

# Tomorrow's News

ESTABLISHED IN 2000 TO LEARN MORE ABOUT CANCER AND OTHER CHRONIC DISEASES

VISIT: www.myATP.ca

**VOLUME SIX - ISSUE ONE - WINTER 2016** 

### A Brand New Era!

A letter from Dr. Paula Robson, Scientific Director of Alberta's Tomorrow Project.

It's the start of a new year, and the beginning of a brand new era for Alberta's Tomorrow Project (ATP).



Dr. Paula Robson, Scientific Director for Alberta's Tomorrow Project

Thanks to the enthusiastic participation of so many of you, I am extremely happy to announce that we have hit our enrollment target of 50,000 Albertans.

This is a massive achievement, as you represent almost one in 30 eligible adults in the province over the age of 35. I am so grateful for the commitment you have demonstrated towards this important project, the largest health study ever conducted in Alberta.

Now that we've achieved our study population target, the real work of helping to solve the puzzle of cancer and other chronic diseases begins. Along with our internal investigators, researchers throughout Alberta, across Canada and around the world are being invited to share in analyzing your vast dataset. The scientists will be

examining how a person's genetic makeup, what they eat, how much exercise they get, and where they live all interact to keep them healthy or contribute to their becoming ill.

They'll investigate which factors play a greater or lesser role, and which aspects of daily life can be modified to offer better protection against diseases like cancer, heart disease and diabetes. These are the fundamental questions that will be asked of the health and lifestyle information, body measurements, and biological samples that you have so generously donated.

In partnership with Alberta's Tomorrow Project, researchers are already using information from our participants to design a better screening test for prostate cancer, and to develop a model to identify women at greater risk for breast cancer, long before an actual diagnosis.

The more we learn about what causes and perpetuates these diseases, the more likely we are to be able to prevent them in the years ahead.

We also know there's strength in even bigger numbers. In 2008, we partnered with four other similar studies across Canada in a national collaboration called the Canadian Partnership for Tomorrow Project (CPTP). Together, we boast more than 300,000 participants from Atlantic Canada to the west coast. Detailed lifestyle and genetic information from this many people offers solid statistical evidence – not guesswork – when it comes to advancing our understanding about who gets cancer and other chronic diseases, and who doesn't.

As a result, we can also help solve such mysteries as to why overall cancer incidence is higher in the Atlantic provinces, and decreases as we move west. to cancer and other chronic diseases, but high-quality longitudinal research such as ours offers real hope towards keeping our children and grandchildren healthier, longer.

Once again, thank you for your commitment, your enthusiasm, and your investment in the health of generations to come.

I know that studies like Alberta's Tomorrow

Project won't bring back people we've lost

ons to come. -Dr. Paula Robson

## Please Help Us Keep Our Files Up To Date

Alberta's Tomorrow Project is a longterm study so staying in touch with participants is important for the project's success!

Keeping current participant contact information reduces the number of participants who are 'lost to follow-up.'

Please take a moment to contact us with any changes or additions to your contact information. Even if you move outside of Alberta or Canada, we can send you information and updates.

#### CONTACT US

Email: tomorrow@ahs.ca

Toll free telephone: 1(877) 919-9292

Outside Canada: 1(403) 955-4617 (collect calls accepted)

Mail: Alberta's Tomorrow Project CancerControl Alberta Alberta Health Services 1820 Richmond Road SW Calgary AB T2T 5C7 Canada

We hope you enjoy reading this edition of our newsletter. Please let us know your thoughts! Don't worry if you haven't heard from us directly for a while. We are preparing to send you a new survey within the next 12 months.





### Sitting Down with Dr. Darren Brenner, Alberta Health Services Research Scientist

One of the researchers Dr. Robson was referring to works as a Research Scientist in the Department of Cancer Epidemiology and Prevention Research. Below, Dr. Brenner provides a brief summary of his work.



Dr. Darren Brenner, Research Scientist with Alberta Health Services. (January 2016)

My current research aims to estimate the total number of cancers in Alberta that are due to known lifestyle and environmental factors, like diet, physical activity (or inactivity), radon, and air and water pollutants. We want to learn how much cancer is due to each individual factor, to assess whether changes at the population level will reduce the cancer burden and also to help plan for future cancer care in Alberta.



Along with colleague Dr. Christine Friedenreich others, ľm using information from health and lifestyle questionnaires completed bv **ATP** participants together with provincial registries. The ATP data is very valuable to us because it was so carefully collected and verified, and offers a broad spectrum of variables crucial to these analyses. In fact. for some of the exposures, ATP provides the only source of data with the necessary information at the provincial level to complete our work.

Over time, we'll be updating estimates of risk related to these various factors based

on outcomes among ATP participants, and we'll continue to use the data to do projections of the avoidable burden of cancer into the future. Ultimately, we're looking at how many different cancers may be prevented by changing individual behaviours.

### ATP Joins Cancer Consortium

Alberta's Tomorrow Project is set to expand its reach, as it joins almost 60 international studies in a collaborative research effort governed by the United States National Cancer Institute (NCI).

Known as the NCI Cohort Consortium, the organization was formed in the early 2000s to address the growing demand for large, wide-scale investigations into the prevention and causes of different cancers.

Today, the consortium holds information on risk factors from more than 7.5 million study participants from 15 different countries. As a cancer epidemiologist, Consortium Steering Committee Chair Dr. Susan Gapstur believes the alliance will help solve current mysteries in the evolution of

chronic disease.

"In the late 1990s, a lot of studies were being published on the role of single genes in relation to various cancers. The findings were often conflicting, and we recognized a real need to pool data from a broad variety of investigations in order to replicate the results and draw more meaningful conclusions."

High-quality regional studies like Alberta's Tomorrow Project are crucial for understanding geographical factors like environmental pollution or dietary habits, says Dr. Gapstur.

By combining longitudinal data from international collaborators, consortium members get the best of both worlds: greater overall statistical power and the opportunity to share expertise that may not be available within smaller research projects.

### New Look, Same Great Study!

Our focus is changing here at ATP, and we have a new logo to show it.

Previously, the image of raised hands encouraged Albertans to literally "lend a hand" for cancer and chronic disease research. Now that we've hit our recruitment target of 50,000, we wanted an image that would reflect our primary mission of supporting analysis and investigation into health and disease prevention. We feel the outstretched arms and double-helix shadow of the new logo portrays optimism, and deep examination into the roles that environment, lifestyle and genetics play in keeping us all healthy. Please visit our new website www.myATP.ca and look around at all the new features.



## Albertans' Habits Revealed in ATP Study

Did you know that married people in Alberta tend to eat more red meat than their single counterparts?

That's just one of the lifestyle habits brought to light in a new study based on our surveys of Alberta's Tomorrow Project (ATP) participants. The research aims to quantify how closely adults in the province adhere



Cancer is an immense puzzle, one that will take a lot of pieces coming together if we're going to see the whole picture one day.

DR. PAULA ROBSON, SCIENTIFIC DIRECTOR
ALBERTA'S TOMORROW PROJECT

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# Who's Who in Alberta's Tomorrow Project

Krista Osborne, Alberta's Tomorrow Project Participant, St. Albert

I'm a clinical social worker, and specialize in grief and loss. Recently my dad started treatments for liver cancer, so I know personally and professionally how helpless you can feel, unable to do anything but offer support.

When I first heard about Alberta's Tomorrow Project (ATP), it was almost

a calling. I actually had to wait a few months to join ATP, as I was not yet 35. Hope was really the trigger for me; that through research we'll learn more and suffer less in the future. Finding meaning somewhere in the mess of cancer is very empowering.

I feel it's a kind of legacy I'm leaving, a generational gift for my children and beyond. I may not be able to do more to cure my dad's cancer or that of other family members, but I can do my part to make sure that future generations might avoid this struggle.



Photo Courtesy: Krista Osborne

to cancer prevention guidelines issued by the World Cancer Research Fund (WCRF)/ American Institute for Cancer Research (AICR) in 2007. The recommendations were developed to help prevent new cancers by addressing lifestyle habits like diet and physical activity. These behaviours are seen as changeable, unlike genetic influences or environmental exposure to pollutants, which may be beyond our individual control.

The two agencies estimate that about one third of the most common cancers can be prevented through regular physical activity. following a nutritious diet, and maintaining a healthy weight. Dietary guidelines include regular consumption of fruits and vegetables, limiting red and processed meat, and moderate use of alcohol. Not smoking and limiting exposure to secondhand smoke are also recommended. Longtime ATP scientist and study author Heather Whelan says the better we understand Albertans' current behaviour, the more effective future cancer prevention programs will be.

"This research gives us a good snapshot of what our participants' behaviours look like, in terms of developing cancer or protecting against cancer down the road. If our participants are somewhat similar to Albertans in general, this could highlight some areas to be targeted in terms of health promotion strategies."

Whelan and her colleagues examined questionnaire responses gathered from almost 25,000 ATP participants between 2001 and 2009.

"Overall, there were a couple of things that

our participants do really well," Whelan notes.

"They generally limit their alcohol below the recommended maximum single drink per day for women, or two per day for men. They also generally don't eat too much red meat, mostly keeping it under the suggested 500 grams per week. That's the equivalent of about two 8-ounce steaks per week."

Unfortunately, ATP participants scored lowest in the area of tobacco exposure; while only about 20% were active smokers, a full 85% of those filling out surveys reported being regularly exposed to second-hand smoke.

"Most of the responses were pulled from questionnaires completed before 2008 when Alberta banned smoking in all public areas and workplaces," Whelan says. "It's possible that fewer people are exposed to second-hand smoke today."

ATP participants, like many Canadians, seem to be struggling to maintain a healthy weight, according to the study. Three-quarters (77%) of the men reported heights and weights that are classified as overweight or obese. Women did slightly better, with 60% being categorized as overweight or obese. While it's still not known exactly how body size influences cancer risk, certain cancers such as pancreatic, colorectal, breast, endometrial and kidney cancers have been linked to higher obesity in multiple studies.

Several factors seem to influence how likely ATP participants are to stick with the WCRF/AICR cancer prevention guidelines in their daily lives. Adults with a higher

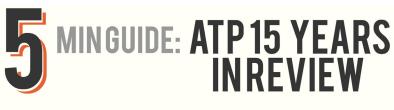
degree of education and greater household income reported healthier diet and physical activity habits, while those with existing chronic disease such as diabetes or heart disease showed lower compliance with the recommendations.

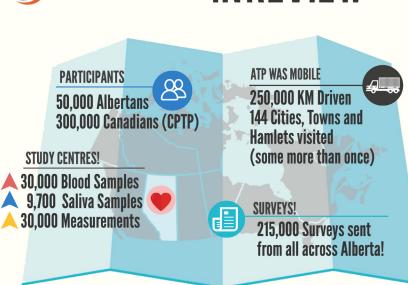
"This is a chicken and egg situation," Whelan observes. "We can't tell from this data whether it's the chronic illness that's keeping people from being physically active or eating well, for example. Or, they may have developed the disease because they're not meeting the prevention guidelines. Fortunately we are following participants over the next several years, and that longitudinal data will help us find the answer."

Over time, information gathered directly from participants and from public health records will shed even more light on what helps prevent or cause certain cancers and other chronic diseases. ATP's massive data resource will help reveal which lifestyle and environmental factors play the largest role, and why some people who follow the WCRF/AICR recommendations still go on to develop cancer while others do not.

Targeted health promotion campaigns, social support, workplace initiatives and public policy may all be influenced as a result. Whelan says she's excited to discover what will be revealed from the hundreds of thousands of pieces of information offered by ATP participants.

"I'm most proud of the quality and breadth of the data we've collected, and very excited that we're at the point now that we can really start learning important things from it!"







Moved to Richmond Road, our fifth location Featured in Hundreds of Media Articles (Video, Print, Radio)



### **FUN FACTS ABOUT OUR COHORT:**

### Current Age Ranges

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**Under 45** 8%

45 to under 55 26%



Age ranges accurate as at January 19, 2016.

55 to under 65 36%

65 and Over 30%

What is our average age?

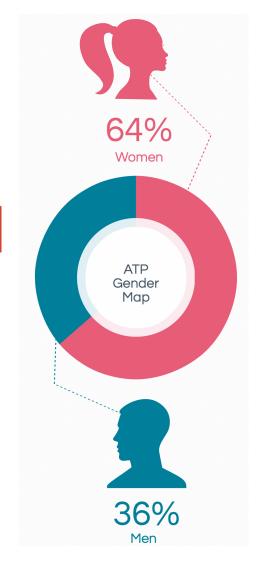


### Did you know?

Our sister study, the Atlantic PATH, actually has a Guinness World Record for their toenail collection!

The majority of ATP samples were stored cryogenically at -80°C within 2 hours of being collected! (The accepted time frame is 24 hours)

We visited Red Deer, AB, more than 10 times during our mobile study centre collection campaign!



### Thanks for reading!



## Alberta's Tomorrow Project

**CONTACT US:** 

VISIT: www.myATP.ca

OR CALL: 1 (877) 919-9292 OUTSIDE OF CANADA 1 (403) 955-4617

OR E-MAIL: tomorrow@ahs.ca

### **Our National Partners**







