



Christmas 2018

Editor: Ivan Jorgensen

Phone: 306-757-8051

Polio Regina Incorporated

ivan.jorgensen@sasktel.net

3344 Baneberry Drive, Regina, Sask. S4V 2V2

# Season's Greetings



*Ken and Cecile Holliday are our newest members of Polio Regina. Here is Ken's Polio Story.*

## My Polio Story

*by Ken Holliday, as recalled October 4th 2018*



I am now 75 years old, retired, married 52 years. I had a business, Financial Planning–Life insurance sales “H&A Financial Advisors”

After high school I worked at Farm Credit Corp for a few years. I met my wife Cecile

there and when we became engaged she quit work there. It was not allowed to have a relative or wife or fiancée working in the same place. I asked for raise in pay and was refused. I took on a 2nd job selling door to door for Fuller Brush company. I took my annual vacation time of 2 weeks and sold full time for that 2-week period. I made more in that 2 weeks than I could make at FCC in 3 or 4 months! I quit FCC and sold full time for a few years becoming sales manager for most of south Saskatchewan. I did that until Fuller Brush was sold to General Foods.

General Foods cut the commission schedule so much that everyone quit at once! I then sold real estate for a couple years, but the real estate market was sour and I was not good at that job. We were in serious financial debt. I had to find a job that paid an income – I answered an ad in the newspaper that said they paid a guaranteed income while learning to sell their product. It was guaranteed for 6 months. I hoped in that time to find a job I liked and paid a wage we could live on. That 6-month job was with Canada Life and it was to lead to a career of some 34 – 35 years. Eventually it led to a partnership with Kelly Aikens who is about 15 years younger than I and he purchased my interest in our company.

I became “normal” sort of, at age 18-19. I limp, my right foot is crooked, I worked on our family farm picking rocks, throwing bales and other manual things. I built my garage where I live. My hobbies were wilderness canoeing, big game hunting, and Peregrine Falcon release program – Regina. – All required physical effort. Those things are no longer something I can do. Cecile and I had 3 sons. Karl – deceased 2009, no family. Chad – lives in Ottawa, 2 daughters, Keith lives in Houston Texas has 1 daughter. We travel to Arizona each winter with our RV trailer, then to Texas and Ottawa. We have a cottage at Glen Harbour Sask. on Long Lake. This PPS will soon mean we can't do these things. This PPS is scary. I am now just taking my head out of the sand (so to speak). It is a real hard thing for our family especially Cecile to accept and learn about. Recently (last few years) I have had cause to try and

regain strength and range of movement. The lack of knowledge meant the help I was given caused me some treatments that I now know were very damaging. I wonder if PPS lead to any of my other medical issues. Insulinoma tumor in my pancreas-removed in Mayo Clinic - Rochester. Gall Bladder removal before laparoscopy was invented, colon cancer with surgery, radiation, chemo, Colloid cyst -3rd ventricle on my brain with 2 surgeries to remove

I was repeating my grade 12 English and the assignment was to write a true story essay. My mother kept notes and here I quote a letter from her to the Sask. Gov't Correspondence School, she was correcting the essay marker. – I was accused by the marker of having an over active imagination because these things could never have happened. The marker got a real lesson from my mother – confirming my essay was true she states “I gather that you find the details of his operations incredible. Here is his story; every word of it is true. On Sept 13, a Tuesday, 1953, at midnight He and his brother took sick, diagnosed the, following day as polio. By Friday, Ken was paralyzed, bowels, one leg, bladder, and admitted to the hospital in Qu’Appelle.” Her letter goes on and in some cases I guess my memory fails me as her notes differ from my memory in small detail. This is my memory and I swear it is as I recall things:

1953 – Polio. That fall my brother Barry and myself

<b>IN THIS ISSUE</b>	
My Polio Story – Ken Holliday . . . . .	1
At the Meetings. . . . .	5
Seniors’ Mental Health . . . . .	6
High-Dose Flu Shot . . . . .	7
Hearing Presentation. . . . .	7
Seeing a Physiatrist . . . . .	8
In Memoriams. . . . .	9
Emotional Stress in Polio Survivors . . . . .	10
Acute Flaccid Myelitis . . . . .	12
Blood Test for PPS . . . . .	12
Memory and Sugar . . . . .	13
Post-Polio Fatigue Log . . . . .	15
You Are Invited. . . . .	16
Membership Application. . . . .	16

were both stricken with polio on the same night “The disease peaked in 1953 with nearly 9,000 cases and 500 deaths , the most serious national epidemic since the 1918 influenza pandemic “a quote from <https://www.cpha.ca> Canadian Public Health Association. Barry was nerve damaged while I had more muscle damage.

1953 when I got sick, there was a fear of catching the disease from me or my family. They did tend to keep their distance. I am told one lady, Minda Lindenbach often drove mom to Regina to see me while most shunned or avoided the family.

I am 10 years old, healthy, active, it is fall, school has started, Wednesday. Dad calls me to get up and I can’t! He does not believe me, at first. It is found I have polio and in no time, I find myself in hospital in Qu’Appelle, Sk. There were others there like me, in that Qu’Appelle hospital a friend in similar condition (since passed away), the minister’s wife, not quite as effected. That was a scary horrible experience. Later I was moved home and then to Regina General Hospital – that became my home for the next few years.

In Qu’Appelle I was placed in isolation, I had horrible cramps in my legs, all they could do was put hot compresses on them – so hot they burned my legs. I recall a 2 burner stove with a boiler on it (oblong 12 inch deep-copper) in which they placed the flannel towels – nurses with tongs removed the towels from the boiling water, pressed the water out and wrapped my legs. I lost the ability to have a bowel movement. The treatment was almost barbaric – enemas and decompaction. (The nurse who did that job hated it as much as I did; I recall her crying while she did it). I lost the ability to urinate and a catheter was put in and drained my bladder every other day. I had great trouble breathing and I was in an iron lung a few times for a few hours each time.

I was there for treatment to help recovery. I went to school there with a teacher “Mrs. Davis”; I have her notes for my parents as I passed one of the grades. In all the time I never failed, never missed a grade. Therapy was in the basement in the exercise room near the classroom and the swimming pool. I stayed in that hospital for about 2-3 years, taking physio in a pool, and in the physio room. I have vivid memory

of some things, Dr. Bachinski telling me and my parents “that kid will never walk again unless” I forget the rest, but it made me mad! I fought, I worked at exercise, I was into a wheelchair. I have just read part of the book by Dr. Bruno “The Polio Paradox” and see that doctors had a habit of telling kids and parents “He will never walk again”

There were many kids in that ward and several in my big room. I recall the times when a kid died and was wheeled out of the room in their bed. It would be very gloomy in our ward for a day or so but always more kids to fill the beds. I have seen some of those kids later. To list a few (not all but some who became closer friends). One from Balgonie Sask. had his own accounting business and used leg braces, since deceased.- Another was in a wheel chair, was the receptionist at the Wascana Hospital last time I saw her, she has since passed away. Brother and sister, both in wheel chairs, very deformed legs- I lost track of them. Yet another was in a wheel chair and worked in an office which was across the hall from my business. One who was in hospital in Qu’Appelle with me died November 2011.

Exhibition - The Shriners took some of us kids to the fall exhibition, I won a huge panda bear and when next I went home I gave it to my baby sister Faye who is 9 years younger, she tells me of her memory “From Faye - I was 18 months old when it began but I do remember rides in your wheel chair, getting to do some colouring or craft in a rehab area, the cast room with all different sizes of crutches and the sound of the saws . I also remember Mom doing some sort of exercises with you on the kitchen table. I recall feeling scared and not sure of what was happening. It must have been painful or difficult for you and I was upset and Mom explained you had to do them to get better” It had an impact on me and I can still see it in my mind’s eye.

I recall some of the other kids, most are deceased already. One I befriended was from north Sask, I think a native Cree indian. He and I often “escaped” to run the halls, to the canteen to read comics, outside to the yard area where he showed me how to make a bow and arrows from the branches of the hospital hedges. We were caught shooting sparrows.

They kept us under more surveillance after that. Dad got special permission to take him to our home for a weekend.

My parents and family came to see me almost daily, all the way from our farm at Edgeley. It was a one-hour drive on dirt roads.

There was food served on trays, with the worst solid Jello you will ever see. Hated it, still won’t touch it. I would put a dish of it on the hot water radiator, and after a day, even in winter with the radiator really hot, the knife marks from cutting the Jello squares were still visible!

A roommate I had was being teased (in fun) by one of my visitors. The roommate was mad at this visitor and threw his urine bottle, drenching my visitor. We all laughed, the visitor was not harmed, and the teasing quit. They had become friends and looked forward to regular visits, and treats being brought, books, candy etc. The exercise rooms were busy, curtained dividers, parallel bars, steps, mats, crutches, wheelchairs, stretchers, doctors, patients, therapists all working on us kids.

I was sometimes living at my grandparents in Regina. I was taken by bunny bus from their home to Wascana hospital daily – exercises, therapy and school. I recall I sometimes road a bike to Wascana instead of taking the bus. The driver was Morris Varin from my home town of Edgeley.

Camp Easter Seal – there were years when I went to Camp Easter Seal. One memory - a field trip to Hanley Sask. They took us to meet a train carrying Queen Elizabeth and Prince Phillip who came out to shake our hands and say hello. Those were fun times.

Any 10 year old would fear surgeries, I did but “suck it up”, “it will make you better” were thrown at me, I had a few operations.

I had many muscles affected. They removed the muscle form the joint of my big toe, inserted a steel pin and removed it in a few weeks. The joint in that toe is frozen forever. The muscle was implanted in the top of that foot to assist my foot from dropping when I walk. It was not 100% effective but helped a lot. My right leg is about ½ inch shorter than my left, the muscles on the left leg are noticeably smaller. My right foot turns out as I walk and I limp. I had severe



muscle loss in my back muscles and left arm. The left arm is smaller than my right and I have never been able to lift it over my head like the right.

I developed serious spinal curvature and Dr. Bachinski did a spinal fusion 13 vertebrae upper ½ of spine. The cure - I was placed in a new full upper body cast every 3 months, while I was growing. It went from my neck to below my hips. This was done while I was strung out – stretched by straps around the hips and under arms and neck. The cast was allowed to dry and harden before the straps were removed. I was in some pain while the stretching was done. The pain went away shortly after the stretch straps were removed. Between changes they gave me a sponge bath – needed or not.

While I was in the body cast age 13-15 approximately, my father got special permission for me to drive to school (Edgeley) even though I was under legal driving age. We owned all the land from our home to the school, He bought me a 1939 Pontiac, needing some repairs. I was to drive on our land unless it was muddy and then I could use the roads. Of course, I often said the rain from weeks ago made the road muddy. That Pontiac went to many other places. No one objected. My friend Archie Craig helped sand and paint it with brushes. We painted it purple

I had a rather scary accident or two with that cast. Barry (my brother) and I were in the Edgeley 4-H beef club. We raised and trained and showed beef calves. Achievement day was at our farm, there were 12-15 children leading these yearling animals in a circle to show spectators and judges. The calf in front of me and my calf kicked back with both feet and smacked me in the chest. There was a very loud sound as it connected with my chest. I was knocked down. Everyone thought I would be hurt but the cast saved me! It was now mush from the waist to near my neck. I did need a cast repair. Lady luck was with me.

Another accident was when I was riding my bike down the Mackie hill, (an entrance to the Qu'Appelle valley) which was very steep, gravel, tight curves and no side rails. The steering column of my bike broke and I had to kick the front wheel to steer it. I directed it to the side hill, hit with some speed and flew over the handle bars. There was a flashlight bracket

mounted on the middle of the steering column. It was steel 2 inches tall and flat. That steel dug into the cast and ripped the plaster- but not my body. I do not recall who all was riding with me but they went to the bottom where the parents were cleaning and preparing the building for the United Church camp. Those parents streamed out and up the hill to find all I needed was a cast repair and a new front wheel and steering column. Lady luck was riding with me.

I went hunting, fishing, milked cows, cut firewood, and did almost everything everyone else did while wearing that cast. The weight of it rode on my hips and I developed large calluses there from it. I was subject to some bullying, “the cripple can’t do that”, but also lots of support such as playing baseball everyone wanted to run for me. I was usually too pig-headed and ran myself, at least to 1st base .

I never missed a grade in school, thanks to the excellent teacher at the Red Cross wing school – a Mrs. Davis who taught us kids and accommodated the therapy sessions we all had. Kids who would not do their exercises did not regain as much as those who did the exercises and more – I did mine and recovered more than some who did not try and had less disability than I. I now feel sorry for them I do wonder if they will have less PPS.



I thank the friends and neighbors who help me doing the things I am unable to do. They fix things, fetch and carry, make repairs, change plans to include me, accommodate me. I am an imposition on them and I would be much disadvantaged without them. I am indeed fortunate in that regard. My wife is a constant support without whom I would be institutionalized.

Aides I use – 2 canes, a 4 wheel electric mobility scooter, and I am purchasing a driver seat modification for me in my suburban – It is by Adapt solutions and called a “Link” about \$12,000 and so far I have not found any government assistance. It will turn, come out and down to 12” off the ground, pick me up and save me the effort of climbing in.

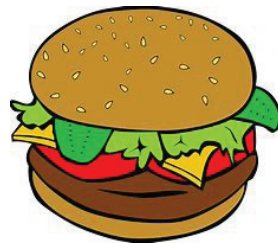
I have tried physio with bad results, due to lack of knowledge by the therapist. I recently had cortisone shot in my good knee, and am using acupuncture and VERY little physio. This physiotherapist is a fibro myalgia sufferer and is very good, making every effort to learn about PPS. I recommend her, “Karen Toffan BSCPT,CAFCI” she is at Regina General Hospital – Medical office wing, Health Works. 306-525-0007

I am a new member of PPS group in Regina and looking forward to friendships and information there.



## At The Meetings

**May 2018** - Our annual spring picnic was enjoyed by everyone with lots of great food and conversation. Although it was inside we still had a picnic-like atmosphere with hamburgers and all the fixings.



**September 2018 – Open Forum** - Our guest speaker was Ramona Iida who spoke on seniors’ mental health. Ramona has studied all kinds of healing techniques as well as being a certified Massage Therapist. She recently co-authored a book called “Breaking the Silence Our Stories of Healing and Hope”. A summary of her presentation is printed later in this issue.

**October 2018** - Diane Lemon talked about an article in the February – March issue of “Canada’s History” magazine about Constance Beattie, a physiotherapist fighting polio in Nunavut in 1949 and the tragic plane crash that killed her and 8 Inuit “crippled by polio” as well as other passengers and crew, 21 people in total.

Diane Lemon informed us about the Flu shot – regular compared to the high dose. The high dose is only available by special order at most pharmacies and the cost is \$60.00 plus \$20.00 to administer it. An explanation of High-Dose vaccine is printed later in this issue.

Dates and times and location for 2019 meetings: Spring meetings for 2019 will be held March 28th and April 25th, 2019 at 3:30 p.m. at Nicky’s Café. We will decide on the dates and times for the Spring Picnic and fall meetings at future meetings.

**Open Forum:** Our guest speaker was Dr. Debbie Davis Aud (C), Aud.D, Doctor of Audiology from the Eastside Audiology & Rehabilitation Inc. who did a presentation on hearing, hearing loss, hearing aids, auditory skill development, auditory processing disorders, and tinnitus. A summary of her presentation is printed later in this issue.

# Seniors' Mental Health

by Ramona Iida, Certified Massage Therapist



My passion is to help people in all areas of wellness. Our mental, physical and spiritual well-being are all so interconnected. When massaging people they often think they are coming for only physical

reasons. However, I find that I am working just as much on their mental health as their physical. Our mental health (stress, emotions) affects every system of our body. So I can literally feel people's mental stress in my hands when I work on them!

My desire to help people led to two friends and myself publishing a book, "Breaking the Silence, Our Stories of Healing and Hope". This book consists of 25 stories of local people sharing their struggles in the area of mental health and addictions. We wanted all proceeds to help a local cause and so we are supporting a place called Dominics through the proceeds of this book. This is a place where people age 18 and over can go for assistance, or to live, while enduring long term mental illness and addictions.

There is hardly anyone out there who hasn't been affected in at least some way from mental illness or addictions. It may not be yourself personally but we know people who have or are still struggling in these areas. Stats show that the numbers of mental health and addiction problems is rising. We don't have enough people employed in these areas to keep up with the demands. Some people are suicidal and are on a two month wait to get in to a professional. That is not ok. So my passion is to get the governments attention for this need and more support. Also, to help people know it is ok and necessary to ask for

help and to give resources to help find help. Some of these stories talk about mental and emotional abuse. (You can purchase this book on Amazon for about \$20)

I have heard Doc's story and I am sure you can relate with your own. I cannot fathom being taken away from my parents at a young age and to be separated and confused, some going through torturous procedures and operations. This can leave a deep wound unhealed. I imagine you would need lots of forgiveness after going through what you did.

My grandma had polio as a child and was not taken away from family. She always wore a brace on her leg to straighten it or else she would walk on the side of her foot. She never complained and was always a positive role model for me. She never worried about herself but she sure worried enough for everyone else about all of us. She may have struggled with things but she never showed it to me. So I never heard about people suffering in this way from polio until Doc told me years back about his story.

I do hope you all have some outlets of support. You have this group which is awesome and I hope you have community support as well for all areas of your wellness. I tried to find resources for you dealing specifically with post-polio syndrome. The following is some local assistance all free provided for people with chronic conditions such as PPS Health Promotions. Live Well, a 6 week program once a week. Fall, Winter and Spring sessions. Workshops on pain management, problem solving, exercise, negative emotions, healthy eating, fatigue, poor sleep, self-management and wellness, Medicine uses and more. Another program offered is Forever in Motion which is physical activity classes for age 50 and over.

To participate in the classes one must register. Call 306-766-7163 or email at [healthpromotionRQHR@rqhealth.ca](mailto:healthpromotionRQHR@rqhealth.ca)





## High-Dose Flu Vaccine

CARP (Canadian Association for Retired Persons), Regina Chapter is lobbying the provincial government to pay for the High-Dose Flu shot and shingles vaccine and provide them free of charge for all Saskatchewan residents that are 65 and older.

With age comes a great many things: wisdom, maturity, beauty... And also a weaker immune system! This places adults over the age of 65 at greater risk for severe complications from influenza. 12,200 Canadians are hospitalized by flu each year, mostly over 65 years of age. Prevention is an important step to keeping healthy this flu season, and getting a flu vaccination is crucial.

The Standard-Dose (Quadrivalent) vaccine which contains 2 influenza A viruses + 2 influenza B viruses (broader protection with both B viruses included in vaccine) is given free of charge to all Saskatchewan residents age 6 months and older.

The High-Dose (Trivalent) vaccine contains 2 influenza A + 1 influenza B. It contains four times the amount of antigen (prompts the body to make antibodies) contained in regular flu shots, to create a stronger immune response. High-Dose shot is designed specifically for age 65 and above. It is only given free of charge to Saskatchewan seniors 65 and older who are in a personal care facility.

Some provinces and territories including Ontario give the High-Dose vaccine for free to all seniors 65 and older. In Saskatchewan the High-Dose is only available by special order at most pharmacies and the cost is \$60.00 plus \$20.00 to administer it. It is not available at Flu clinics at the shopping malls.

Flu vaccines are safe. Vaccine viruses used are inactivated ("killed") or weakened and CANNOT cause influenza.

Effectiveness - 60% less likely to need treatment for flu after get vaccination. Also reduces other illnesses, antibiotic use, time off work, hospitalizations, and deaths.

Potential side effects are: soreness, redness, or swelling where the shot was given; fever (low grade); aches; the High-Dose may cause headache; potential for increased local side effects.

## Hearing Presentation

*by Dr. Debbie Davis Aud (C), Aud D, Doctor of Audiology*

How many of you know someone that you think should have their hearing tested but they won't do it? Why do people do that?

We have chest pains and we see our cardiologist, we have mobility troubles and we see our physiotherapist, we have vision problems and

we get glasses. But why don't we get our hearing tested? Even just to get a baseline test. After today, I challenge you all to try to change the mindset of that individual, or even yourself and get a baseline hearing check. We should start thinking about hearing health and hearing fitness like we do any other type of healthy lifestyle choice. I will talk a bit about the research for why we should catch hearing loss earlier and why we should fit the best of technology.

Research has shown that hearing loss that is not treated will more rapidly increase the rate of cognitive decline by 30-40%! Of all the lifestyle choices one can make to keep the brain healthy, hearing loss is the one that stands out as being the most manageable. Think of that. Along with doing puzzles and Sudoku to keep that brain alert, practice good hearing! And keep it that way the best you can for as long as you can. What that means is if there is hearing loss, fit it soon and fit it well.

I once had a physician ask, how does not aiding a hearing loss make the hearing worse? Studies have shown that within 10 years of diagnosis the majority of individuals will have poor word understanding.



We know that aging and noise and medical conditions can impact hearing levels but why not wearing hearing aids?

Well think about it. It's actually more than an audibility problem. Signals to the brain have a lower quality of sound. When a sound is muffled and it reaches the brain to be processed what is that brain receiving? It's a lack of signal. Less stimulus. If you don't use it you lose it.

The brain isn't receiving the signal for processing where it's supposed to be and there is evidence that grey matter is being lost, reorganizing to the lack of sounds. We have seen brain imaging studies that have shown the need for more cognitive areas to light up in the fMRI scans showing that there is more activity in our frontal cortex and other areas of the brain to try to take over all fill in the blank cognitively when we don't get the entire message. This extra mental energy can be quite fatiguing. It makes us tire more quickly and socially withdraw. Especially in the presence of background noise.

This social isolation will cause an Acceleration of health problems and dementia and sadly on average there is a 7 year wait before people choose to aid their hearing loss. I suspect that people may be more quick to respond to hearing loss if they knew these things.

So what can we do? How can we free up our resources to be easier on the brain? Research from the past few years has been changing how manufacturers choose to have the hearing aids handle noise. Studies have shown that traditional directionality or tunnel listening is harder on the brain. So what manufacturers are doing is listening to those non users as to why they don't get hearing aids and they needed to correct a few things. Two big ones I can talk about tonight and that is helping it better in the areas they need the help.... background noise and make it look better, less of a stigma needs to be attached to it.

Oticon has ground breaking technology that is 50 times faster than the previous premium technology and with that they have managed to correctly identify locate and separate sound for better comprehension. Their studies are showing that the latest premium technology is actually

closing the gap between hearing help in noise and how normal hearing individuals hear in noise. 50 times faster!!!! It has been the best thing I've fit to repeatedly have my patients say that they notice that they are hearing better in noise and more naturally too.

Signia has a ground-breaking hearing aid that has looked more closely at the stigma attached to the teardrop shape that hearing aids typically have. The Styletto has converted 10% more non-users to using heading aids.

These advances in technology paired with seeing an audiologist who uses Real Ear objective verification of hearing aid fitting has proven to give a higher rate of success than what hearing aids have ever before.

So in conclusion get tested sooner and do it with advanced technology because healthy ears mean healthy brains.

Thank you.



## On the topic of seeing a Physiatrist

*Bruno Bytes (6/2018)*

**Original Post:** I went to see a Physiatrist (Rehabilitation Physician). When I asked if she knew about PPS her response was, "YES I do and have treated several patients with it. I had a colleague who had to retire from practice because of it." When she examined me, she asked me why I told her I had polio only in my left leg." She went on to explain that polio affected every muscle in my body, even if they did not appear paralyzed or even weakened. WHAT a surprise!

**Dr. Bruno's Response:** She's right – let's clone her! Every muscle in your body was affected by polio, even if you had no symptoms at the time. This is why polio survivors often report new muscle weakness in their "good" limbs and no change in the polio-affected ones.



## In Memoriams

### Jo-Ann Boivin



*Jo-Ann Boivin was a long-time member of Polio Regina. She wasn't able to attend meetings but she was always a dedicated supporter. Polio Regina would like to thank those who made donations to Polio Regina in memory of Jo-Ann.*

Jo-Ann Boivin passed away peacefully on Wednesday, June 27, 2018.

She was predeceased by her parents Gordon and Anne Willerth; her in-laws Al and Wanda Boivin; and brother-in-law Garth Willoughby.

Jo is survived by her husband Phil; daughters Danielle (Cameron) Demmans and Jennifer (Derek) McMillan; grandchildren Chance and Karin Demmans; and sister Jackie Willoughby (Lorne Cosford); and numerous other family members.

Polio complicated her life, but she lived life to the fullest and she was an inspiration to others.

There was a private family interment at Regina Funeral Home and Cemetery, 4001 East Victoria Avenue, Regina, SK.

### Ross Copeland



Ross and Verna Copeland were original members of Polio Regina. Verna was our treasurer for many years. Together, they worked tirelessly every year asking for donations from different organizations, for door prizes, to be given at our Annual Christmas parties for Polio Regina.

We will always remember Verna and Ross as being so dedicated to whatever they were asked to do. Verna passed away August 23, 2013. They were married for 62 years.

Ross and Verna owned and worked on a mixed farm in the Davin district but Ross' expertise was raising and showing registered Shorthorn cattle which they exhibited and won many prizes, at shows throughout Canada and the USA. One of Ross' proudest achievements was showing the Grand Champion Shorthorn heifer at the Western Canada Agribition in 1984.

After they retired they moved to Pilot Butte where they lived for a number of years. After Verna's health began to deteriorate they moved to Broadway Terrace in Regina where they were great card players. They never missed a game of Cribbage and taught many how to play Rook. Ross spent his final years at Parkside Extencicare.

*The following is Ross Copeland's obituary:*

### William COPELAND



COPELAND, William "Ross" It is with great sadness we announce the passing of Ross on Friday, August 17, 2018. He was a proud 95 year old. Ross was predeceased by his

loving wife Verna (née Shaw); parents, Fredrick and Elizabeth (née Graham); and sister Mary. He is lovingly remembered by his brother Don Copeland; brother-in-law Les Larter; niece Zita (Peter) Connoy; close friends Dave (Sheila) Brandt; as well as numerous nieces, nephews, cousins, and dear friends. Funeral Service was held at Speers Funeral Chapel, 2136 College Avenue, Regina, SK on Saturday, August 25, 2018 at 1:00 p.m.



## Emotional Stress in Polio Survivors and Post-Polio

*Dr. Richard L. Bruno, HD, PhD  
Post-Polio Sequelae Monograph Series  
NY: Random Harvest, 1999*

Emotional stress is the second most frequent cause of PPS symptoms, causing fatigue in 61% of polio survivors, muscle pain in 51% and muscle weakness in 45%. (Bruno & Frick, 1987; Bruno, et al., 1991) Polio survivors report other symptoms of chronic stress, including trouble falling asleep because their “minds are racing” in 58%, frequent feelings of anxiety (49% ) and a frequency of ulcers that is 80% higher than in the general population. (Bruno & Frick, 1987; Bruno, 1995a). There appear to be two sources of polio survivors’ stress: having had polio and having PPS.

Stress and Polio. Three North American surveys and two clinical studies of more than 2,200 polio survivors found 23% more “Type A” behavior – being hard-driving, time-conscious, pressured and overachieving -- as compared to those without disabilities or those who had spina bifida, a physical disability apparent at birth. (Bruno & Frick, 1987, 1991; Bruno, et al., 1991; Creange and Bruno, 1997; Frick, 1997). Thus, it should not be a surprise that polio survivors also have more years of education, work more hours of overtime and take fewer sick days than do non-disabled workers. (Bruno, et al., 1991, Bruno & Frick, 1987, 1989; Lonnberg, 1993)

“Type A” behavior (TAB) seems to have developed in polio survivors as an attempt to prevent abuse. (Bruno & Frick, 1989) Polio survivors who were emotionally, physically or sexually abused as a result of their polio-related disability are at least 15% more sensitive to the criticism of others and more ready to believe that they are failures than polio survivors who had not been abused or those without disabilities. (Frick, 1997) And the more sensitive polio survivors are to criticism and failure, the more “Type A” they are and the less likely they are to agree to complete or even begin a PPS treatment program. (Bruno, 1995b; Bruno & Frick, 1999; Frick, 1997)

Whether or not TAB actually did protect against

criticism, failure or abuse, it has taken a heavy toll on polio survivors. Post-polio fatigue and muscle pain are more common in “Type A” polio survivors, as are trouble falling asleep, anxiety, frequent headaches, neck pain, back pain or muscle spasms. (Bruno & Frick, 1987; Schanke, 1998). Type A polio survivors are also more lonely, are less likely to agree to be evaluated for PPS and are less willing to take rest breaks during the day to manage PPS. (Creange and Bruno, 1997; Frick, 1997).

What’s more, many polio survivors’ stress response system is compromised. Polio survivors with fatigue do not release enough ACTH in response to stress. (Bruno, et al., 1995b) ACTH is a hormone, produced by a part of the brain damaged by the poliovirus, that both activates the brain and turns on the body’s stress “braking” system. (Bodian, 1949) So polio survivors with fatigue are less able to activate their brains and concentrate when they need it most, that is when they are under stress.

Distress and PPS. Unexpected and disabling PPS symptoms occurring in the prime of life are understandably a cause of distress. (Frick, 1985; Frick and Bruno, 1986) And polio survivors do have “significant psychological distress” and symptoms of depression. (Bruno & Frick, 1991; Conrady, et al, 1989) Interestingly, distress and depression are not caused by PPS symptoms themselves, but appear when new symptoms cause the loss of the functional abilities necessary to work, socialize and participate in family life, or when polio survivors believe that PPS symptoms are beyond their control and will progress. (Schanke, 1997; Kemp, et al., 1997; Conrady, et al, 1989; Diard, et al, 1994; Mullins, et al, 1995; Kirsh, et al, 1989; Peterson, et al, 1989).

Depression is more common in polio survivors who have less social and family support to help them deal with functional losses (Tate, et al, 1994;). A lack of family support is also related to polio survivors not completing or even beginning a treatment program for PPS (Creange & Bruno, 1994). Using crutches or a wheelchair is associated with polio survivors feeling inadequate as family members, while embarrassment about having an obvious disability is associated with refusal to use assistive necessary to treat PPS (Creange & Bruno, 1997; Bruno & Frick, 1987)

Both stress and distress must be addressed if polio survivors are to make the lifestyle changes and use assistive devices necessary to manage PPS. It is recommended that all polio survivors with PPS symptoms receive a psychological assessment as well as individual and group psychotherapy to teach “more effective coping behaviors,” decrease TAB and help deal with past abuse and feelings of inadequacy, embarrassment and the sensitivity to criticism and failure that prevent polio survivors from treating their PPS (Bruno and Frick, 1991; Conrady, et al, 1989; Tate et al, 1994).

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*The following are posts reprinted from Dr. Bruno's "Bruno Bytes"*

## **On the topic of AFM and the Polio Virus**

(10/5/2018)

**Dr. Bruno's Original Post:** AFM is not, NOT the Polio Virus!

At a Glance

### **Acute Flaccid Myelitis**

Centers for Disease Control and Prevention is concerned about AFM, a serious condition that causes weakness in the arms or legs.

From August 2014 through October 2018, CDC has received information on a total of 396 confirmed cases of AFM across the US; most of the cases have occurred in children.

Even with an increase in cases since 2014, AFM remains a very rare condition. Less than one in a million people in the United States get AFM each year.

While we don't know the cause of most of the AFM cases, it's always important to practice disease prevention steps, such as staying up-to-date on vaccines, washing your hands, and protecting yourself from mosquito bites.

<https://www.cdc.gov/acute-flaccid-myelitis/afm-surveillance.html>

**Additional Post:** I wonder if these kids were vaccinated for Polio?

**Dr. Bruno's Response:** Since the cause isn't he poliovirus I wouldn't think polio vaccine would be an issue. The vaccines are very specific to the virus used. That's why the flu vaccine doesn't always work very well. The virus changes every year.

**Additional Post:** It's not the Poliovirus but is it a similar enterovirus?

**Dr. Bruno's Response:** The polioviruses are only three of more than 10 enteroviruses, the majority of which can cause symptoms identical to polio. It's still unclear which viruses cause acute flaccid paralysis in the United States but it could be several. Remember there are 60,000 cases of non-polio enterovirus paralysis in India every year caused by several different non-polioviruses

## **On the topic of a Blood Test for PPS**

(10/23/2018)

**Question:** Recently I had a fever with muscle and chest pain. The only abnormal blood tests showed high C-reactive protein and high creatine kinase. My blood pressure and cholesterol are normal, have never smoked and I'm thin. Because of the chest pain I had an angiogram, which was normal. Could high CRP and high CK be related to PPS?

**Dr. Bruno's Response:** C-reactive protein (CRP) is a blood marker for inflammation somewhere in the body. High CRP can be seen with Type 2 diabetes, autoimmune diseases and cancers. Could inflammation somewhere in your body, as indicated by your elevated CRP, be related to PPS? Fifty consecutive patients evaluated at The Post-Polio Institute had CRP measured. The patients were on average 59 years old and 55% were women. Thirteen percent had an elevated CRP, 66% of whom were men. CRP was on average nearly three times the normal value. However, there was no significant difference between those with high and normal CRP on self-ratings of daily fatigue, difficulty with self-care or ability to perform activities inside or outside of the home. So, there is no evidence that elevated CRP or inflammation is related to PPS, either to post-polio fatigue or difficulty in functioning.

Recent studies have found that elevated CRP is related to having a heart attack or stroke. The theory is that a bacterial or viral infection (although definitely not a poliovirus infection) somehow inflames arteries and causes pieces of cholesterol clogs to break off. Our 1985 National Survey found no more heart disease or high blood pressure in polio survivors than in the general population. But two studies found that 5% more male post-polio patients had abnormally elevated cholesterol as compared to the general population. In one of the studies only 33% of those with high cholesterol had been given a cholesterol screening test by their doctor and not even 25% were on cholesterol-lowering medications, like the statin drugs such as Lipitor, Pravachol and Zocor. This is not good since reducing cholesterol reduces heart attack risk. What's more, research has shown that taking statins to reduce cholesterol can also lower CRP and may thereby increase survival even after having a first heart attack.

Statin drugs provide a connection between CRP and CK -- creatine kinase -- in polio survivors. CK is an enzyme released when muscle is damaged. One half of one percent of anyone taking a statin develops muscle breakdown, which causes muscle pain (especially in the calves), muscle weakness and an increase in CK. Even without muscle breakdown or an elevated CK, some polio survivors report muscle pain or weakness when taking a statin, usually one of the older statins, like Lipitor. And polio survivors can have an elevated CK without taking a statin. Two studies found that 40% of polio survivors had abnormally elevated CK, with men having significantly higher CK than did women. In one study, CK increased with the number of steps polio survivors walked in a day. In our fifty Post-Polio Institute patients, 21% had abnormally elevated CK (on average about 33% higher than normal) with men again having higher CK than did women. But, as with CRP, there was no significant difference between those with high and normal CK on self-ratings of daily fatigue, difficulty with self-care or the ability to perform activities inside or outside of the home. However, an elevated CK may mean that polio survivors are making their muscles work too hard and are causing muscle fibers to break down.

So, neither CRP nor CK is related to fatigue or loss of functional abilities in polio survivors. However, all polio survivors need to have their cholesterol and CRP measured to assess heart disease risk. And since an elevated CK indicates muscle breakdown, either from taking a statin or from muscle overuse, polio survivors should have CK measured before taking a statin. If you are worried about possible muscle weakness or breakdown with the statins, or the newer cholesterol-lowering drugs like Zetia and Vytorin, ask your doctor about using older medications like slow-acting niacin or bile acid sequestrants. Besides medication, polio survivors need to eat high fiber foods, reduce saturated fat, treat high blood pressure and stop smoking to keep their tickers ticking.

## **On the topic of Memory and Sugar**

(7/22/2018)

Dr. Bruno's Original Post: Thinking Improves With "A Spoon Full of Sugar." This study should apply doubly to polio survivors since our research found

there was impaired attention and slowed thinking speed in polio survivors who had low, just barely normal blood sugar levels.

### **Sugar Improves Memory in Over-60s – Helping Them Work Smarter**

A small dose of sugar can improve memory in older adults, motivate them to work harder and puts them in a good mood when performing difficult tasks.

Researchers gave participants a drink containing a small amount of glucose and got them to perform memory tasks – found improvements in memory, mood and level of engagement.

Short-term energy in the form of raised blood sugar levels could be an important factor in older adults motivation to perform a task at their highest capacity.

Sugar improves memory in older adults – and makes them more motivated to perform difficult tasks at full capacity – according to new research by the University of Warwick.

Led by Konstantinos Mantantzis, Professor Elizabeth Maylor and Dr. Friederike Schlaghecken in Warwick's Department of Psychology, the study found that increasing blood sugar levels not only improves memory and performance, but makes older adults feel happier during a task.

The researchers gave young (aged 18-27) and older (aged 65-82) participants a drink containing a small amount of glucose, and got them to perform various memory tasks. Other participants were given a placebo – a drink containing artificial sweetener. The researchers measured participants' levels of engagement with the task, their memory score, mood, and their own perception of effort. They found that increasing energy through a glucose drink can help both young and older adults to try harder compared to those who had the artificial sweetener. For young adults, that's where it ended, though: glucose did not improve either their mood or their memory performance.

However, older adults who had a glucose drink showed significantly better memory and more positive mood compared to older adults who consumed the artificial sweetener. Moreover, although objective measures of task engagement showed that older adults in the glucose group put more effort into the task than those

who consumed the artificial sweetener, their own self-reports showed that they did not feel as if they had tried any harder.

The authors concluded that short-term energy availability in the form of raised blood sugar levels could be an important factor in older adults' motivation to perform a task at their highest capacity. Heightened motivation, in turn, could explain the fact that increased blood sugar levels also increase older adults' sense of self-confidence, decrease self-perceptions of effort, and improve mood. However, more research is needed to disentangle these factors in order to fully understand how energy availability affects cognitive engagement, and to develop clear dietary guidelines for older adults.

Konstantinos Mantantzis commented: "Over the years, studies have shown that actively engaging with difficult cognitive tasks is a prerequisite for the maintenance of cognitive health in older age. Therefore, the implications of uncovering the mechanisms that determine older adults' levels of engagement cannot be understated."

Dr Friederike Schlaghecken, from the University of Warwick's Department of Psychology, commented: "Our results bring us a step closer to understanding what motivates older adults to exert effort and finding ways of increasing their willingness to try hard even if a task seems impossible to perform."

<http://www.newswise.com/articles/view/697579/?sc=mwhn>

### **Additional Post: 8 Best Fruits (and Fruit Sugars) for a Diabetes-Friendly Diet**

Every Day Health by Maria Masters Reviewed by Kelly Kennedy, RD

When you're looking for a diabetes-friendly treat that can help keep your blood sugar within a healthy range, look no farther than the produce drawer of your refrigerator or the fruit basket on your kitchen table. Believe it or not, the notion that fruit is not safe when you need to watch your A1C is a popular diabetes myth that has been debunked again and again. Indeed, according to the American Diabetes Association (ADA), many types of fruit are loaded with good-for-you vitamins and minerals, as

well as fiber -- a powerful nutrient that can help regulate blood sugar levels and decrease your risk of developing type 2 diabetes -- according to the Harvard T.H. Chan School of Public Health.

*Fiber*, which can also be found in some of the best vegetables for diabetes, as well as whole grains — can further benefit your health because it promotes feelings of fullness, curbing unhealthy cravings and overeating, research shows. Healthy weight maintenance can increase your insulin sensitivity and help in your diabetes management.

So, how do you pick the best fruit for diabetes? While some forms of fruit, like juice, can be bad for diabetes, whole fruits like berries, citrus, apricots -- and yes, even apples -- can be good for your A1C and overall health, fighting inflammation, normalizing your blood pressure, and more. But as with any food in your diabetes diet, you have to be smart about counting carbohydrates and tracking what you eat. Portion size is key.

Consume fruit in its whole, natural form, and avoid syrups or any processed fruits with added sugar, which have the tendency to spike your blood sugar. Stick to the produce aisle and the freezer section of your grocery store. If you're using the glycemic index (GI) or glycemic load — measures of how foods affect your blood sugar levels — to make dietary decisions, most whole fruits are a good choice because they tend to lie low on these rankings.

When you have diabetes, these steps will help keep your blood sugar within a healthy range, thereby lowering your risk of certain diabetes complications including diabetic nerve damage, kidney disease; eyesight issues like glaucoma, retinopathy or cataracts and serious life-threatening illnesses like heart disease and stroke.

The next time you have a hankering for something sweet, consider reaching for a naturally sweet and juicy treat, courtesy of Mother Nature, you can whip into a diabetes-friendly smoothie or keep it simple and throw it into your bag to munch on while you're on the go.

The complete article is available here:

<https://www.everydayhealth.com/type-2-diabetes/best-fruits-for-diabetes/>



# Post-Polio Fatigue Log

Name:		Day:		Date:		
Time	Activities & Steps	Perceived Exertion	Specific Muscle Weakness	Overall Fatigue	Pain Mood Breathing	Activities that produced Symptoms & Modifications
	Sleep Quality?:		Rate as mild-moderate-severe			
Up	Food?:					Activity: Symptom: How did you do the activity & how were you positioned? How could you modify?
BREAK						
Noon	Food?:					Activity: Symptom: How did you do the activity & how were you positioned? How could you modify?
BREAK						
6 pm	Food?:					Activity: Symptom: How did you do the activity & how were you positioned? How could you modify?
Bed	Total Steps:					

Perceived Exertion Scale: 6 Very, Very Light, 7 Very Light, 8 Very Light, 9 Very Light, 10 Fairly Light, 11 Fairly Light, 12 Somewhat Hard, 13 Somewhat Hard, 14 Hard, 15 Hard, 16 Hard, 17 Very Hard, 18 Very Hard, 19 Very, Very Hard, 20 Very, Very Hard

## You Are Invited

Polio Regina is inviting people who have had poliomyelitis and are now experiencing new symptoms such as fatigue, muscle weakness and cold intolerance, to join our self-help support group to learn how they can cope with post polio syndrome. Spouses and partners of polio survivors are also welcome. Polio Regina Inc. was formed to help people from southern Saskatchewan.

### Our Objectives:

- To develop, promote and increase awareness of Post Polio Syndrome.
- To disseminate information concerning research and treatment pertaining to Post Polio Syndrome.
- To provide support to survivors of polio, other than financial aid.

### Where to Meet

The next two Polio Regina meetings will be held at Nicky's Café, on the corner of Eighth Avenue and Winnipeg Street, on Thursday March 28, 2019, and Thursday April 25, 2019 at 3:30 p.m. Nicky's has extra parking at the back and it is wheelchair

accessible. Our Spring Picnic will be held at a time and location yet to be determined.

### Web Site:

Check out our website for more information on Polio Regina and links to other useful related information at: <http://nonprofits.accesscomm.ca/polio/> or you can just Google **Polio Regina**. Our email address is: [polio@accesscomm.ca](mailto:polio@accesscomm.ca)

### Disclaimer

Information published in the Polio PostBox may not represent the opinion of Polio Regina. It is not to be regarded as Polio Regina's endorsement of treatment, products or individuals. If you have or suspect you may have a health problem, please consult your health care professional.

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*The executive of Polio Regina would like to wish all our members and their families a Merry Christmas and a Healthy and Happy New Year.*

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## MEMBERSHIP APPLICATION POLIO REGINA Inc.

Name \_\_\_\_\_  
Active ( ) if you had polio    Associate ( )    New ( )    Renewal ( )

Address \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Postal Code \_\_\_\_\_ Phone: \_\_\_\_\_

Annual membership fee: (Jan.- Dec.) *Membership Fees are due January 7, 2019*

\$10 Single; \$15 family                      \$ \_\_\_\_\_  
My donation to Polio Regina Inc.:\*        \$ \_\_\_\_\_  
Total \$ \_\_\_\_\_

(If you require sponsorship for your fee, inform our membership chairman)

Please make cheque payable to: **Polio Regina Inc.** and mail this application form and cheque to:  
Polio Regina Inc., 825 McDonald St. Regina, Sk. S4N 2X5

\*(Official receipt of donation for income tax purposes will be mailed.)