



The Brain Builders Lab was a joint initiative of the Canadian Centre on Substance Use and Addiction and the Alberta Family Wellness Initiative. Its aim was to move Brain Story science, which links childhood trauma to later health outcomes, into action. Between 2019 and 2021, participants in the Brain Builders Lab undertook projects to spread and embed Brain Story science in their communities. This case study along with the others in the series provides practical advice on how to develop and implement projects, along with project impacts and lessons learned.

Alberta Health Services

Brain Builders Lab Case Study

Project Team

- Laurel DiMarzo, Health Promotion Facilitator, Addiction Prevention Unit, Provincial Zone, Alberta Health Services
- Krista Dumba, Health Promotion Facilitator, Mental Health Promotion and Mental Illness Prevention Unit, Provincial Zone, Alberta Health Services
- Kyla Mottershead, Health Promotion Facilitator, Mental Health Promotion and Mental Illness Prevention Unit, Provincial Zone (at the time of the Brain Builders Lab), Alberta Health Services

Location

- Alberta

Introduction and Project Goals

With over 100,000 direct employees, Alberta Health Services (AHS) is Canada's largest province-wide, fully integrated health system, responsible for delivering services to nearly 4.4 million people in Alberta and some residents of Saskatchewan, British Columbia and the Northwest Territories. Laurel DiMarzo, Krista Dumba and Kyla Mottershead (who is no longer at AHS), work directly with AHS staff and community partners to support mental health promotion and addiction prevention in their respective service areas. While many stakeholders in Alberta have benefitted from the Palix Foundation's ongoing efforts to mobilize Brain Story science through its Alberta Family Wellness Initiative (AFWI), there are still gaps in awareness and uptake. With this in mind, the AHS team's goals were:

- To orient mental health and addiction stakeholders across the province to Brain Story science to help them think more about upstream substance use prevention and mental health promotion and to reduce the stigma surrounding these issues;
- To build workforce capacity to apply Brain Story science to service delivery; and
- To increase access to the many educational resources based on the Brain Story that have been developed by AHS staff and partner organizations over the past several years.



Knowledge Mobilization Activities

Awareness-raising among community networks:

The Palix Foundation, which houses the AFWI and associated Brain Story resources, is based in Alberta. Many of the community coalitions the team supports are in rural areas where there is less knowledge of the AFWI's work compared to urban centres. The team began by including information about how adverse childhood experiences can create vulnerabilities to substance use and mental illness in their regular newsletter to the community coalitions. They also shared information about the AFWI's Brain Story Certification Course and encouraged newsletter recipients to enrol.

Awareness-raising among internal networks:

AHS staff who work in mental health promotion and substance use prevention also participate in a provincial community of practice. At one of their regular meetings, Laurel delivered a presentation on Brain Story science and its link to substance use and mental health outcomes. She pitched the Brain Story Certification Course as a training tool for people working in prevention and early intervention. Members immediately saw the relevance of the science and there was significant interest in using the knowledge and the resources from AFWI to inform their work. Members committed to sharing and promoting the resources within their respective coalitions and networks.

Creating resources: Kyla and Krista integrated Brain Story science into three booklets targeted to parents, called the Building Blocks for Resilience series. Each booklet focuses on fostering resilience in children at particular ages (0–2 years, 2–4 years and 5–8 years) and provides parents with Brain Story-based information and language, as well as developmentally appropriate activities to build resilience and foster social and emotional skills and abilities in their children.

Outcomes and Impact

Emergence of local champions: The team's strategy of engaging the community coalitions helped significantly expand their reach. As a result, many new champions for the science have emerged. Several coalitions organized professional development workshops in their own communities to build more awareness and knowledge about Brain Story science; others hosted community-based events for families. Many coalitions also created Brain Story-themed posters, puzzles and games, and other resources that they could distribute locally. These resources have been centralized and shared across the community of practice members so they can continue to be used province wide.

Shifting mental models: Using Brain Story science to guide prevention and promotion work is now firmly embedded within the community of practice and community coalitions. These groups report that the science has helped them better explain their work to the community, has created excitement and desire to approach prevention from a more upstream perspective, and is starting to reduce the stigma associated with addiction and mental illness.

Key outcomes

- 100% of community coalition members (64/64 survey respondents) reported **increased awareness** of Brain Story science and **interest in embedding it in practice**.

- 100% (64/64) reported applying the knowledge to their work:

The Brain Story made a difference in their ability to **explain the importance and value of prevention** in the work they do in their communities.

Some responded that this work was **pivotal and provided a framework** to help get other community members on board.



Alignment with ongoing work: While not a planned outcome of the project, a Brain Story-based perspective on community-based prevention efforts has helped align this work with the broader system-level change that is occurring in Alberta because of over a decade's worth of advocacy and programming from the Palix Foundation.

Resources: All three Building Blocks for Resilience booklets are available digitally and have been printed and distributed to relevant AHS directors, provincial service delivery units and community partners. Copies of the booklets can be ordered at no cost to Albertans through the Mental Health Promotion and Mental Illness Prevention Unit. They have also been made available online on a national scale via other networks sponsored by Brain Builders and the Canadian Centre on Substance Use and Addiction.

Lessons Learned and Next Steps

Engaging new change agents creates fresh new ideas. The team's biggest success was the early and strong engagement from the community coalitions and the creative and entertaining ways they came up with to share the Brain Story knowledge with families. These new resources have been shared widely and will continue to support the direct engagement of families across the province. Although the pandemic derailed some of this work, many coalitions were able to provide some online activities, which were critical to help alleviate the heightened levels of stress in the community.

The language of the Brain Story helps shift understanding and creates broader engagement. The coalitions have reported that the Brain Story and its associated metaphors have helped them build more, and more effective, engagement in the community and with families.

Turning a large ship requires alignment across many teams and resources. The team's biggest challenges were budget constraints within AHS that curtailed some of their plans as well as not generating enough buy-in and support to move forward with all planned activities. For example, part of the project plan was to create a central repository for resources related to the Brain Story science within AHS. While this idea was discussed, ultimately a decision was made not to implement it. In hindsight, the team reflected that they could have used their Brain Builders Lab colleagues more frequently to help troubleshoot the obstacles they encountered.

The team members plan to provide periodic presentations to the community of practice and the coalitions to keep the information fresh and at the forefront of their efforts. Krista plans to evaluate the first three Building Blocks booklets and, if warranted, develop a fourth for children aged 9–11 years. To date, over 53,000 copies of the first three booklets have been distributed to parents in Alberta and beyond.

