

President: Jay Garlitz, D.D.S., AA4FL  
 Pres. Elect: Bruce Small, M.D., KM2L  
 Secretary: Joseph Breault, M.D., WB2MXJ  
 Historian: Vacant  
 Webb Master: Dave Lieberman KT8E  
 Treasurer: Charles Lind, M.D. N8CL  
 Radio-Internet: Chip Keister, M.D., N5RTF  
 MediShare: Arnold Kalan, M.D., WB6OJB  
 News Editor: Warren Brown, M.D., KD4GUA



A non-profit Corporation, founded in 1965, privately supported for the public good and dedicated to the advancement of Medicine through Amateur Radio.

Marco Blogsite: [marco-Ltd.blogspot.com](http://marco-Ltd.blogspot.com)  
 "listserve": <http://googlegroups.com>

Web Site: <http://www.marco-ltd.org>  
 Internet address: [warren.brown1924@gmail.com](mailto:warren.brown1924@gmail.com)

(53rd year), Edition # 122 Since Year 2000, April 2020

P.O. Box 127, Indian Rocks Beach, FL., 33785-0127

## TRANSFUSION & AUTOTRANSFUSION

**THERE IS LITTLE EVIDENCE TO SUGGEST THAT INCREASING HB CONCENTRATION, ARTERIOL O<sub>2</sub> CONTENT, OR GLOBAL OXYGEN DELIVERY RESULTS IN IMPROVED O<sub>2</sub> UTILIZATION.**

The history of blood transfusion originated with William Harvey's discovery of blood circulation in 1628. The earliest known blood transfusion occurred in 1665, and the first human blood transfusion was performed by Dr. Philip Syng Physick in 1795. The first transfusion of human blood for the treatment of hemorrhage was performed by Dr. James Blundell in London in 1818. The first blood bank was established in Leningrad in 1932, and the first blood bank in the U.S. opened at Chicago's Cook County Hospital in 1937.

Allogenic (other people's blood) transfusion of whole blood and fractionated blood components remains a controversial topic. In spite of widespread use, data supporting specific practice paradigms for whole blood and component therapy are lacking. the notable exception being in the primary treatment of hemorrhagic shock. In general, there is little evidence to suggest that increasing hemoglobin concentration, arteriolar oxygen content or global oxygen delivery results in improved oxygen utilization. Opinions are embraced and defended, but transfusion of red cells has not reliably demonstrated increased survival, other than in 2 specific populations, those with active hemorrhage and those with active cardiac ischemia.

Technology making the transfusion of allogeneic blood products feasible includes Karl Landsteiner's landmark identification of the human blood groups A, B, and O in 1901. Decastello and Sturil added the fourth group, AB, in 1902. Reuben Ottenberg used blood typing and cross-matching for the first time shortly thereafter; he also coined the terms universal donor and universal recipient in 1912. Subsequently, the development of long-term anticoagulants, such as acid-citrate-dextrose, allowed preservation of blood for later use. In 1939-1940, the Rhesus (Rh) blood type system was discovered, leading to the development of minor antigen compatibility testing. Fresh whole blood has long been thought of as the criterion standard for transfusion, but the advent of whole blood fractionation techniques subsequent to WW II provided a means of more efficient use of the various components (i.e., packed red blood cells, fresh frozen plasma (FFP), individual factor concentrates, platelet concentrate.) As a result, current indications for the use of whole blood are generally few. The most widespread use of whole blood transfusion is the US military buddy transfusion system. (German tankers in WW II had all men with the same blood type in each tank, just in case.....) Additionally whole blood transfusion in civilian pre-hospital settings and in the trauma bay is seeing a resurgence in some areas.

With improvement of medical technology and the growing discrepancy between blood supply and demand, autologous blood transfusion (ABT) (*giving one's own blood*) has attracted more attention in recent years; its safety and effectiveness has gradually become a subject of interest. Shortage in blood supply has greatly promoted the improvement of blood preser-



### LATE BREAKING NEWS ???

(See President's report on page 6)

Xenia, Ohio, Friday, May 15th, 9 am usually would mark the date of MARCO's annual business meeting at the Dayton Hamvention (held in Xenia) (*For corona virus update call 937 912 9350.*), *however this business meeting has been cancelled.....*

The Agenda normally would be replete with topics that you care about. Our Bylaws, Aether, Listserv, Directors/Officers, Website, and much more will be discussed at a later date. The hotel hosting our annual meeting is the Wingate by Wyndham, 3055 Presidential Drive, Fairborn, Ohio. Our room block of rooms starts Thursday May 14, for three nights priced at \$129 plus \$16.45 tax per night (breakfast included). Reservations must be made by April 23, phone 937 912 9350. Make your reservations ASAP as availability is limited.

The HamVention MARCO experience extends well beyond our annual business meeting. Spouses and guests are welcome. We meet for dinner Thursday night, planning our evening once we know your arrival time. Friday after the business meeting (**cancelled**) those going to HamVention head to Xenia, with non-ham spouses planning their own adventures. Friday evening we will select a venue to gather for dinner. On Saturday, the focus is HamVention but **NOT** followed by our Marco dinner banquet that evening (**cancelled**).

Marco will be turning the President's gavel over from Jay Garlitz AA4FL to Bruce Small KM2L. Bruce was our President back in 2000 and did a commendable job. We are looking forward to another two successful years under his tutelage.

And most of all, remember *to bring yourself and your XYL!*

**WRITE TO US!**  
 We welcome your comments.  
 Mail to Marco, P.O. Box 127,  
 Indian Rocks, FL,  
 33785. Email to  
 warren.brown1924@gmail.com  
 Letters may be edited for  
 brevity & clarity.

**MARCO NET SCHEDULE**

<u>DAY</u>	<u>EASTERN</u>	<u>FREQ.</u>	<u>NET CONTROLS</u>
Any Day	On the Hour	14.342	Hailing Frequency
Sunday	10:30 a.m. Eastern	14.140	CW Net, Chip, N5RTF
Sunday	11 a.m. Eastern	14.342	Warren, KD4GUA

(Alternate confidential Grand Rounds frequency—  
 on or about 14.344 or as announced on the air.)

**MARCO'S CW  
 NET IS NOW  
 CALLED THE  
 "Bob Morgan  
 Memorial  
 Net"  
 Sundays, 10:30 am,  
 14.140 MHz**

**Page 2**

**MARCO Grand Rounds is held Sunday at 11 a.m. Eastern Time; 10 a.m. Central; 9 a.m. Mountain, and 8 a.m. Pacific Coast time on 14.342. You qualify for one hour Category II CME credit with your check-in.**

vation and safety, but some risks remain in blood transfusion. Allogenic blood transfusion (*getting other people's blood*) not only causes adverse reactions that would lead to the spread of various infectious disease, but also increases the economic and psychological burden of patients and their families. ABT can avoid the serious harm caused by allogenic blood transfusion, alleviate blood shortages, while lightening the burden of patients. Therefore, ABT has gained more attention, has become a common demand in clinical practice and is becoming widely used clinically

**Component Transfusion.** Whole blood is fractionated into specific components, as follows: PRBC (*Packed Red Blood Cells*), FFP (*Fresh Frozen Plasma*). Platelet concentrates, and cryoprecipitate; FFP may be further fractionated into individual factor concentrates as well. Fractionation maximizes the ability to use the components of each donated unit while simultaneously limiting unnecessary transfusions. A specific product may also be transfused with less volume. Additionally the individual components require different storage temperatures, therefore, fractionation allows more effective product management.

**Packed red blood cells (PRBC):** Indications for PRBC are decreased hemoglobin concentration measured by serum hemoglobin and less accurately by hematocrit.

**Fresh frozen plasma (FFP):** Indicated in hemorrhaging patients to replace labile and lost coagulation factors. Circumstances fulfilling this criterion include massive transfusion, cardiopulmonary bypass, extracorporeal pulmonary support techniques, decompensated liver disease, or acute disseminated intravascular coagulation regardless of causes.

In the past, FFP, in conjunction with Vitamin K was also indicated for excessive warfarinization in circumstances accompanied by life-threatening hemorrhage.

A guideline for initial FFP dosing is 10-15 mL/kg; this translates to at least 4 units of FFP to effect a therapeutic response. Efficacy is monitored by prothrombin time (PT), activated partial thromboplastin time (aPTT), and the international normalized ratio (INR) However, more recently FFP is rarely indicated in vitamin K deficiency or reversal of warfarin therapy, because commentates such as prothrombin complex concentrate are widely available (an alternate for FFP, **Kcentra + vitamin K6**). The exception is in the circumstance of concomitant plasma volume deficit.

**Platelets:** Platelet transfusion may be beneficial with platelet deficiency or dysfunction. It is indicated with bone marrow failure, and low platelet counts.

**Cryoprecipitate:** Transfusion of cryoprecipitate is indicated for fibrinogen deficiency or dysfibrinogenemia in the setting of hemorrhage, invasive procedures, injury, or acute disseminated intravascular coagulation. Fibrinogen levels should be monitored and treatment undertaken of levels less than 100 mg/dl; many use a higher threshold of 150 mg/dL in patients with active hemorrhage. Cryo is generally transfused in aliquots of 10 units.

**TRANSFUSION AND AUTOTRANSFUSION**

**Alternatives to Allogeneic Blood Transfusion:** Given the risks associated with component transfusion, it stands to reason that alternative therapies to reduce allogeneic exposure have been sought. Meticulous surgical technique, preoperative and intra operative protocols designed to reduce red cell mass loss (eg, hypotensive procedures, surgical tourniquets, preoperative anemia correction with human erythropoietin), hemostatic adjuncts (eg, surgical, thrombin, procoagulant gels, platelet gel), and lower hemoglobin transfusion triggers are standard in the modern armamentarium to reduce banked blood use. Additional practices are

outlined below:

**Autologous (acute) Normovolemic hemodilution ...**This technique involves collecting a patients' blood (2-4 units) into anticoagulants-containing storage bags at the outset of surgery, accompanied by I.V. replacement with crystalloids or colloids to maintain normovolemia. The patient's whole blood can then be transfused later in the case as needed. The evidence on the overall efficacy of autologous normovolemic hemodilution is conflicting with respect to blood savings and transfusion avoidance, but it appears to be safe and efficacious in centers that make routine use of this technique.

**Preoperative autologous donation...**In general, preoperative autologous donation limits the infectious, immunologic, and hemolytic complications of allogeneic blood transfusion. Although accepted by patients and many surgeons, preoperative autologous donation is encumbered by unexpected disadvantages. They include patient inconvenience and the cost of processing the blood. Because many patients require no blood, up to 1/3 of collected units are discarded.

**Intraoperative autotransfusion/cell salvage...**cell salvage is an effective method of transfusion avoidance. Shed blood is collected from the operative field and mixed with an anticoagulant. It is concentrated and washed or filtered, then returned to the patient. Harmful contaminants, such as potassium, fat, and free hemoglobin, are removed from the salvaged blood; the washed blood is returned via a 40-um blood filter. Blood obtained from the thoracic cavity via chest tubes in a closed system can be processed and auto transfused in a similar manner. Contraindications include: malignancy, bacterial contamination of the surgical site, cesarean delivery and sickle cell diseases.

**Erythropoietin...**Recombinant human erythropoietin (rHuEPO) increases hemoglobin and hematocrit values and decrease the number of RBC transfusions in ICU patient's, but further studies are needed to determine whether this therapy has a + impact on outcome and whether the benefits justify the cost of therapy. Adequate amounts of protein intake, iron, folate, vitamin B12 and vitamin C are all important.

**Recombinant factor VIIa...** Was introduced in the setting of massive transfusion, as related to the trauma patient. Factor VII is key in the extrinsic pathway of the coagulation cascade. When activated, factor VII complexes with tissue factor, leading to activation of factor X which ultimately leads to thrombin generation. At high doses, factor VIIa can directly bind to platelets, activating factor X and converting prothrombin to thrombin by a tissue factor-independent mechanism. The ultimate result is amplified thrombin production.

**Antifibrinolytics...**such as aprotinin, epsilon aminocaproic acid (EACA), and TXA can reduce perioperative blood loss by retarding or arresting fibrinolysis. The role of TXA in the adjunctive management of severe acute traumatic hemorrhage is present. Aprotinin has been documented to decrease blood loss in certain cardiac, orthopedic, and transplant surgeries by inhibiting serine proteases, such as plasmin.

**Red blood cell substitutes...**Two types: Fluorocarbon-based synthetic oxygen carriers, and stroma-free, cross-linked, or polymerized human or nonhuman hemoglobin preparations. They are used in acute massive blood loss and have been used in patients declining transfusions for religious reasons.

## ARE MARCO DUES SECURE OVER THE INTERNET 3

Dave Lieberman K78E

I received comments recently that some members preferred to pay their dues by mail citing concerns over use of internet—especially public wi-fi.

Over the past several years the club has worked diligently to streamline the collection of club dues by managing online invoices. Tracking dues by checks, snail-mail, and spreadsheets is a formidable and time-consuming task, wearing down the brave souls that volunteer for club secretary.

The online payment system has significantly improved the efficiency of tracking and collecting dues. But are we asking club member to take unwarranted security risks?

To have a conversation about browsing security, we first need to touch on two topics—

**Encryption:** By themselves, browsers are nothing more than digital data transceivers. The issue of security addresses HOW you send and receive.

If you submit forms in plain text, it is relatively easy for the amateur hacker to hack it with tools like WireShark. I teach a network class and show students how to do it. If you transmit encrypted data, it is still easy to hack but IMPOSSIBLE TO DECODE. With today's encryption algorithms it simply takes too long and requires too many resources to break it. The reality is encryption is a safe method of moving sensitive data across a public channel. All modern browsers (Edge, Internet Explorer, Chrome, FireFox, Safari) can encrypt communications using SSL (Secure Sockets Layer) and TLS (Transport Layer Security) network protocols. In a nutshell, sniffing these packets results in capturing stuff like this: `wEPDwUJNjU2Nzc2MDUK4D2QWAmYKPZBY-CAGMPZBYKMAgMPZBYCAGEPZBYCAG...`

*ASCII-Encoded encrypted data.*

You can tell if your browser has established a secure connection if you see the padlock icon next to the name of the web site in the navigation bar. The full path to the web site contains the HTTPS prefix which stands for "Hyper Text Transfer Protocol Secure."

*Secure connection icon*

A web site cannot establish SSL connections (i.e. transit security) unless it obtains a digital certificate. The certificate must be issued by a certifying authority (like VeriSign) that validates the identity of the domain holder. Once an SSL certificate is installed on the domain's server, browser that connect to that server exchange public and private "keys" to facilitate encryption. You can view these certificates by clicking on the padlock icon.

*SSL Certificate for Google*

Sensitive data is not sent until the key exchange is completed. Sniffing the public key does not help the hacker—the server maintains a private key that is part of the decryption process.

*Key exchange at start of connection*

**Phishing:** Here is where most of us get into trouble with "secure" connections. You must pay attention to the actual **domain** that you are connected to. Even if the connection is secure, and untrusted domain puts you at risk. Let's take an example. I'm embarrassed to say this happened to me. I consider myself to be a computer "professional" but I fell victim to this scam THE BAIT...I got an email from "Netflix" that looks just like Netflix. It's got the logos and artwork and even uses their font style. It say my credit card information expired and service is about to be terminated. My XYL is watching Netflix in the next rom so I panic. I click on a link that says, "Go to your Netflix account." THE HOOK...The link didn't go to Netflix. It went to a web site in "who knows where" that looks exactly like Netflix. It prompted me for Netflix login credentials and credit card information for renewal. I clicked Submit and nothing happened. CONGRATULATIONS...I managed to submits my Netflix password and credit card information to a phishing site. And I did it over a secure connection. The moral of this story is—know who you are connected to. Keep an eye on your browser's navigation bar and the address it contains. Here is a breakdown of an internet URL (uniform resource locator):

*Internet web site address format*

A domain may have many subdomains. For example, "http://maps.google.com" is a legitimate URL for google.com with "maps" as the subdomain. The MOST important part of the URL is the domain component.

Here are examples of sites with URLs that are intended to fool you: `register-drivegoogle.sytes.net...netflixrenewal...A04113334222.zecure.com...fidelity-investments.4kqd3hmqgptupi3p.dozensby.loan`

Note that these URLs have something familiar in the subdomain component, but the domain is NOT something you would normally recognize. Always double check and verify the domain component of your URLs to ensure you are

## THE RUST-PREVENTIVE BODY VITAMIN

Compare the following ad for "Rustolium" paint to the following ad for body antioxidants:

"Corrosion protection technology consists of a highly charged and durable migrational molecule that has the ability to penetrate and travel through a wide variety of mediums in order to find and bond with certain types of ferrous or nonferrous metals. Once this molecule has found metal it creates a highly durable resilient and robust chemical bond. Its bond provides extensive protection for long periods of time in very harsh environments."

**Now the ad for body antioxidants:**

"Antioxidants are intimately involved in the prevention of cellular damage—the common pathway for cancer, aging and a variety of diseases. A few of the better known antioxidants include carotenoids—the substance that gives fruits and vegetables their deep rich colors. Apricots, broccoli, pumpkin, cantaloupes, spinach and sweet potatoes, are some good choices in addition to lycopene in tomatoes. Vitamin C and E are also good antioxidant's, as well as magnesium, copper and zinc.

**Does this mean that corrosion protection such as in the paint "Rustoleum" MIGHT BE CONSIDERED a "Paint Vitamin?" Or a vitamin might be considered a "Corrosion Rust Protector" of the body?**

**Free radicals** are atoms or groups of atoms with an odd (*unpaired*) number of electrons and can be formed when oxygen interacts with certain molecules. Once formed these highly reactive radicals can start a chain reaction. Their chief danger comes from the damage they can do when they react with important cellular components such as DNA, or the cell wall. Cells may function poorly or die if this occurs. To prevent free radical damage the body has a defense system of **antioxidants**.

**Free radicals can be compared to sparks emitted from the burning of glucose by oxygen in the mitochondria of the cells (the cell's power plants) which produces our energy—similar to sparks being emitted by the burning of paper which may damage the surrounding area.)**

**Antioxidants** are molecules which can safely interact with free radicals and terminate the chain reaction before vital molecules are damaged. Although there are several enzyme systems within the body that scavenge free radicals, the principal micronutrient (vitamin) antioxidants are Vitamin E, beta-carotene and Vitamin C. Additionally, selenium, a trace metal that is required for proper function of one of the body's antioxidant enzyme systems, is sometimes included in this category. The body cannot manufacture these micronutrients so they must be supplied in the diet.

**Vitamin E...**A fat soluble vitamin present in nuts, seeds, vegetable and fish oils, whole grains, fortified cereals and apricots. Current recommended daily allowance (RDA) is 15 International Units per day for men and 12 IU for women. *Note: A recent analysis concluded the overall risk of dying began to increase as the dose in a single capsule of Vitamin E (400 IU) and the more Vitamin E people took, the more their risk of death rose. Someone taking 400 IU a day for 5 years would face a 5% higher risk of dying. The study found no increased risk from lower doses, particularly at doses of 200 IU or below and perhaps even a benefit. A typical multivitamin contains between 30 and 60 IU units of Vit. E.*

**Vitamin C...**Ascorbic acid is a water soluble vitamin present in citrus fruits and juices, green peppers, cabbage, spinach broccoli, cantaloupe and strawberries. The RDA is 60 mg per day. Intake above 200 mg may be associated with adverse side effects in some.

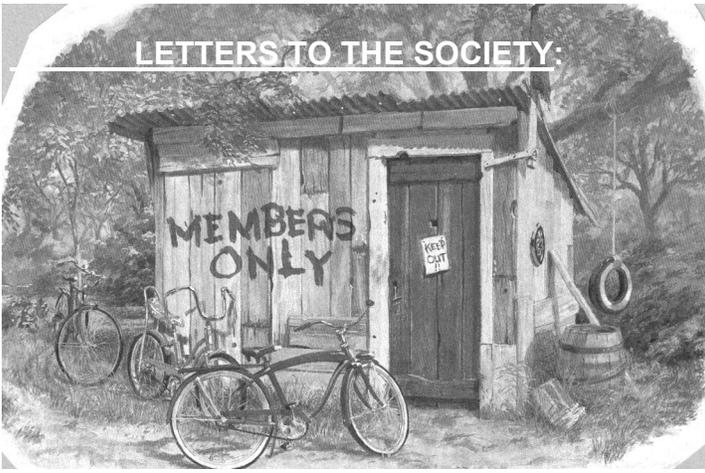
**Beta-carotene's** a precursor to Vitamin A (retinol) and is present in liver, egg yolk, milk, butter, spinach, carrots, squash, broccoli, yams, tomatoes, cantaloupe, peaches and grains. Because beta-carotene is converted to Vitamin A by the body there is no set requirement. Vitamin A has no antioxidant properties (*beta-carotene does*) **and can be quite toxic when taken in excess.** \*\*\*\*\*

**NUCLEAR WEAPONS...What is the difference between "Nuclear Fission & Nuclear Fusion?" Those designed to release energy in an explosive manner as a result of nuclear fission, nuclear fusion, or a combination of the two processes. Fusion weapons are referred to as thermonuclear bombs or hydrogen bombs in which at least a portion of the energy is released b nuclear fusion.**

---

browsing a trusted site. **Conclusion: Are public wi-fi hotspots secure?** If you have the padlock (HTTPS) AND you trust the domain name (like WellsFargo.com) then **it is secure**. It doesn't matter if you are at home on your cable internet or on the deck of a cruise ship over public Wi-Fi. It is the same encryption being used and **it is secure**. (Remember...You can still send in a check by snailmail.)

**LETTERS TO THE SOCIETY:**



From **Ralph Brigham**, Huntsville, AL...Please pass this suggestion to the MARCO leadership...due to the increasing noise and cross-talk; we should strongly consider making use of the online conference network—Free Conference Call [www.freeconferencecall.com](http://www.freeconferencecall.com) should be a minimal charge, if any.

From **Chuck Lind N8CL**...I intended to be on Grand Rounds but we decided to leave Chicago (fast) and get back to Albany. We stopped in Buffalo for the night, The cities are turning into ghost towns: no libraries, entertainment, sports, and now all the schools and universities have shut down. Spooky. Stay home and keep a low profile!!!

From **Jeff Wolf**, K6JW, Palos Verdes, CA...“New antenna is up—should be back on the Net soon.....LATER: ....Well, I may miss this Sunday's net too. The prediction is still for rain with possible lightning. If thing look safe, I'll raise the tower and check in, if not, it'll be another week. I just don't take chances. I live on a hill about 750' above sea level, and raising the tower into an electrical storm just isn't my idea of a great thing to do.

From **Ed Rubin**, N2JBA, Amenia, NY...(Referring to Grand Rounds & animals aboard planes) “Hi Warren, I have a hard and fast rule: when I travel, especially on airplanes, I always leave my gorilla at home. You made me laugh for the first time in a week, given the virus situation upon us.

From **Arnold Kalan**, WB6OJB, Pacific Palisades, CA.... (inpatient)“Nice MediShare donation from Paul Lukas, N6DMV.”

From **Robert Thompson**, WD8ING, Hazard, KY..”I would like you to know I just graduated with my RN degree! I will sit for my Board Exam in March for the RN license. I enjoy the topics on the air and the internet feed is helpful. My final term GPA was a 3.7 so listening helps. I am also the second oldest student to graduate which I did at age 57. Have a great day. Editor's note: **Robert, we at MARCO are proud to have you as a member.**

**Dave Justis KNOS**, in Virginia...Concerning “sleep deprivation” ...during the Viet Nam War, we were on 36 hrs. on and 12 off (hopefully). Not a very good surgeon after 24 hrs. of continuous work....once I fell asleep between cases while trying to sit on a roll-around stool only to wake up on the floor when I tried to lean against the floor. Now I try to get 7-8 hours each night as I am no longer taking night call for trauma or up in the E.R. Trying to make up for all the years of sleep I lost in my youth.” Editors note: Dave just recently retired.

**EDITOR'S NOTE:** Walter Winchell began broadcasting in 1933 to an audience of 25 million people. The Winchell style was unmistakable. He talked rapidly at 197 words per minute...the voice was high-pitched and not pleasant to the ear; but it was distinctive. The staccato quality made every item compelling. He claimed he talked so fast because if he talked more slowly people would find out what he was saying...he began his radio program with a series of dots and dashes operating the key himself. Telegraphers throughout the country complained that what Winchell tapped out made no sense. He realized he hadn't the faintest knowledge of Morse code but he refused to have an experienced telegrapher provide the sound effects for him. He wrote like a man honking in a traffic jam.



\*\*\*\*\*

**When is the best time to take blood pressure medicine?** A recent Hygia trial in Europe of 13,844 patients revealed a 45% reduction in cardio-vascular events in those systolic hypertensives taking their BP meds at bedtime.

**Rapid genomic tests are poised to change the way doctors diagnose serious illnesses...**by rapidly sorting through the DNA in a blood sample and picking out the pathogen...the “petri dish” culture version may take several days to diagnose whereas the new method can do the same in a matter of hours not days. It works by matching the DNA or RNA of microbes against a large database of known bacteria. However, most insurance companies will pay only 65% of the cost for this “Biosystems” test. It's coming...

**Man's best friend...**A research team in Sweden observed that those in ages 40 to 85 who suffered a heart attack or stroke between 2001 and 2012 and found that people who suffered and lived alone were 33% less likely to die after being released from the hospital if they owned dogs. Stroke victims who owned dogs saw a 27% lowered risk of death. The good results were accountable by more exercise and less loneliness and depression.

**Infidelity...**apparently is overrated...Playboy magazine reported (before it's surmise) that 75% of men and 82% of women said they had never had an extramarital affair. Although they themselves didn't stray, the couples were under the impression from movies & TV that infidelity was more common. An ABC poll found that just 16% of men and women said they had cheated on their spouses. Although 18% of men and 14% of women ages 18 to 35 admitted to extramarital sex partners, the number increased to 30% of men and 18% of women by their mid-40s. (now we have to figure what percentages were lying!)

**What was President Harry S. Truman's middle name?** Harry S. Truman's parents had big ideas for his middle name, “Shipp,” after Harry's paternal grandfather, was one option. “Solomon,” after his maternal grandfather, was another. But his parents couldn't decide, so they just went with the letter “S.” Truman stuck with the “S,” though others sometimes tried to stick him with unwanted middle names—like when Chief Justice Stone prompted him to recite the presidential oath as “Harry Shipp Truman “ (Truman made the correction back to “S” when he recited the words back). Truman's middle initial could reasonably be written without a period since it doesn't stand for anything longer. Historians tend to use the period, though, because that's what Truman himself usually did.

**A good blood pressure check** consists of first, a bare arm (no clothing); An average of three readings sitting down. Intensive BP control usually leads to an increase in renal function over 3 years.

**Who was the first Boy Scout to become President?** John F. Kennedy was the first U.S. president who had been a Boy Scout in his youth. The Scouts were founded in 1910, and JFK was able to rise to Star ranking. Gerald Ford was the first and only commander-in- chief to reach Eagle Scout. Two other presidents, Bill Clinton and George W. Bush were Cub Scouts.

**Club/Hamfests/Nets**

MARCO Medical Amateur Radio Council.  
Professionals enjoying ham radio. Free newsletter & info: [secretary@marco-ltd.org](mailto:secretary@marco-ltd.org)

**MARCO AD IN QST MAGAZINE**

## WHAT IS CBD ?

Lately, we're hearing **cannabidiol** known as "**CBD**"—suggested as the answer to everything from anxiety and sleeplessness to aches and pain. It's sold as an oil and a lotion, in foods like gummy bears and drinks and added to bath bombs, dog treats and other products.

First, it's important to differentiate between CBD and tetrahydrocannabinol (THC), the compound in marijuana that has an intoxicating effect. CBD is found in cannabis plants but doesn't produce a high. "Hemp" has CBD in it, and CBD is nonintoxicating and nonaddictive. It's just one of hundreds of chemical compounds in cannabis.

**How can CBD help a person?** There is some early data that show CBD helps in terms of performance anxiety and public speaking. People also think it helps with sleep, anxiety and pain. It has potential for treating addiction. It has potential as an antimicrobial. It's been approved by the FDA for pediatric epilepsy syndromes.

It also seems to have potential as an adjunct to other treatment regimens for cancer. People with a glioblastoma live longer if CBD is part of the regimen, based on some preliminary data. Hopefully we can navigate a middle path between harnessing the potential of CBD and not having people be exploited.

**What are CBD's risks?** It's not regulated. CBD affects your metabolism in the same way as grapefruit juice. It competitively metabolizes liver enzymes, meaning it can increase the blood level of a couple of drugs such as a blood thinner. One must make sure it is pure and not containing THC and in the proper amounts.

Make sure you get it from a source that has independent, third-party lab testing so you know you're getting the CBD they're selling you and nothing else.

**Generally speaking, it is probably best to wait until we know more about this drug.**

\*\*\*\*\*

## PREBIOTICS

We have all heard about **probiotics**, the "good" gut bacteria found in supplements, yogurt and other fermented foods, including kimchi and kombuchah.

Say hello to "**prebiotics**" compounds that feed the friendly bacteria in the gut...they are largely fermentable carbohydrates that "help" nourish gut bacteria so they can better thrive" (give the **good** bacteria more energy.)

**Prebiotics** are linked to reduced inflammation, can boost immunity, and may also have a positive effect on blood cholesterol and triglycerides, and mental health. They are found in honey, bananas, carrots, radishes, onions, garlic, soybeans, asparagus, and some cereals.

\*\*\*\*\*

## MARCO EARLY BIRDS...

Believe it or not, if you are a MARCO member you have (or had) a number.

The earliest present active members are

**Ian Kellman K3IK #155** who joined Marco in 1967. He is followed by **Arnold Kalan MD WB6OJB #673 (1973)**; **Roger Higley DDS W8CRK 1973**; **Jeff Wolf MD ,K6JW 1977**; **Bruce Small MD Km2L #1300, 1986**; **Rick Zabrodski MD VE6GK, #1350, 1988**, **Chip Keister Jr. MD N5RTF #1546 1992**; and **Ted Hatfield MD KQ4IC #1597, 1993**; **Warren Brown MD, 1993**. MARCO was founded in 1965. By June 2008 (not today) there had been 1,868 members.

\*\*\*\*\*

## KEEP MARCO PERKING !

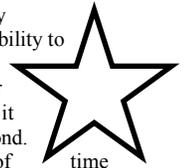
Pass this copy to a friend OR send us a \$15 membership

# 5

## THE RUST-PREVENTIVE BODY VITAMIN

Compare the following ad for "**Rustolium**" **paint** to the following ad for **body antioxidants**:

"Corrosion protection technology consists of a highly charged and durable migrational molecule that has the ability to penetrate and travel through a wide variety of mediums in order to find and bond with certain types of ferrous or nonferrous metals. Once this molecule has found metal it creates a highly durable resilient and robust chemical bond. Its bond provides extensive protection for long periods of in very harsh environments."



**Now the ad for body antioxidants:**

"Antioxidants are intimately involved in the prevention of cellular damage—the common pathway for **cancer, aging** and a variety of diseases. A few of the better known antioxidants include carotenoids—the substance that gives fruits and vegetables their deep rich colors. Apricots, broccoli, pumpkin, cantaloupes, spinach and sweet potatoes, are some good choices in addition to lycopene in tomatoes. Vitamin C and E are also good antioxidants, as well as magnesium, copper and zinc.

**Does this mean that corrosion protection such as in the paint "Rustoleum" MIGHT BE CONSIDERED a "Paint Vitamin?" Or a vitamin might be considered a "Corrosion Rust Protector" of the body?**

**Free radicals** are atoms or groups of atoms with an odd (*unpaired*) number of electrons and can be formed when oxygen interacts with certain molecules. Once formed these highly reactive radicals can start a chain reaction. Their chief danger comes from the damage they can do when they react with important cellular components such as DNA, or the cell wall. Cells may function poorly or die if this occurs. To prevent free radical damage the body has a defense system of **antioxidants**.

**Free radicals can be compared to sparks emitted from the burning of glucose by oxygen in the mitochondria of the cells (the cell's power plants) which produces our energy—similar to sparks being emitted by the burning of paper which may damage the surrounding area.)**

**Antioxidants** are molecules which can safely interact with free radicals and terminate the chain reaction before vital molecules are damaged. Although there are several enzyme systems within the body that scavenge free radicals, the **principal** micronutrient (vitamin) antioxidants are Vitamin E, beta-carotene and Vitamin C. Additionally, selenium, a trace metal that is required for proper function of one of the body's antioxidant enzyme systems, is sometimes included in this category. The body cannot manufacture these micronutrients so they must be supplied in the diet.

**Vitamin E...**A fat soluble vitamin present in nuts, seeds, vegetable and fish oils, whole grains, fortified cereals and apricots. Current recommended daily allowance (RDA) is 15 International Units per day for men and 12 IU for women. *Note: A recent analysis concluded the overall risk of dying began to increase as the dose in a single capsule of Vitamin E (400 IU) and the more Vitamin E people took, the more their risk of death rose. Someone taking 400 IU a day for 5 years would face a 5% higher risk of dying. The study found no increased risk from lower doses, particularly at doses of 200 IU or below and perhaps even a benefit. A typical multivitamin contains between 30 and 60 IU units of Vit. E.*

**Vitamin C...**Ascorbic acid is a water soluble vitamin present in citrus fruits and juices, green peppers, cabbage, spinach broccoli, cantaloupe and strawberries. The RDA is 60 mg per day. Intake above 200 mg may be associated with adverse side effects in some.

**Beta-carotene's** a precursor to Vitamin A (retinol) and is present in liver, egg yolk, milk, butter, spinach, carrots, squash, broccoli, yams, tomatoes, cantaloupe, peaches and grains. Because beta-carotene is converted to Vitamin A by the body there is no set requirement. Vitamin A has no antioxidant properties (*beta-carotene does*) **and can be quite toxic when taken in excess.**

**Do antioxidants help prevent cancer and heart disease?** Observations show lower cancer rates in people whose diets are rich in fruits and vegetables. This has led to the theory that these diets contain substances, possibly antioxidants, which protect against the development of cancer. Thus far none have shown that dietary supplementation with extra antioxidants reduces the risk of developing cancer. One study showed an increase in risk of lung cancer in male smokers who took antioxidants vs. male smokers who did not supplement. Antioxidants are also thought to have a role in slowing the aging process and preventing heart disease and strokes, but the data is still inconclusive. The best advice is to eat 5 servings of fruit or vegetables per day. (Continued on Page 9)



The most recent issue of the Marco's *Aether* contains a note that two Marco members shared an article reporting a study of the causes of death among amateur radio operators in Washington and California. The stated conclusion of the article was that hams experience excess mortality from myeloid leukemia, myeloma and perhaps certain lymphomas, and that RF exposure is a possible cause.



This appears to be a resurrection of the long-discredited study by Samuel Milham, Jr., "*Increased mortality in amateur radio operators due to lymphatic and hematopoietic malignancies.*" Am. J. Epidemiology **1988**; 127:50-54. I kept myself quite busy in the mid-1990's speaking about the shortcomings of this article. **The fact that it is apparently now being recycled is proof that the medical literature lacks an excretory system.**

The author obtained the 1984 FCC database of amateur radio operators, which contained licenses issued or renewed from 1979 to 1984, California and Washington death records were searched for any of the 67,829 names of CA or WA hams in the database. Females and those with names that might be female were eliminated from the study. The cause of death was obtained from the death certificate for 2,485 individuals whose data match the FCC records. Occupational data were available only for the 402 cases from Washington, and indicted that about 30% of them worked in jobs that would expose them to RF.

The relative risk for various causes of death was calculated in a standard way, by comparison with age-adjusted national death rates.

These calculations showed that the risk of hams dying from any cause was 71% of the risk for the general population.

The risk of hams dying from circulatory diseases was 71% of the risk of the general population.

The risk of hams dying from respiratory diseases was 50% of the risk of the general population.

The risk of hams dying from accidents was 64% of the risks of the general population.

The risk of hams dying from any cancer diseases was 89% of the risk of the general population. This was statistically significant. When cancer was broken down by subtypes there was no statistical difference in mortality rates between hams and the general population except for pancreas (risk 64%) and "Other lymphatic tissue" (risk 162%).

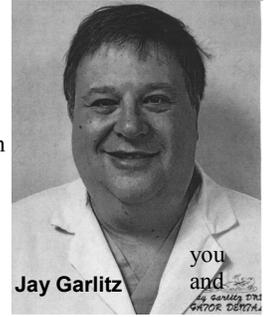
There was no statistically significant increase in deaths due to leukemia's as a group, but the author, not content to let matters lie, further tortured his data by breaking down the leukemia category into different types. The AML subtype barely achieved statistical significance with a risk ratio of 1.76. None of the other types of leukemia demonstrated excess mortality risk.

So what are the problems here?

1. It is unclear that the US standard mortality data were appropriate for the calculation. The US data contains males and females, while females were excluded from the amateur operator dataset. In addition Washington and California tend to have lower mortality risk than the country as a whole.
2. Ham operators do not represent a socioeconomic cross-section that is identical to the entire US population.
3. Probably around a third of the hams in the silent key group worked in jobs that exposed them disproportionately to RF. If this exposure put them at risk (and there is no decent evidence to support such an idea), then they distort the calculation of the risk experienced by the rest of the ham population.
4. The study did not account for exposure to other potential toxins, such as chemicals, solvents, solder fumes, PCBs, etc.
5. The data available to the investigator did not allow him to calculate the length of time that an individual was licensed, so there was no way to estimate lifetime mortality risks by license class, under the assumption that license class was a measure of the duration of licensure. This notion is highly questionable. The analysis was published in Am. J. Epidemiology 1988;127; 1175-1176. Contrary to expectation, this analysis showed that the lowest all-cause mortality risk occurred in Amateur Extra class operators.

Many ham operators are not active on the bands. Licensure is not a

I hope my words find your family and you in good health. The only curve balls being thrown these day are by COVID-19. Socializing by radio wave is not affected but our lives and the annual MARCO meeting in Xenia at HamVention may be. Their committee will honor the determination of the Greene County Ohio Public Health Department as to whether to proceed with Ham Vention this year. No decision has been made as of this date (March 14) to cancel the event. If you have made a reservation to attend HamVention decide to not attend we understand. (Ed.Note: **A phone call to the Wingate Hotel on March 14, informed us that final judgement on this year's HamVention fate will be made on April 3rd...best to call the hotel at 937 912 9350 for update.)**



Due to the circumstances and realizing the challenges in planning an annual meeting that may be cancelled a change of plans is in order. If HamVention 2020 takes place we will have a MARCO booth and small group dinner get-together for those who are attending, but not a formal banquet or business meeting. To make sure we are fair to our board members, allowing them to participate without travel at risk of infection or cancellation, our annual meeting will be held by conference call at a date TBD.

May the propagation of our unwelcome viral visitor pass quickly and affect as few as possible. HIV/AIDS was the challenge of my generation but of course avoidable for most. I asked our *Aether* editor Warren Brown if he remembers a comparable stress and strain to society in the form of a disease during his professional career. Polio in the 1950's came to mind. Of course Warren barely missed the post WWI Spanish Flu pandemic! Thanks to Warren and all that participate in the *Grand Rounds on the Air*, timely CME topics such as COVID-19 highlight the importance of this cherished MARCO activity.

In service to MARCO and 73, **Jay, AA4FL.**

\*\*\*\*\*

**COVID-19 DECISION SUPPORT TOOL, submitted by Bruce Small KM2L...The Surgical Outcomes Collaborative just released a decision support tool for COVID-19 diagnosis. It was developed from data on over 60,000 patients in hospitals around the world, employs commonly-available lab tests like PT, CBC, liver enzymes, etc. and claims 99.9% accuracy when used on people for whom exposure to coronavirus is deemed likely. It doesn't replace PCR-based viral diagnostic testing, but does allow for rapid decision-making in the office or ER. The tool and explanatory video can be found at <https://surgicaloutcomes.com/covid-19/>**

\*\*\*\*\*

**THE BARBER POLE...**Back in the 16th century, the majority of Europeans couldn't read. How could one advertise? One solution was metal emblems illustrating the shopkeeper's profession. A pair of scissors indicated a tailor; a key a locksmith; a barber a red or blue candy striped pole usually did the job. Then it was a place to go for a phlebotomy to rid bad blood and to act as surgeons & dentists—the "Barber-Surgeon" was born.

good measure of RF exposure.

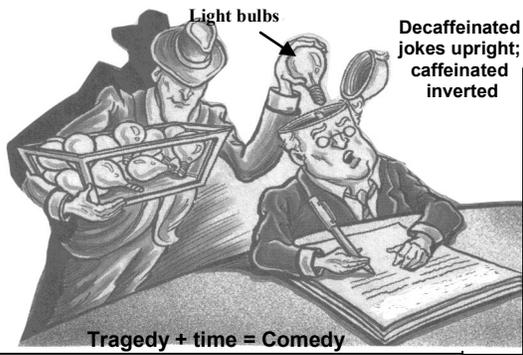
6. The statistical analysis was stretched further than the numbers would allow. The more small subgroups you create, the greater the chance that you will randomly find a "significant" result. For example, the AML group in the leukemia breakdown had 15 cases. If there had been 14 cases, statistical significance would not have been reached.

8. Everybody dies of something. If hams are not dying from cardiovascular diseases, respiratory diseases or accidents, then what is left? The take home message of this study for me was that hams tend to lead a reasonably healthy lifestyle.

(Editor's note: This subject was brought up by Dr. Small in the Dec. 2010 edition #66 of "Aether." His summary at that time was: "...the bottom line is that presently no credible studies conclusively demonstrate adverse health effects from exposure to RF at low power densities. As no one is suggesting that RF exposure is actually good for you, prudence is advised in all our amateur radio activities."

This was also investigated about 20 years ago by NIH which concluded there was no clearly demonstrated health risks from RF at normal environmental exposure levels which included ham radio.

LIGHTEN UP...



# MARCO OFFICERS

**President:** Jay Garlitz, D.M.D., AA4FL.  
 P.O. Box 10, Hawthorne, FL., 32640  
 Phone 352 481 2677; email: jgarlitz@ufl.edu

**President-Elect:** Bruce Small, M.D., KM2L  
 10540 Stoneway St., Clarence, N.Y., 14031  
 Phone: 716 713 5597, BruceSmall73@gmail.com

**Secretary:** Joseph Breault, M.D., WB2MXJ  
 1615 Brockenbraugh St., Metairie, LA., 70005  
 Phone: 504 259 1191; email: wb2mxj@arri.net

**Treasurer:** Charles Lind, M.D., N8CL  
 1353 Rowe Road, Niskayuna, N.Y. 12309

**Web Master:** Dave Lieberman, KT8E  
 4424 Technology Dr.  
 Fremont, CA 94538,  
 E-mail: Dlieberman@computer-methods.com



**Radio-Internet Coordinator:**  
 T. "Chip" Keister, M.D., N5RTF  
 1000 Jefferson Ave.,  
 New Orleans, LA. 70115, phone: 504 899 3486  
 E-mail: tkeister@bellsouth.net

**MediShare Director:**  
 Arnold Kalan, M.D., WB6OJB  
 16690 Charmel Lane,  
 Pacific Palisades, CA 90272,  
 E-mail: wb6ojb@yahoo.com  
 Phone: 310 459 2495

**Newsletter Office:**  
 Warren J. Brown, M.D., KD4GUA  
 P.O. Box 127, Phone 727 542 4158 (cell) 727 595 2773 (home)  
 Indian Rocks Beach, FL., 33785  
 E-mail: warren.brown1924@gmail.com

\*\*\*\*\*

### REGIONAL DIRECTORS:

- Area 1: KIDCA**
- Area 2: Barry Rabin, M.D., WB1FFI**, 315 727 0484
- Area 3: Keith Adams, M.D., N3IM** docadams12@gmail.com  
Phone: 570 295 0629 cell; 570 748 5118 home
- Area 4: Mary Favaro, M.D., AE4BX**, (4th) , Phone: 843 267 6879  
Email: maryfav@aol.com
- Area 5: Linda Krasowski, R.N., KE5BQK**, Phone 915 857 5933  
bkrasowski@elp.rr
- Area 6: Paul Lukas N6DMV**, dmvpalko@yahoo.com; 310 370 9914
- Area 7: Albert Breland, M.D., KA7LOT**, Phone: 858 793 6887
- Area 8: Roger M. Higley, D.D.S., W8CRK(8)** rhigley599@aolcom  
Phones: 513 451 1096, 513 481 5885
- Area 9: Bill T. Hargadon, WA9HIR (9th)**, Phone: 708 341 2338
- Area 0: Vacant.**

### DIRECTORS AT LARGE:

- Harry Przekop, PA-C WB9EDP**, hprzekop@aol.com; 312 829 8201
- Arnold Kalan, M.D., WB6OJB** wb6ojb@yahoo.com
- Jeff Wolf, M.D., K6JW**, k6jw@arri.net, 310 373 5970
- Chip Keister, M.D., N5RTF**, tkeister@bellsouth.net
- Robert Conder, Jr., PsyD, K4RLC**, bconder10@gmail.com

\*\*\*\*\*

### THE "ZIP CODE"

The ZIP code originated in 1963 to allow for faster and more efficient mail delivery. Each of the numbers in a "Zone Improvement Plan" refers to a specific area: The first digit is a collection of states, the next two digits indicate a specific state or region and the final digits denote the most specific area. Many areas have since added a "ZIP+4" code which includes an extra four digits denoting an even more specific location.

\*\*\*\*\*

**Where does the vanilla flavor come from?** A. It comes from orchid plants, most commonly *Vanilla planifolia*, a vine-like plant that is found in Madagascar, Mexico, and Tahiti.

Making a diagnosis: **Go outside and urinate in the garden.** If ants gather, diabetics. If you urinate on your feet, prostate. If it smells like a barbeque, cholesterol. If when you shake it, your wrist hurts, osteoarthritis. If you return to your room with your business outside your pants, Alzheimers.

People are prisoners of their phones—that's why they call them "cell phones."

"My ex was from down-under." "Australia?" "No, Hell!"

"What is the meanest thing you can do to a person?"  
 "Take the light bulb out of the bathroom and leave the plunger in the toilet!"

**Remarks from the Prime Minister:** Member of Parliament, "Mr. Churchill, must you fall asleep while I'm speaking. **Mr. Churchill:** "No, it's purely voluntary."

**Bessie, a woman:** Winston, you are drunk and what's more you are disgustingly drunk!" **Mr. Churchill:** "Bessie, my dear, you are ugly and what's more you are disgustingly ugly. But tomorrow I will be sober and you will still be disgustingly ugly!"

**Lady Astor:** Winston, if you were my husband I'd put poison in your coffee. **Mr. Churchill:** "Nancy, if you were my wife, I'd drink it!"

\*\*\*\*\*

### WAITING TIME.....

Whenever my aunt went to the doctor, she would complain to me about the long waits. One day, when my aunt's name was finally called, she was asked to step on the scale. "I need to get your weight," said the nurse. Without batting an eye, my aunt replied, "one hour and forty-five minutes!"

\*\*\*\*\*

### COMBAT TIME...

Mike was complaining to his friend about the problems he was having with his stubborn wife. "Well, I'll tell you what I used to do with my wife," his friend replied. "Wherever she got out of hand, I'd take her pants down and spank her." Shaking his head, Mike replied, "That doesn't work, Once I start doing that I'm not mad anymore."

### THE BLIND GIRL...

There was a blind girl that hated herself because she was blind. She hated everyone except her loving boyfriend. He was always there for her. She told her boyfriend, "If I could only see the world I would marry you." One day someone donated a pair of eyes to her. When the bandages came off, she was able to see everything, including her boyfriend. He asked, "Now that you can see the world will you marry me?" The girl looked at her boyfriend and saw that he was blind. The sight of his closed lids shocked her...she hadn't suspected that. Her boyfriend left in tears and days later sent her a note saying, *Take good care of your eyes, my dear, for before they were yours, they were mine.*"

Ninety-nine per-cent of lawyers give the rest a bad name.

\*\*\*\*\*

**New California poll:** Asked whether people in California think illegal immigration is a serious problem: 29% said "Yes." 71% said, "No es una problems seriosa."

# MEMORIES OF YEARS AGO IN MARCO

Our History Book

## Twenty years ago in Marco

### MediShare News

**20 years ago, Feb. 2000...**This was the first copy of "Aether" under the editorship of **Dr. Warren Brown**. Our past editor, **Dr. Edward R. Briner**, 73, had died on Nov. 13, 1999, after putting out the MARCO Newsletter for 20 years.

In Oct. 1999, **Judy N3MBW** and **Gene Hoenic WB3FTJ** took over from MediShare's founder **Dr. Robert "Smitty" Smithwick W6CS**

**15 years ago Feb. 2005...**A cry for "HELP" came from SE Asia where a tidal wave had inundated thousands of homes causing over 160,000 deaths and extensive damage. MARCO, under the leadership of **Bill Stenberg N5QF** raised over \$6,000 with matching funds from Rotary International and others to bring the contribution to over \$60,000 for Tsunami relief. **Ian Kellman K3IK**, was reporting his solo radiology work was driving him up the wall and **Linda Krasowski KE5BQK** reported a bad case of sinusitis. **Bill Otten KC9CS** and **Bill Stenberg** reported having passed their Extra exams and **Sister Mary Emmanuel, KD5AQ** sent her post Christmas greetings to the group.

**10 years ago, Feb. 2010...****Danny Centers, W4DAN** reported receiving some photos in the mail of HamVention attendees who cars looked like porcupines, with antennas flying from all directions. **Jerry Ziperstein N4TSC** suggested the use of "SKYPE" for Sunday's Grand Rounds but it was turned down because it "was not radio!" It was also reported that **Helen Keller** (1880-1968), blind and deaf from an early age, developed her sense of smell so finely that she could identify her friends by their personal odors.

5 years ago, Feb. 2015...It was reported that people who didn't carry their smart phones had elevated heart rate, blood pressure and anxiety. It was explained that the phones became part of their owner and when the phone were not around they suffered a loss of self.

It was mention that the late Glenn Miller's replacement "Tex" **Beneke** was a ham "K0HWY (Advanced Class...he is remembered for his singing of *Chattanooga Choo Choo & I Gotta Girl in Kalamazoo*. He joined the Miller band in 1938 as a sax player and vocalist. He had a raspy Texas accent.

**Marco President Jeff Wolf K6JW** was welcoming all you Marco Hams to the upcoming Los Angeles convention March 19th.(2015).

**Bill Otten KC9CS** reported, the Marco terrorist had been fined \$22,000 by the FCC, (but he died before making the payment).

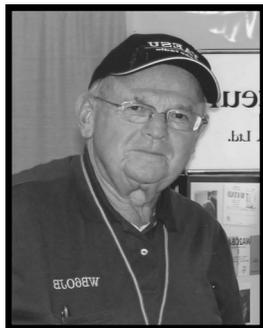
\*\*\*\*\*

### MEDISHARE

**Arnold Kaian, WB6QJB, Director**

**George Villican KE8GA**, closed his office and has a lot of equipment he would like to donate to MARCO. **Roger Higley W8CRK** stated we have a dentist that runs a clinic in Central America. I would like the two to get together. still pending. We had a nice donation from **Ruth Lieberman** in Maryland. Also a nice note from **Jan & Larry Tepe** thanking all Marco members who donated to *Shoulders to Shoulders*, a children's dental clinic in Honduras.

**NOTE:** I came home from the hospital 18 October after two back surgeries in 3 weeks. Lots of pain, etc. On 21 October at 10:30 AM an arson fire was started at the bottom of one canyon over from our house. The weather was 89 degrees with no wind. The fire came up the canyons to our street, about 1/8th of a mile from us. They issued a "mandatory evacuation" but I would not leave. The car was loaded with important things so Joan could leave if the wind started up. Six different fire companies and 400 police were there. The police set up a command post in front of the house. The all-clear wasn't until 8 PM. Close, but escaped death one more time!



# CME RANKINGS, March 11,2020 BOB CURRIER MARCO GRAND ROUNDS OF

THE AIR. (Corrections to Marco)

14.342, Sundays, 11 am Eastern, One Hour Cat. II CME

CALL	HRS.	NAME	QTH
KD4GUA	9	Warren	Largo, FL
NU4DO	9	Norm	Largo, FL
N5RTF	9	Chip	New Orleans, LA
WB9EDP	9	Harry	Batavia, IL
KC9CS	9	Bill	Seminole, FL
N6DMV	9	Paul	Torrance, CA
N2JBA	9	Ed	Amenia, N.Y.
KNOS	8	Dave	Virginia
WB6QJB	8	Arnold	Pac.Pas. CA.
WB1FFI	8	Barry	Syracuse NY
KK1Y	8	Art	Seminole, FL
KG4CSQ	8	Ralph	Alabama
KB5BQK	7	Linda	El Paso, TX
KD5QHVV	7	Bernie	El Paso, TX
N0ARN	7	Carl	Denver, CO
N5AN	7	Bud	Lafayette, LA
W1RDJ	7	Doug	Cape Cod. MASS.
KM2L	6	Bruce	Clarence, NY
K6GZ	6	Bill	Hysteria, CA
N4MKT	6	Larry	The Villages, FL
N3IM	6	Keith	Mill Hall, PA
N2OJD	6	Mark	Sidney, Ohio
N9RIV	6	Bill	Danville, IL
N8CL	6	Chuck	Albany, NY
WA3QWA	6	Mark	Chesapeake, VA
KE8GA	5	George	N. Carolina
N4TSC	5	Jerry	Boca Raton, FL
KE5SZA	5	John	Marietta, OK
KC9ARP	5	Michelin	Batavia, IL
K4RLC	5	Bob	Raleigh, NC
WD8ING	5	Bob	Kentucky
K9BBN	5	Mike	Eagle, WI
KB9CCE	5	Fred	Wisconsin
W4DAN	4	Danny	Cleveland, TN
WA5EXE	4	Mark	Cape Cod, Mass.
W8LJZ	3	Jim	Detroit, MI
WA1HGY	3	Ted	Massachusetts
KA8KEI	2	Jim	Tennessee
WD4MLM	2	Bruce	Louisville, KY
AC4IS	2	?	Oregon
W6NJY	2	Art	Beverly Hills, CA

## MARCO GRAND ROUNDS OF THE AIR

### ANNUAL RADIO CHECK-INS

YEAR	TOTAL CHECK-INS	AVERAGE PER SUNDAY
1998	694	14.46
1999	766	15.95
2000	1,035	20.29
2001	1153	22.60
2002	1383	26.15
2003	1489	28.63
2004	1534	29.50
2005	1517	29.17
2006	1531 (one extra Sunday)	28.89
2007	1591 (one extra Sunday)	30.02
2008	1524 (Only 46 nets)	33.14
2009	1533 (46 nets)	33.32
2010	1591 (44 nets)	36.22
2011	1514 (44 nets)	34.41
2012	1602 (44 nets)	36.41
2013*	1400 (44 nets) (New Freq)	31.82
2014 (Year of Terrorist)	1756 (47 nets)	37.36
2015	1722 (49 nets)	35.14
2016	1687 (46 nets)	36.67
2017	1536 (46 nets)	34.13
2018	1500 (43 nets)	34.88
2019	1786 (49 nets)	36.45
2020	357 (9 nets)	39.67

Record number of stations checked-in was 51, on Feb. 24, 2013

\*\*\*\*\*

## CORONAVIRUS

### U.S. Gets 1st Case of Mysterious Chinese Virus

The U.S. reported its first cases of a new and potentially deadly Corona RNA virus (designated 2019nCoV) circulating in China, one similar to the deadly SARS virus. A Washington state resident who returned from the outbreak's Chinese epicenter was hospitalized in good condition near Seattle.

These Coronaviruses were discovered in the 1960s, and cause diseases in mammals, rodents, bats, camels and birds that includes diarrhea in cows and pigs, and URIs (*Upper Respiratory Infections*) in chickens. In humans, the virus causes respiratory infections which are often mild, but in rare cases are potentially lethal. **There are NO vaccines or anti-viral drugs that are approved for prevention or treatment.** The name "coronavirus" is derived from the Latin *corona* meaning crown. This refers to the characteristic appearance of the virus, which have a fringe of large, bulbous surface spiked projections creating an image reminiscent of a royal crown.



What is a virus? Is it living or dead or just active and inactive **It is a protein** with a set of genetic instructions that requires a host to replicate. It is estimated that in each drop of clear seawater there are 10 million viruses on average. The problem is mankind has developed antibodies against most viruses but new mutations are always arriving. It is thought the new virus was developed by bats giving it to snakes who then gave it to man. The danger is a replication of the *Spanish flu of 1918 where a questionable 50-60 million died worldwide.*

By 24 January, there were 547 cases reported in China with 7 deaths (9% death rate...the first case was diagnosed just 10 days earlier). Time between infection and detection 6 days and 5 days between symptoms and detection. The "flu" usually covers about 21 days on average before it burns it self out to the immune system.

Common human coronaviruses, including types 229E, NL63, OC43, and HJUI, seven in all, usually causing mild to moderate upper respiratory tract illness, like the common cold. Most people get infected with these viruses at some point in their lives. Symptoms may include runny nose, headache, cough, sore throat, fever, a general feeling of being unwell.

Human coronaviruses can sometimes cause lower as well as upper respiratory tract illness, such as pneumonia or bronchitis. This is more common in people with CV disease, those with a weakened immune systems, infants and older adults.

Other human coronaviruses...Two other human coronaviruses, MERS-CoV and SARS-CoV have been known to frequently cause severe symptoms. MERS symptoms usually include fever, cough and shortness of breath which often progresses to pneumonia. About 3 out of every 10 patient's reported with MERS (*Middle East respiratory syndrome*), have died. MERS cases continue to occur, primarily in the Arabian Peninsula. SARS (*Severe Acute Respiratory Syndrome*) often includes fever, chills, and body aches which usually progresses to pneumonia. No cases of SARS have been reported anywhere in the world since the epidemic of 2003. During the epidemic however, 8098 people contacted SARS world-wide with 774 dying. It was estimated that for each victim, 15 others contacted the disease (*the "RO factor"*). The main transmission route is from person to person usually someone picking up the virus from someone's cough or touching viruses on tables, kissing, hugging, or sharing eating utensils.

Diagnosis: serum blood testing + clinical findings.

Chinese media says the illness in Wuhan, China, is different from coronaviruses that have been identified in the past. Earlier lab tests rule out SARS and MERS. The new virus so far does not appear to be as deadly as SARS and MERS, but viruses can sometimes mutate to become more dangerous.

Airports in the U.S. and other countries have stepped up monitoring, checking passengers from China for signs of illness. Other countries involved are Thailand, Japan, Australia and North & South Korea. Recently, U.S. health officials began screening passengers from Wuhan in central China, where the outbreak began, at five U.S. airports—New York's Kennedy, Los Angeles, San Francisco, Chicago's O'Hare and Atlanta airports. All passengers that originate in Wuhan must go to one of those five airports if they wish to enter the U.S.

### Coronavirus: Should you be afraid??????????

You've seen the headlines...the Wuhan coronavirus that became an epidemic in China is sowing panic around the globe with more than 100,000 confirmed cases and over 7,000 dead, **But for Americans "it's not as scary as it sounds," (or is it?)**. It is apparently more dangerous to older people (15% of those over 80 expected to die) And even if you were to somehow contract the virus, symptoms for most are not life-threatening, (practically none under 10 years of age will die—) a fever, congestion and a cough. Treatment means riding out the symptoms as you would with a common cold.

If you want to fret about illness, worry about the flu. You're more likely to encounter the regular influenza virus over the next few months. This season, the flu is believed to have infected more than 19 million Americans, hospitalized as many as 310,000, and killed more than 10,000. Compared with that, the coronavirus risk is slightly more dangerous. And yet we're so complacent about the flu that many won't take even the simplest precautions. Only 45% of adults get the flu vaccine, which is cheap and widely available. There's no vaccine for the new virus...simply wash your hands often; don't put your fingers in your eyes, nose or mouth; and stay away from people who are coughing.

\*\*\*\*\*

### THE RUST-PREVENTIVE VITAMIN

(Continued from Page 5.)

**Exercise & oxidative damage.** Endurance exercise can increase oxygen utilization from 10 to 20 times over the resting state. This greatly increases the generation of free radicals prompting concern about enhanced damage to muscles and other tissues. The question that arises is how effectively can athletes defend against the increased free radicals resulting from exercise? Do athletes need to take extra antioxidants?

Because it is not possible to directly measure free radicals in the body, scientists have approached this question by measuring the by-products that result from free radical reactions. If the generation of free radicals exceeds the antioxidant defenses than one would expect to see more of these by-products. These measurements have been performed in athletes under a variety of conditions.

Regular physical exercise enhances the antioxidant defense system and protects against exercise induced free radical damage. These changes occur slowly over time. However, intense exercise in untrained individuals overwhelms defenses resulting in increased free radical damage. Thus, the weekend warrior, who is predominantly sedentary during the week but engages in vigorous bouts of exercise during the weekend may be doing more harm than good.

**Can antioxidant supplements prevent exercise induced damage or enhance recover from exercise?** Vitamin deficiencies can create difficulties in training and recovery but the role of antioxidant supplementation in a *well nourished* athlete is controversial. Nevertheless, most of the data suggest that increased intake of Vitamin E. is protective in that it is involved in the recovery process following exercise. Currently, the amount of Vitamin E needed to produce these effects is unknown. The diet may supply enough Vitamin E in most athletes but some may require supplementation. There is no firm data to support the use of increased amounts of the other antioxidants.

**Performance.** Antioxidant supplements have not been shown to be useful as performance enhancers except in those athletes exercising at high altitudes where Vitamin E. supplementation may help.

**How much is enough?** There is little doubt that antioxidants are a necessary component for good health but no one knows if supplements should be taken and if so how much. **Antioxidants were once thought to be harmless but increasingly we are becoming aware of interactions and potential toxicity.** It is interesting to note that, in the normal concentrations found in the body, Vitamin C and beta-carotene are antioxidants; but at higher concentration they are **PRO-OXIDANTS** and thus harmful. Also, very little is known about the long-term consequences of mega-doses of antioxidants. The body's finely tuned mechanisms are carefully balanced to withstand a variety of insults. Taking chemicals without a complete understanding of all of their efforts may disrupt this balance.

#### RECOMMENDATIONS:

Follow a balanced training program that emphasizes regular exercise and eat 5 servings of fruit or vegetable per day.

Weekend warriors should strongly consider a more balanced approach to exercise. Failing that, consider supplementation.

For extremely demanding long-distance races, or when adapting to high altitude, consider taking a vitamin E supplement of 100 to 200 IU per day for several weeks up to and following the race.

Look for upcoming FDA recommendations, but be wary of advertising and media type. **DO NOT OVERSUPPLEMENT.**

\*\*\*\*\*

## HISTORY OF AMERICAN CURRENCY

In a perfect world, you wouldn't need money. One could just walk into any store and be provided with goods or services straight from the giving heart. But this is an imperfect world. The custom of trading an item in exchange for goods or services has long been extinct. We've come a long way from the days of paying with precious stones or pelts of fur which got us thinking about American currency and how it came to be. Once we became independent from British rule, how did the U.S. create a currency that's still viewed as one of the strongest and most stable in the world?

Today's paper bills are commonly used worldwide, but when they first started circulation in the new World in 1690 it was ground breaking. Before this, coins were the standard choice for paying for services rendered. When the Massachusetts Bay Company planned a military expedition to Canada, they issued paper bills instead of coins. The paper bills served as an "I owe you" for the expedition's cost and represented a promissory note of debt that needed to be paid. While this was a foreign concept in Europe, paper bills serving as a promise to pay debt became standard practice in the colonies even at the onset of the American revolution.

At the start of the American Revolution the Continental Congress decided to create their currency as further proof that the colonies had separated from Britain. This currency was called the Continental Currency and was paper money that was intended to be backed by gold or silver bullion. Unfortunately the bullion was never provided. It's easy to see how this could be problematic. The value of the Continental Currency was questionable because there was no gold or even silver to back the paper money that's being treated like promissory notes. All of this was made worse by the fact that both the Continental Congress and individual states were printing Continental Currency and often printing in excess to cover debts and maintain cash flow. If you understand economics you know that flooding markets with additional paper currency—especially when it's not backed by a tangible item of value—does nothing to stabilize an economy. Often, paper bills couldn't be redeemed for their value. By 1780, the value of the Continental currency had dropped to one fortieth of its original value and Congress decided to end production. It was time to go back to the coin—based currency.

**The Mint Act of 1792...** Shortly after the Constitution was ratified, Congress realized that it was time to reform the country's currency. Citizens were leery of paper money because of the massive depreciation during the war. The Mint Act was passed on April 2, 1792 and created a clear coinage process that relied on the decimal system that we still use today. The dollar was the primary base unit. On a national level, the US wasn't printing paper money, but individual banks throughout the states opted to print paper money to make it easier to support their economies and pay down debts. While this was an improvement over the Continental Currency, this system also made it easier for unscrupulous financial institutions to create counterfeit versions.

**Paper Money Returns...** At the end of the Civil War, both the US and Confederate governments found themselves with heavy military debts that couldn't be covered by their respective inventories of gold and silver. To ease the financial strain, both governments began printing paper money. In the Union, this money was known as "demand notes" or "greenbacks" and could be immediately redeemed into coins for their face value. "Greenback" is still a word that we use to this day. With the National Banking Act of 1863, the US government consolidated issuing power for paper currency by converting independent banks and financial institutions into national banks which is our current system. This curtailed counterfeit paper bill production and helped stabilize the currency.

**The Federal Reserve emerges...** Even though paper money was meant to be a temporary fix during a wartime economy, it was never retired—even after the Civil War ended in 1865. After the economic panic of 1907, however, the US government recognized that something needed to be done to ensure that the value of paper money wouldn't fluctuate.

The Federal Reserve was created in 1913 to serve as a safety net to make sure that the government could pay its debts. In 1914 paper money production was consolidated and only Federal Reserve Notes were produced and accepted as legal currency. While designs and safety measures to prevent counterfeiting have modernized, the U.S. still relies on Federal Reserve Notes for our paper money, which is printed at the Bureau of Engraving and Printing. Meanwhile, our coins have always been produced by the US Mint.

## USES OF DECIBELS

Excerpts from QST, January 2020

Sound identity or *sound pressure level (SPL)* is also specified in decibels. The reference level of 0 dB corresponds to a pressure of .0002 microbars, which is the standard threshold for being able to hear a sound. As the sounds get louder, the value of SPL in dB also increases, indicating an increase with respect to the reference level.

SPL in the average home is about 50 dB above the 0 dB threshold that serves as the SPL reference. When a vacuum cleaner 1 meter away is on, SPL increases to 70 dB. A chainsaw 1 meter away produces an SPL of 110 dB, and the threshold of discomfort from sound intensity is 120 dB.

Radio and electronic circuits also deal with signal levels that change by many orders of magnitude. This, the decibel is a common feature of the technical side of amateur radio. For example, received signal strengths on the HF bands are usually reported in S-units. Each S-unit represents a change in strength of 5 to 6 dB. Although most receiver S-meters are not accurately calibrated, it is useful to consider that a change in signal strength of one S-unit is a change in signal power of about four.

Here are some other places you'll find the ubiquitous decibel:

**Filter bandwidth** is the width of the frequency range over which signals are attenuated less than 3 dB, or where the filter output is no less than half of the input power.

**Feed line loss** is specified in decibels per some length (100 feet or 100 meters is common) at a particular frequency.

**Antenna gain** is given in decibels, usually compared to an isotropic or dipole antenna.

**Power amplifier & preamplifier gain** is usually given in dB.

**Adding Decibels Together:** Another characteristic of decibels is that gains and losses of stages in a radio system can be added together if they are specified in decibels. For example, if you have an antenna with 8 dB of gain connected to a preamplifier with 15 dB of gain, the total gain is simply 8 + 15 = 23 dB. Similarly, if a power amplifier with 12 dB of gain is connected to a feed line with 1 dB of loss and then to an antenna with 4 dB of gain, the total gain of that combination is 12-1+4= 15 dB. Losses are treated as negative gains.

(The article on pages 34-38, QST, January 2020, goes into more depth.)

\*\*\*\*\*

### AN INTERESTING LETTER FROM QST

Submitted by Mike Walters, New Bedford, CT.

I've been reading about amateur radio and our hope that the hobby will continue to grow in the future. How amateur radio embraces change will determine our survival.

The most important thing that any ham can have, whether they have years of experience or are just starting out, is the willingness to look at new ideas and ways of doing things with an open mind. The concept of "that's how we've always done it" will be our death. As hams, we must be willing to embrace the younger generation and open our hobby to the makers of the world. Today we have new concepts like digital modes using computers instead of microphones or keys. The building is often in software instead of soldering irons.

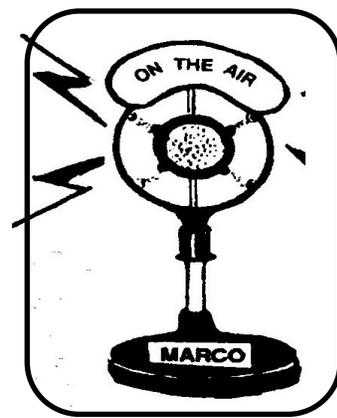
The ability to adapt and accept change is one of the basic principles of evolution. If we as hams do not look forward to new technology and embrace change brought by the next generation, we are doomed to extinction. I do not mean to say we need to give up all our traditions, but we must be willing to teach the next generation so they can take those traditions to the next level.

Be a mentor, not one of the people saying, "That's not ham radio."

\*\*\*\*\*

## KEEP MARCO SPARKING

Request a complimentary News Letter  
For a medical-radio friend.



## BACKACHE

As presented on Marco Grand Rounds, Jan. 19, 2020

45% of the U.S. population suffers from back pain at one time or another...the first acknowledged back pain was called "*Railway Spine*" and was found in workers laying the railroads across the U.S. in the middle 1850s.

Prior to 1934 there were two types of back pain, LUMBAGO or pain limited to the back and SCIATICA pain going down the back of the leg. In 1934 the herniated disc was discovered and between 1934 and 1990 many people underwent unnecessary surgery.

In 1990 researchers found that 30% of people over 40 have asymptomatic disc disease which meant that ruptured disc was normal unless the patient exhibited clinical symptoms.

In the past we have resorted to bed rest in healing backs. Now we think that back rest should be reserved to only two days as 70-90% of all back pains recover completely regardless of treatment. Only 1% of backaches go to surgery and 1/2 of those actually need surgery. A new study from Finland indicates ordinary activities within the limits permitted by the pain leads to more rapid recovery than either bed rest or back-mobilizing exercises. (*In other words, Mother Nature heals, the doctor gets the fee!*)

By the time you are 60 it is normal to have a backache since 51% or more of people that age have backaches and normal is the behavior of the majority. As the central disc nucleus and annular ligament degenerates the weight bearing and shock absorbing is taken on by the facet joints which normally have no weight across them. Second, 45% of the population of the U.S. has some type of backache. Medicine has found that the best therapy is exercise in moderation and no more than 2 days of bed rest or 7 days of limited exercise. After 75 years medicine has backtracked back to Lumbago and Sciatica.

Basically, backache is the most common cause of disability in those over 45. There is no known cause in 90% of cases. One worries when pain persists, there is weight loss, a neuro deficiency, sciatic pain or inability to walk a city block. With spinal Stenosis one cannot walk one block and it does responds to surgery in 75% of the cases. In Disc Disease, sitting while driving makes the pain worse. Pain itself comes from either the disc, the facet joints, the nerve roots, the muscles or the ligaments.

Compression fractures of the spine, more prevalent in women, is usually treated by vertebroplasty (injecting cement into the collapsed vertebra or by Kyphoplasty (first inserting a collapsed balloon into the fracture line and then ballooning), thus creating a space and then injecting bone cement.

**Spinal Stenosis** exists in 15% over the age of 65, mostly males. Pain is present in the buttocks on standing and walking—feels better bending forward. The patient is o.k. on sitting and **walking up** stairs but has trouble **walking down** stairs. Surgery is the only cure and only 40% improve.

**Disc Disease...sitting and driving makes the pain worse...positive leg raising test.**

**Bilateral pain...**Either Ankylosing spondylitis, tumor, or infection.

**Myo-Fascial disease (have trigger points)**, pain originating in the Gluteus Maximus or Minimis, fascial pain, Piriformis Syndrome, Post Facet syndrome (no leg pain).

Using traction, 5-20 lbs on 1 hour and off 1 hour, TENS units, acupuncture usually do NOT work.

The cutting edge today in orthopedics is CAOS (Computer Assisted Orthopedic Surgery) and MIS (minimal invasive surgery).

First: MIS—This is surgery using a shorter incision and utilizing muscle splitting rather than muscle cutting. The short-term benefits: less pain, shorter recovery time, fewer pain pills. It is tough on the surgeons and requires much experience. It also, requires computer assistance.

**Computer Assisted Orthopedic surgery (CAOS)...the problem in any joint replacement procedure is getting mal-alignments of the joint (is the one leg shorter than the other?) and what portion of a joint needs more repair than another.**

## IS SPERM DONATION AFTER DEATH MORALLY PERMISSIBLE?

A fertility expert said he was *uncomfortable* with the idea that men should be able to donate their sperm after death. The proposal was advanced as not only technically feasible, but *morally permissible* in an analysis published online in the *Journal of Medical Ethics*. **WOW!**

The article stated: "If it is morally acceptable that indivisibles can donate their tissues to relieve the suffering of others in "life enhancing transplants" for diseases, we see no reason this cannot be extended to other forms of suffering like infertility, which may or may not also be considered a disease."

"Sperm harvesting after death has been technically possible for many years, either from electro-ejaculation or from surgical methods. Following collection, sperm is cryopreserved until use...there is also evidence that sperm retrieved from dead men can result in viable pregnancies and healthy children, even when retrieved 48 hours after death.

Concerns about the possible transmission of "unhealthy" genes could be addressed by carrying out health checks on the donor and the sperm.

It was argued that those who disagreed said that, while the paper was well argued, they "strongly" disagreed with its conclusions. "Given the distance we have travelled in terms of recruiting donors who are willing to be identified to donor conceived people, it feels like a backward step to then recruit donors who are dead and, therefore will never have the opportunity to meet. I'd much rather that we invested our energy in trying to recruit younger, healthy, willing donors who stand a good chance of being alive when the donor conceived person starts to become curious about this, and would have the opportunity to make contact with them without the aid of a spiritualist."

The Director of the Progress Educational Trust, commented: "The question of whether sperm should be added to the list of tissues donated after death is a challenging one. Further discussion is needed to understand whether people who need to use donor sperm would even want to use the sperm of a deceased donor. It is also vital to seek the opinions of donor-conceived people about what they think the impact would be of never being able to meet the donor.

**This certainly is an interesting question that is yet to be answered.**

(Information for the above was taken from Medscape, Jan. 21, 2020.)

\*\*\*\*\*

## HOW A BOY'S BLOOD STOPPED AN OUTBREAK

It isn't every day that a school physician's work gets published in a medical journal. **But it happened in 1934, and the story contains a lesson for the coronavirus epidemic.**

A **Pottstown, PA** boy identified as C.Y. was exposed to measles. The boy was quarantined in the **Hill School's** infirmary; he developed a severe case of measles but recovered. Yet he infected two other students, who exposed others.

Fearing a wider outbreak, the school doctor, J. Roswell Gallagher, took serum from C.Y. and administered small amounts to 62 boys at risk. Serum can be extracted and prepared from a simple blood draw. Only three of the 62 boys developed measles—all mild cases. This was a remarkable victory against a highly contagious disease. The episode was important enough to warrant publication the following year in the *American Journal of Public Health*. (Decades later Gallagher pioneered in the field of adolescent health. He died at 92 in 1995.)

How did it work? The explanation is that patients who recover from an infectious disease often produce antibodies that can protect against later infections with the same microbe. This immunity can be transferred by giving serum to those at risk of infection.

In the early 20th century, doctors realized that they could prevent certain infectious diseases by taking serum from recovered patients and administering doses to those at risk of infection. This approach was used to stem outbreaks of measles, polio and mumps. Modern medicine continues to use antibodies from human serum to prevent certain infections such as rabies and hepatitis B.

**This approach could help contain a coronavirus pandemic.** Patients who recover from the virus could donate their blood to make serum. Doctors would test the serum for the antibodies that kill the coronavirus. Then this serum could be given to those at highest risk of infection—including nurses and doctors. A vaccine is in the works but may not be ready for months. Serum could be available within weeks.

As an epidemic threatens to become a pandemic, public health authorities need to consider all available options. Meanwhile, perhaps one quick route to containment is to do what C. Y. did for his classmates: protect the vulnerable with the antibodies in the blood of those fortunate enough to have recovered.

(Information for above was taken from the *Wall Street Journal* article by Arturo Casadevall which appeared in the Feb. 28, 2020 edition.)



**NEW FACES for MARCO & RENEWALS, as of March 12, 2020**

Daily, Richard, Arkansas  
 Ziperstein, Jerrold, Florida  
 McGirr, Michael, Crete, Illinois  
 Fink, Marc, Chesapeake, VA  
 Przekop, Micheline, Batavia, IL  
 Shatz, Arnold, Santa Ana, CA  
 Paterek, Bill, Lincoln City, OR  
 O'Connor, John, Marietta, OK  
 McCann, John, Vancleave, MS  
 Abbott, Harlan, Reedsville, PA  
 Thompson, Robt., Hazard, KY  
 Krasowski, Bernie, El Paso, TX  
 Krasowski, Linda, El Paso, TX  
 Wissing, Larry, The Villages, F  
 Higley, Rodger, Cincinnati, OH  
 Carswell, Tim, El Paso, TX  
 Kline, Lewis, Cheswick, PA  
 Finnerty, Todd, Worthingtn, OH  
 Whittle, Nancy, Mulga, AL  
 Reilly, Thomas, Louisiana  
 Rosario, Jeff, Frederick, MD  
 Mozzor, Matty, New York  
 Przekop, Harry, Batavia, IL  
 McEachern, Larry, TX  
 Tribble, Don, Sacramento, CA  
 Bangsil, Edgar, Silver Creek NY  
 Wertz, Charles, W. Virginia  
 Kaufman, Rob, Winnipeg, MB  
 Rowlett, Wm, Hopkinsville, KY  
 Knickerbocker, Guy, Narvon, PA  
 Rubin, Edward, Amenia N.Y.  
 Rodman, David, Amherst, NY

Vance, Sam, Roanoke, VA  
 Judge, Frank, Ann Arbor, MI  
 White, Elbert, Corinth, MS  
 Wolfla, Hank, Indianapolis, IN.  
 Centers, Danny, Cleveland, TN  
 Vila, Doug, Iron Mountain, MI  
 Gibby, Gordon, Newberry, FL  
 Sosinski, Carl, Hudson, Ohio  
 Hensley, Gerald, Richburg, SC  
 Finick, Andrew, Highland, IN.



**NO RADIO, NO ANTENNA?**

Keep in touch with MARCO on "listserv"  
 E-Mail your request to join to  
 BruceSmall73@gmail.  
 Com If on the list simply  
 contact marco-ltd@googlegroups.com

Tune in to Marco Grand Rounds on your  
 computer:  
[www.reliastream.com/cast/start/tkeister](http://www.reliastream.com/cast/start/tkeister)

**MEDICAL AMATEUR RADIO COUNCIL, LTD.,  
 New Membership Application & Renewal form**

**REGULAR MEMBERSHIP \$25:** A licensed professional in the health care field who holds an amateur radio license. A DX Membership is \$25 in U.S. currency.

**ASSOCIATE MEMBERSHIP \$15:** Anyone licensed or unlicensed who is interested in medicine and radio.

*10 year Regular membership fee \$200 (a saving of \$50).  
 Associate membership for 10 years is \$100 (also a saving of \$50).*

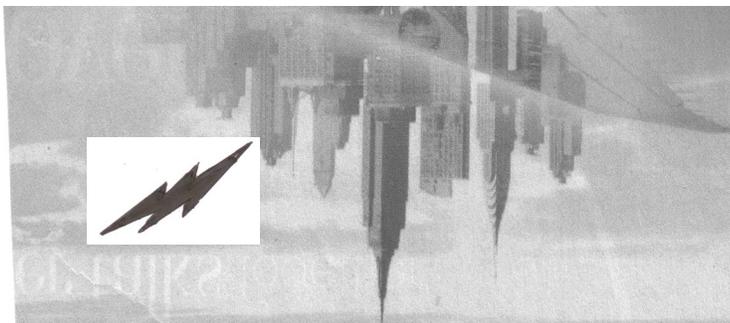
Name: \_\_\_\_\_  
 Address: \_\_\_\_\_

Call Sign \_\_\_\_\_ Type License: \_\_\_\_\_  
 Phone: \_\_\_\_\_  
 Internet Address: \_\_\_\_\_  
 Your Birthday \_\_\_\_\_ (Year optional.) Member ARRL \_\_\_\_\_

**Applications for membership should be sent to  
 Secretary Joseph Breault WB2MXJ,  
 1615 Brockenbraugh St., Metairie, LA, 70005  
 Email: [wb2mxj@arrl.net](mailto:wb2mxj@arrl.net)**

**WHY NOT SEND A HAM FRIEND A MEMBERSHIP IN MARCO,  
 \$15, ONE WHO IS INTERESTED IN BOTH MEDICINE & RADIO.**

Your Renewal Date  
 Is January 1 of each year



Web Site: <http://www.marco-ltd.org>

MARCO Grand Rounds is held every Sunday at 11 a.m. Eastern Time, 10 a.m. Central, 9 a.m. Mountain and 8 a.m. Pacific Coast time on 14.342. You qualify for one hour credit, Category II CME with your check-in.

**122nd**  
 Edition  
 (2000-2020)  
 April 2020

DAY	EASTERN TIME	FREQ.	NET CONTROLS
Any Day	On the Hour	14.342	Halling Frequency
Sunday	10:30 a.m.	14.140	NSRTF (CW-net)
Sunday	11 a.m.	14.342	KD4GUA



**"AETHER"**

**MARCO'S**

**MEDICAL AMATEUR RADIO COUNCIL, LTD.,  
 P.O. Box 127, Indian Rocks Beach, FL, 33785  
 (Send dues to Jos. Breault, M.D., WB2MXJ, 1615 Brockenbraugh St. Metairie, LA 70005.)**