745 53,965 Remaining authority types 12,936 37 33 44 114 Total 2,097 1,325 1,197 4,619 238,489 Percent of youth Public 80.9 81.3 82.4 81.4 72.0 17.3 16.2 14.0 16.1 22.6 Separate Remaining authority types 2.2 2.4 3.7 2.5 5.4 100.0 100.0 100.0 100.0 100.0

# Tables (school authority type continued)

Table 24. Number and percent of youth registered in Alberta's education system by school authority type and

type of corrections involvement, Albertan youth aged 12 to 17 years, 2008/09

	School authority type	Type of corrections involvement			
		Custody	Community	Any corrections involvement	No corrections involvement
Number of youth	Public	541	3,180	3,236	172,112
	Separate	88	653	665	54,045
	Remaining authority types	27	91	94	12,956
	Total	656	3,924	3,995	239,113
Percent of youth	Public	82.5	81.0	81.0	72.0
	Separate	13.4	16.6	16.6	22.6
	Remaining authority types	4.1	2.3	2.4	5.4
	Total	100.0	100.0	100.0	100.0

Table 25. Number and percent of youth registered in Alberta's education system by school authority type and

any income support support activity, Albertan youth aged 18 to 20 years, 2008/09

	School authority type		Income support activity	
		Any income support activity	No income support activity	Total
Number of youth	Public	443	22,529	22,972
	Separate	73	4,973	5,046
	Remaining authority types	33	1,429	1,462
	Total	549	28,931	29,480
Percent of youth	Public	80.7	77.9	77.9
	Separate	13.3	17.2	17.1
	Remaining authority types	6.0	4.9	5.0
	Total	100.0	100.0	100.0

#### **Definitions and Notes**

- The study population for this project consisted of all Albertan youth who were registered with the Alberta Health Care Insurance Plan in 2008/09 or who received selected services from one or more of the participating ministries in 2008/09. "All Albertan youth" refers to this study population.
- The study year was fiscal year 2008/09. With the exception of Education and Enterprise and Advanced Education data, all data were for services provided between April 1, 2008 and March 31, 2009, with age determined on March 31, 2009.
  - Data for Enterprise and Advanced Education were for services provided between September 1, 2008 and June 30, 2009, with age determined on March 31, 2009.
  - Data for Education were for services provided to youth who were 12 to 19 years old on September 30, 2008. As a result, youth turning 12 between October 1, 2008 and March 31, 2009 were not included in the Education data but were included in other ministries' data. This resulted in the number of 12 year olds in the Education data being lower (approximately 50% lower) than that of 13 to 17 year olds.
  - Furthermore, although Education only provides services to youth who are under 20, the provision of services is defined by age at September 30. Youth who turned 20 between October 1, 2008 and March 31, 2009 were included in the Education data, resulting in the inclusion of 20 year olds in some analyses of Education data.
- Cross-ministry analyses included only youth that were linked across the relevant ministries. This means that not all youth in the project were represented in every analysis. As well, only youth with a value for a given indicator were included in analyses involving that indicator (i.e., missing values were excluded).
- Age, gender, and postal code (translated into Statistics Canada dissemination areas) were provided for each
  individual by each participating ministry. In the case of discrepancies between ministries, the most common
  value for an indicator was chosen. In the event of two or more most common values, the value for the
  indicator was chosen randomly from the most common values.
- Dissemination areas of residence were used by CYDL to determine **region of residence**. Urban areas included large centres with urban core populations greater than 100,000 (i.e., Edmonton and Calgary metropolitan areas) and mid-sized centres with urban cores greater than 10,000; all other areas were categorized as rural.
- Socio-economic status (SES) captures the social and material environments in which youth live. A youth was assigned a socio-economic status via an index based on the Statistics Canada dissemination area in which he or she resided<sup>7</sup>. Six indicators were included in the index: percent without a high school diploma, the employment ratio, average income, percent of single families, percent of persons living alone, and percent of persons separated, divorced, or widowed. Socio-economic status values fell into five quintiles. In this report, "lowest socio-economic status" refers to the lowest quintile of socio-economic status, while "highest" refers to the highest quintile.

#### **Definitions and Notes (continued)**

- Educational achievement was computed by Alberta Education using age, grade, school type, special education codes, provincial achievement test scores, home education status, number of high school credits earned, number of higher level courses taken, average grade in higher level courses, possession of an Alberta Education certificate or diploma, and Alexander Rutherford scholarship eligibility. Educational achievement was categorized as above, meeting, or below expectations for a student's age and grade. An educational achievement rating was not available for 12 to 14 year old youth without scores on provincial achievement tests, for youth in 'other' schools (accredited post-secondary institutions offering high school courses for credit to adults; most youth in these schools were between 18 and 20 years), and for home-schooled high school youth with no credits.
- Mental health status was defined by the presence or absence of mental health diagnosis codes in Health's databases (Inpatient—Discharge Abstract Database, Ambulatory Care, and Practitioner Payments), or in the Family Support for Children with Disabilities Information System. Only youth who were registered with Health for the full fiscal year were included in the mental health analyses. Mental health service use is a proxy for presence of a mental health condition: Some youth with mental health conditions may not have accessed mental health services in Alberta during the year, and some mental health service use may have occurred for youth who did not in fact have mental health conditions.
  - Mental health conditions were grouped based on The Johns Hopkins ACG® Case-Mix System (version 8.2)<sup>8</sup>. Mental health conditions were *mood/anxiety* (anxiety, depression, bipolar disorder, etc.), behavioural (attention-deficit disorder, regulatory disorder, mental or behavioural problems due to substance use, etc.), neurodevelopmental (autism, fetal alcohol spectrum disorder, cerebral palsy, etc.), or schizophrenia/psychoses (schizophrenia, psychosis, delusional disorder, etc.). Conditions were not mutually exclusive; a youth could have a diagnosis in more than one category.
- **Physician visits** reflect fee claims made by physicians when patients visit their offices. In this report, multiple claims by a given physician for a given patient on the same day were counted as a single visit.
- Emergency room visits refer to visits to emergency departments for assessment or treatment.
- **Hospitalizations** refer to admissions to hospital for assessment or treatment.
- Maltreatment-related investigations occur when there is a concern that the safety or well-being of a youth is threatened. Outcomes of investigation include *in care after investigation* (the youth is taken into care, and placed in a foster home, with family, in a group home, etc.), out of care services (the youth remains in the home and the family receives support services), and *no intervention needed*.
- Maltreatment-related interventions occur when the safety or well-being of a youth is threatened. Categories of intervention include *in care services* (the youth is taken into care, and placed in a foster home, with family, in a group home, etc.), and *out of care services* (the youth remains in the home and the family receives support services).
- Family Support for Children with Disabilities (FSCD) is a ministry of Human Services program that provides a range of supports and services to families that strengthen their ability to support and care for their child with a disability based on their needs.
- Youth with offence charges include those charged with criminal offences or administrative offences related to
  criminal offences (e.g., failure to appear in court, breach of probation, etc.). Number of offences in the study
  year was available, but individual incidents were not available. This means that youth charged with multiple
  offences may have had multiple charges in a single incident, or they may have been charged in multiple
  incidents.

#### **Definitions and Notes** (continued)

- Youth with corrections involvement have appeared before the Court or a Justice of the Peace for an offence
  charge and have been remanded in custody or placed under pre-trial supervision in the community awaiting
  further court dates, or have been found guilty and sentenced to a community disposition (i.e. Fine, Probation,
  Community Service Work, Deferred Custody) and/or custody (in which the sentence is served in a young
  offender facility).
- **Income support** refers to financial benefits provided to individuals and couples who cannot meet their basic needs. The **client types** for income support clients are *expected to work* (clients who are looking for work, working, or unable to work in the short term) and *barriers to full employment* (clients who have difficulty working because of a chronic mental or physical health problem or because of multiple barriers to employment).

#### School authority types

There is one publicly-funded system of education in Alberta. The public system includes public, separate, Francophone and charter schools.

- **Public** schools are non-denominational schools.
- **Separate** schools are established under rights guaranteed by the Constitution of Canada for the minority religion (Protestant or Roman Catholic).
- **Francophone** schools provide instruction in French to children whose parents have rights under section 23 of the Canadian Charter of Rights and Freedoms.
- **Charter** schools are autonomous public schools designed to meet the needs of students through a specific program or approach. They must be non-religious.

**Private** schools operate outside the public education system. Private schools may charge tuition and other fees. There are two kinds of private schools.

- Accredited private schools must offer the Alberta Program of Studies with certificated teachers; they
  may be partially funded or non-funded.
- Registered private schools are not required to offer the Program of Studies and are not funded.

**Other** schools are accredited post-secondary institutions offering high school courses for credit to adults.

- No data were available for students who attended schools on First Nations reserves or in Lloydminster.
- Youth involved in corrections may have received educational programs from a school authority that was
  different from the school authority type they attended while not involved in the correctional system. The
  school authority assigned to the youth for analyses in this report may or may not have been the school
  authority type in which they were enrolled while involved in corrections.

#### **Data sources**

Ministry	Database	Use in this report
Enterprise and Advanced Education	Learner Enrolment Reporting System (LERS)	Post-secondary education enrolment data
Education	Corporate Data Warehouse (CDW)	Primary and secondary education achievement data
Health	Inpatient – Discharge Abstract Database (DAD)	Hospitalization data
Health	Ambulatory Care (ACCS)	Emergency room visit data
Health	Practitioner Payments (SESE)	Physician visit data
Health	Alberta Health Care Insurance Plan Population Registry (AHCIP registry)	Population registry
Human Services	Child Youth Information Module (CYIM)	Maltreatment and intervention data
Human Services	Family Support for Children with Disabilities Information System (FSCDIS)	Family Supports for Children with Disabilities data
Human Services	Central Client Directory (CCD)	Income support data
Justice and Solicitor General	Justice Online Information Network (JOIN)	Offence data
Justice and Solicitor General	Alberta Community Offender Management System (ACOM)	Corrections data (community)
Justice and Solicitor General	Correctional Offender Management Information System (CoMIS)	Corrections data (custody)

#### References

- 1. Human Resources and Skill Development Canada. (2008). *Special reports What difference does learning make to financial security?*. Retrieved from http://www4.hrsdc.gc.ca/.3ndic.1t.4r@-eng.jsp?iid=54
- The Chief Public Health Officer. (2011). Report on the state of public health in Canada youth and young adults Life in Transition. Retrieved from http://www.phac-aspc.gc.ca/cphorsphc-respcacsp/2011/pdf/cpho-resp-2011-eng.pdf
- 3. Public Health Agency of Canada. (2004). *The social determinants of health: Education as a determinant of health*. Retrieved from http://www.phac-aspc.gc.ca/ph-sp/oi-ar/10\_education-eng.php
- 4. Bussiere, P., Knighton, T., & Pennock, D. (2007). *Measuring up: Canadian results of the OECD PISA Study The performance of Canada's youth in science, reading and mathematics 2006 first results for Canadians aged 15* (Cat. no. 81-590-XPE– No. 3). Ottawa: Human Resources and Social Development Canada, Statistics Canada, Council of Ministers of Education, Canada.
- 5. Statistics Canada. (2003). Understanding the rural-urban reading gap (Cat. no. 81-003-XIE). *Education quarterly review, 9, 7-18.*
- 6. Alberta Children and Youth Services & Alberta Education. (2010). Summary of Education Results for Children and Youth in Care: 1997/98 2006/07. Retrieved from http://education.alberta.ca/media/1136282/summarycyicdatareport.pdf
- 7. Pampalon, R., Hamel, D., Garnache, P., Raymond, G. (2009). A deprivation index for health planning in Canada. *Chronic Diseases in Canada*, *29*(4), 178-91.
- 8. The Johns Hopkins University (2008). *The Johns Hopkins ACG® System Reference Manual, Version 8.2.* Johns Hopkins University: Baltimore.



## The Child and Youth Data Laboratory

The **Child and Youth Data Laboratory** (CYDL) links and analyzes administrative data from child- and youth-serving ministries in the Government of Alberta. The ministries participate in research design and provide data elements that contribute to answering research questions.

The CYDL's research provides groundbreaking opportunities to understand relationships between critical factors in the lives of children and youth in Alberta. The research results can be used to inform policy and program development and evaluation, both within and across ministries, and to inspire further research.

The CYDL is managed by the **Alberta Centre for Child, Family and Community Research** (ACCFCR). The Centre has evolved over its eight year history as a public-sector, innovative resource for evidence. The Centre develops, supports and integrates research across sectors and disciplines to provide a strong, evidence-based foundation for identifying and promoting effective public policy and service delivery to improve the well-being of children, families, and communities in Alberta, Canada, and internationally.

# Our partners

This project was carried out on behalf of six ministries of the Government of Alberta. Each ministry collaborated extensively with the CYDL on this project, and their dedication to the project is gratefully acknowledged:

Enterprise and Advanced Education
Education
Health
Human Services
Aboriginal Relations
Justice and Solicitor General

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