Pinnacle Pediatrics
Scott R. Serbin, M.D., F.A.A.P.

Pinnacle Pediatrics Newsletter Vol. XII, #2

What a difference a year makes. Last April, everything was shut down as we tried to deal with and understand the novel Coronavirus that was ravaging our country and the world. Now, restrictions are being relaxed and venues are opening up. No, the pandemic is not over. In fact, in many states, including Pennsylvania, case numbers are on the rise again. But, over 20% of the individuals in our country are now fully immunized, and over 30% have had at least one dose. Over 2 million vaccine doses are being administered each day. The most vulnerable to severe disease, the elderly, especially those in long-term care facilities, have nearly all been offered the vaccine, and most have received it. Yes, there is plenty of reason for optimism.

More good news. Early data shows that the vaccines are very effective, just as they were in the clinical trials. In addition, after more than 100 million doses have been administered in this country, there have been almost no serious side-effects. So, at the very least, we know these vaccines are very safe in the short term, with no reason to expect any significant issues in the future.

Bad news? Well, several variants of SARS-CoV-2 have replaced the original strain, and they are more contagious and more lethal. But, they are still susceptible to the present vaccines, though not at quite as high of a rate. It is likely that within the next 2 months we will have enough vaccine to inoculate everyone in this country that desires to be vaccinated. Then, the issue becomes those that do not wish to be vaccinated. That percentage is dwindling, as many vaccine-hesitant individuals see the efficacy and safety of the vaccines. However, if we really want to achieve the Holy Grail of herd immunity, where the virus is no longer spreading widely because of insufficient hosts, we will need to convince the vast majority of vaccine-hesitant individuals to become vaccinated. The worst-case scenario is that if this virus continues widespread circulation, a variant may emerge that is resistant to our current vaccines. Then, we are back at square one. So, this truly is a race to vaccinate as many people as quickly as possible.

That does include children. Although children remain at low risk of disease, and very low risk of severe disease, we have had over 2,000 cases of MIS-C, the often deadly condition directly related to COVID-19. In addition, to achieve herd immunity, the children will need to be immunized as well. We just received the first reports of the effectiveness of one of the vaccines in the 12-16 year age group, and it was excellent. Hopefully, we will be able to immunize this age cohort before the start of school next Fall. Last month children as young as 6 months began entering clinical trials. If all goes well, we could conceivably be able to immunize them by the end of the year, or early 2022,.

Will this need to be a yearly immunization like the Flu vaccine? Or will boosters need to be provided every so often like Tdap? Or will this be 1-2 shots and then done, like many of our other vaccines? Time, and science, will tell. As I have stated so often in these Newsletters, Trust the Scientists.

What else have we learned? You all know that for now, even those individuals who have been fully vaccinated are advised to wear a mask, because we do not know if they can still spread the virus, even though they are well-protected against becoming ill from it. We do now have data suggesting that these vaccinated individuals are in fact unlikely to spread the virus. Although the CDC is still waiting for further data before they will lift the mask recommendation completely for immunized individuals, they have issued new guidelines stating that immunized individuals do not need to wear a mask when entering a single-family dwelling, unless there is a high-risk individual residing there. Hence, since I have been fully immunized for 2 months now, although I will still enter all houses with my mask on, if you are comfortable with my not wearing a mask, you may say so. If you desire that I remain masked, that is no problem. (You do not need to tell me that you simply prefer not to see my face, I will not require an explanation :).

Some parents have expressed concern about the harmful effects of children wearing masks. A study published in JAMA is reassuring. They looked at children under 2 years of age, and another group age 2 years - 12 years. They measured the children's oxygen saturation, CO2 levels, pulse and respiratory rate with and without masks, including a walking interval for the older children. They found no difference in the children's parameters when masked or unmasked.

Based on one well-done study, the CDC has revised the recommendation for social distancing in Elementary schools. Children now only need to observe 3 feet of separation, instead of 6 feet, though they should remain masked. This certainly

makes it easier for schools to follow currently recommended protocols. There are a multitude of recommendations for schools, primarily involving spacing and cleaning. As we have learned, although cleaning surfaces is helpful, preventing respiratory spread with masks and social distancing appears to be the most effective strategy, as opposed to focusing primarily on surface cleaning. With proper classroom, hallway, lunchtime and bathroom policies in place, most schools should be able to safely welcome students, as most in our area have done.

Effective treatments for COVID patients have been difficult to find. Many individuals have proposed that zinc, vitamin C or vitamin D may be effective. In a recent study of adults with COVID not requiring hospitalization, neither zinc nor vitamin C proved effective at decreasing the duration of symptoms. Another recent study evaluated the effect of a large dose of vitamin D on hospitalized patients with COVID. Again, there was no benefit to the patients taking vitamin D compared to placebo.

I discussed in the last Update the dramatic effect our Coronavirus mitigation efforts have had on decreasing the incidence of Influenza and other respiratory diseases. The Allegheny County Health Department just released the 2020 statistics on reportable diseases. Of the 27 reportable diseases, only 3 saw an increased incidence in 2020 compared to 2019. Yes, wearing a mask, staying away from other people and increasing hygiene clearly has a major effect on communicable diseases. This is certainly no surprise. Despite the horror of over 500,000 people dying of COVID-19, we can only wonder how dramatically many more would have succumbed if not for the mitigation strategies undertaken.

Children who are positive for SARS-CoV-2, even those who are asymptomatic, are at risk for developing myocardial injury. It is recommended that all of these children, after their 10 day quarantine, have a physical exam and an EKG prior to returning to athletic activity.

FINAL CORONAVIRUS ITEM (for now): We are now in Spring allergy season (more on that below). There is plenty of overlap between COVID symptoms and allergy symptoms. Cough, congestion, runny nose, sore throat and headache can be seen with either diagnosis. COVID often also presents with fever, chills, muscle aches, nausea, vomiting, diarrhea and loss of taste and smell, which are not seen with seasonal allergies. Common allergy symptoms such as sneezing and itchy/watery eyes are not seen with COVID. This should help distinguish the etiology of your child's symptoms this Spring. Resistance to cleaning the

bedroom, an inability to disengage from the cell phone, and impatience with younger siblings can be seen with both of these etiologies, but there is no proven cause and effect relationship.

Believe it or not, there ARE other Pediatric issues besides Coronavirus. My preambles on Coronavirus inevitably run longer than I desire, leaving me little space for other topics. I know I can only expect most of you to read for a few minutes before checking out the humor on the Back Page and calling it a night. But I believe I can introduce a few more topics here before I put you all to sleep.

SEASONAL ALLERGIES

Yes, we are now firmly in Spring allergy season. Tree pollen is the primary source of this discomfort, followed in several weeks by grass pollen. Typical environmental allergy symptoms consist of sneezing (especially in the morning, when pollen counts are highest), runny nose, congestion and itchy, watery eyes. In children, the eye symptoms provoke the most complaints, followed by congestion. Sneezing and runny nose tend to bother the parents more than the child. Fever indicates infection, not allergy. Sore throat and cough are more commonly due to infection than allergy.

If a child exhibits runny nose and sneezing only, no treatment is necessary. If they do express discomfort, particularly if they have congestion and/or eye symptoms, first-line treatment is a non-sedating antihistamine. The Big Three products are Zyrtec, Claritin, and Allegra, and their generic equivalents. All three are effective, with Zyrtec proving to be slightly more effective in head-to-head studies. Older antihistamines, such as Benadryl, are not as effective, and do cause sedation (which may be desirable in the pre-school aged child). Zyrtec is over-the-counter, comes as a liquid and a small tablet, and is given just once per day. The dose is 5 mg. for children age 2-6 years, and 10 mg, for children age 6 and up. The oral decongestant Pseudoephedrine may be added to an oral antihistamine, as in Zyrtec-D or Claritin-D.

If the oral antihistamine alone does not provide sufficient relief, a nasal-spray steroid can be added. This is particularly effective for congestion. These products were also recently made OTC. There are many products in this field -- Flonase appears to be the most effective. The usual dose is 1 spray in each nostril once per day. Although their onset of action typically occurs within 12 hours, maximal effect may not be achieved until 7 days.

For itchy/watery eyes, antihistamine eye drops provide significant relief for those children who will allow their administration (Hint -- have the child look up, pull the lower lid down, and place the drop in the sulcus you have created. Hint #2 -- be certain your child is not holding sharp objects while you do this :). There are many OTC antihistamine eye drops, the most effective being Ketotifen (brand name Zaditor or Alaway). The dose for the drops is 1 drop in each eye twice per day. Onset of action is within minutes. If Ketotifen proves ineffective, a prescription product, Patanol may prove useful.

Although avoiding potential allergens is an oft-recommended strategy, in most instances this is not practical. Your child needs to go outside, even (?especially) in these challenging times. Certainly, there are reasonable steps one can take, such as not asking the grass-allergic child to mow the lawn, avoiding hay rides, and whole-house air-conditioning so the windows can remain closed. Having the child immediately take off clothes upon coming indoors, and promptly taking a shower to remove any pollen also makes sense. Likewise, allergy testing is superfluous for most children, as knowing specifically what they are allergic to will usually not alter their management ("Stay away from the Dutch Elm trees and Timothy grass dear!").

If a child is on maximal medical therapy (oral antihistamine, nasal steroid, antihistamine eye drops) and is still miserable with allergy symptoms, then it is reasonable to see an Allergist for consideration of immunotherapy (allergy shots). Fortunately our allergy medications are effective enough currently that we see far fewer children requiring immunotherapy than previously.

Spring allergy season generally lasts until mid-June, then Fall allergy season starts in mid-August. However, depending on exactly what the child is allergic to, some kids are symptomatic year-round. Fortunately, many of these children are not terribly uncomfortable, and our current medications provide significant relief for most others. As with many issues in Pediatrics, the parents are often more bothered by the symptoms than the child. Recommended treatment is earplugs for the parents and a recording of "Gesundheit" that can be replayed on a continuous loop each morning.

BENADRYL CHALLENGE

Faisal, S. Dangers of the Tik Tok Benadryl Challenge. ***Contemporary Pediatrics****. Jan., 2021, p. 20-21.*

Speaking of antihistamines, our creatively experimental youth have devised the so-called Benadryl Challenge, which has promulgated on Tik Tok. We know that many teenagers are risk-takers, consider themselves invulnerable to bad outcomes and are easily influenced by peers. Currently, 32% of users of Tik Tok are teens, so trends introduced on this site spread rapidly among this age group. Someone discovered that consuming large amounts of Benadryl (Diphenhydramine) can cause hallucinations, which rapidly appealed to many teens. Unfortunately, taking too much can also prove to have severe side-effects, including death.

A usual dose of Benadryl is 25 mg. Individuals engaged in the Benadryl Challenge are consuming 300 mg. or more. Symptoms of overdosing on Benadryl include rapid heart rate, dry mucous membranes, dilation of the pupils, inability to void, flushed skin and disorientation. Ultimately, the individual will become sleepy, and may have a seizure. If you believe your child may have ingested a toxic amount of Benadryl, call the Poison Control Center, 1-800-222-1222 and/or 911.

These types of challenges are common on social media. Most are harmless (I like cinnamon!). However, many teens are drawn to danger, like to "live on the edge" and so are prone to the riskier activities. It is reasonable to have a discussion about this particular challenge with your kids, and segue into a broader discussion of the dangers of following social media challenges without discussing with elders first. In the 1950s your grandparents were swallowing goldfish. In the 1970s your parents were wearing mood rings and collecting pet rocks. In the 1990s you were dancing to the Macarena and collecting Pokemon cards. Fads have always been with us. But the internet has enhanced this dramatically, and teens natural risk-taking proclivity has created a fertile breeding ground for high-risk activities. As always, parents of teens need to be ever vigilant (and these days, tech-savvy).

HEALTHY DIET

During these quarantine times, many individuals, including our kids, have had a tendency to both overeat and to eat more unhealthful foods. So, what is a healthy diet? The recent guidelines from the American Heart Association and the American College of Cardiology provide a valuable template. Eat a diet rich in

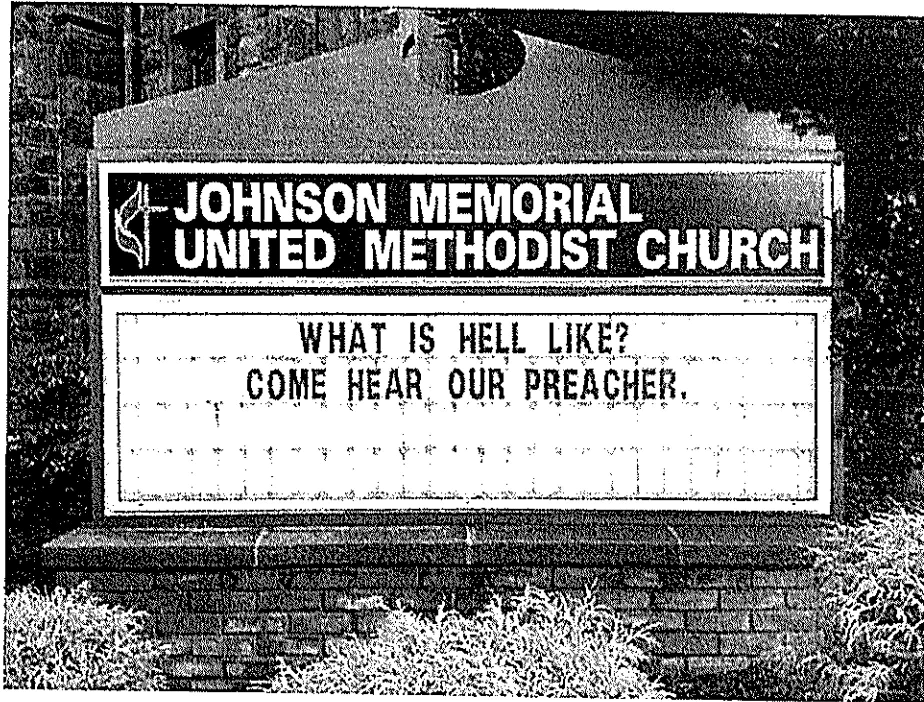
vegetables, fruits, nuts, beans, whole grains and fish. Replace saturated fat with monounsaturated and polyunsaturated fats. Minimize refined carbs (white flour, added sugars), sweetened beverages and processed meats (bacon, hot dogs, lunch meat, sausage). Reduce sodium and high-cholesterol foods (like egg yolk). Yes, as always in any scientific field, nutrition recommendations can and do change periodically, based on new studies. That is appropriate. But these general guidelines have so far withstood the test of time, and are a great basis for maintaining good nutrition for your children. I do encourage parents not to overthink this. If you tell a child there is a food they cannot have, that is the ONLY food they crave. A chicken nugget does not lodge in the aorta and kill your child. Neither does a french fry or a donut. Learn to differentiate between diet staples, foods that your children eat regularly, and treats, foods that are eaten rarely but merrily. A child eating a (mostly) healthy diet and not arguing/complaining is a win-win for the parent. Save yourself for the bigger battles ("No, you may not have a tattoo of a Bulldog on your face").

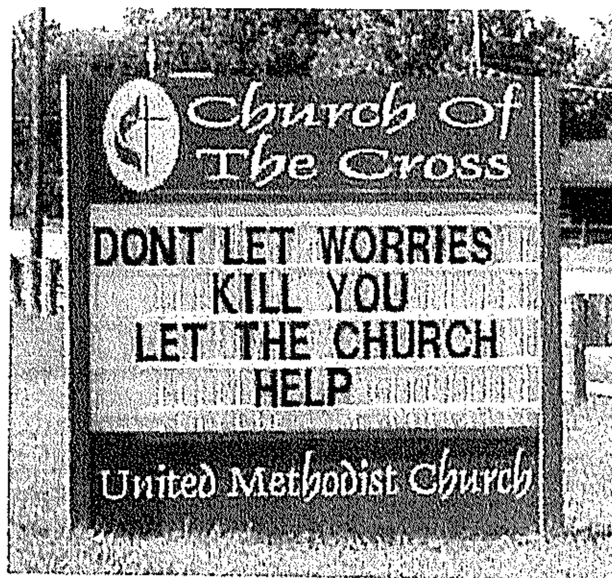
As has been the case for the past year, Coronavirus takes up most of the space in these Newsletters, so I do not get to discuss nearly as many issues as I would like. I do realize you are all busy (Parent = Busy I believe is the First Law of Physics, or should be), and I appreciate your taking the time to read these Newsletters. Hopefully SOON we will be discussing the end of the pandemic, and get back to discussing important items like "How do I get my 2-year-old not to repeat my swear words" and "Why does my 4th-grader think farts are funnier than my dad jokes?".

Best regards,

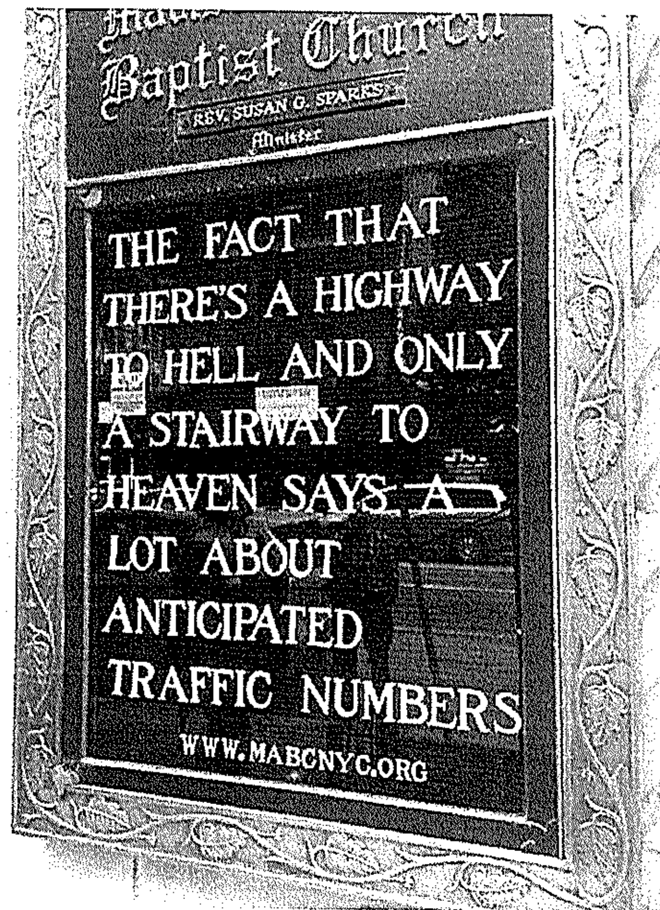
Scott R. Serbin M.D., F.A.A.P.

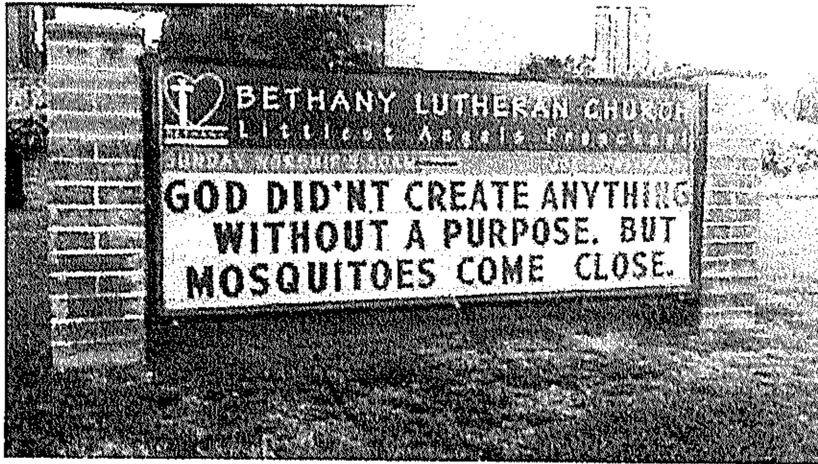
As we are at a nexus of Passover, Easter and Ramadan, this issue's Back Page features humorous signs from Houses of Worship. Life is better with laughter — Enjoy!


JOHNSON MEMORIAL
UNITED METHODIST CHURCH
WHAT IS HELL LIKE?
COME HEAR OUR PREACHER.

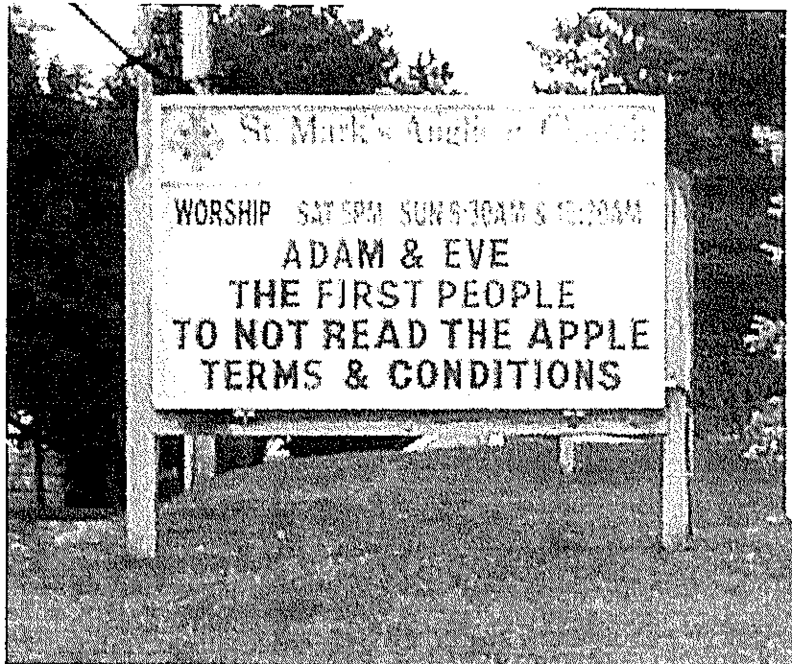

Church Of
The Cross
DONT LET WORRIES
KILL YOU
LET THE CHURCH
HELP
United Methodist Church

Holy Trinity Roman Catholic Church
TOO HOT TO KEEP
CHANGING SIGN
SIN BAD JESUS GOOD
DETAILS INSIDE

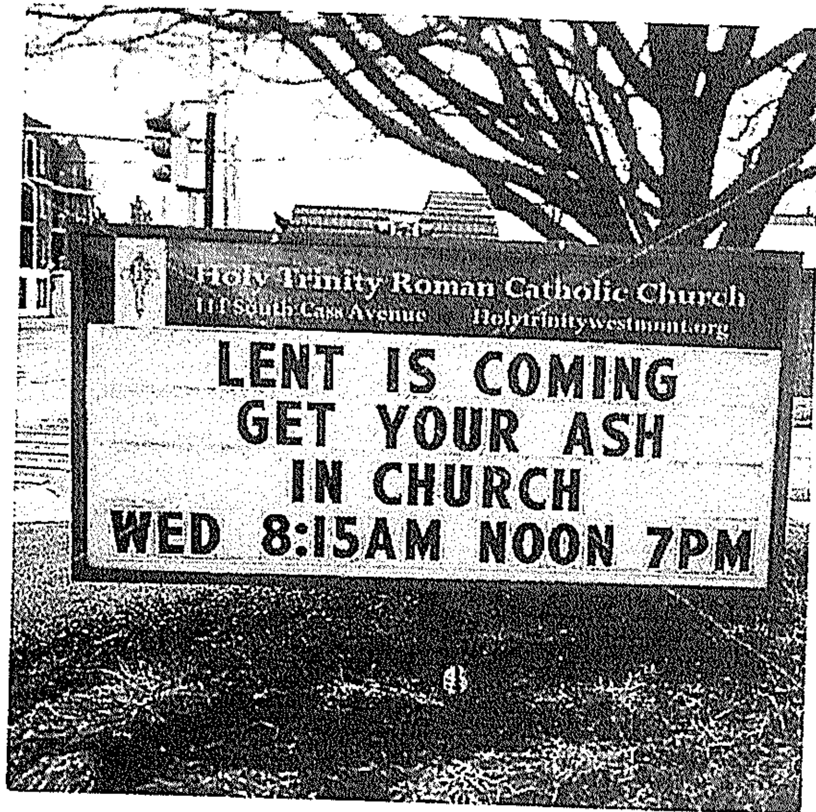

Baptist Church
REV. SUSAN G. SPARKS
Minister
THE FACT THAT
THERE'S A HIGHWAY
TO HELL AND ONLY
A STAIRWAY TO
HEAVEN SAYS A
LOT ABOUT
ANTICIPATED
TRAFFIC NUMBERS
WWW.MABCNYC.ORG


BETHANY LUTHERAN CHURCH
GOD DID'NT CREATE ANYTHING
WITHOUT A PURPOSE. BUT
MOSQUITOES COME CLOSE.

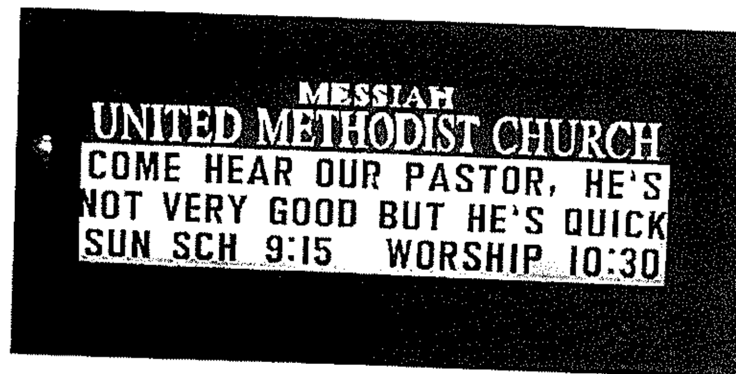
FIRST
COVENANT
CHURCH
SUNDAY WORSHIP
10:00 AM
DON'T GIVE UP! MOSES WAS
ONCE A BASKET CASE!

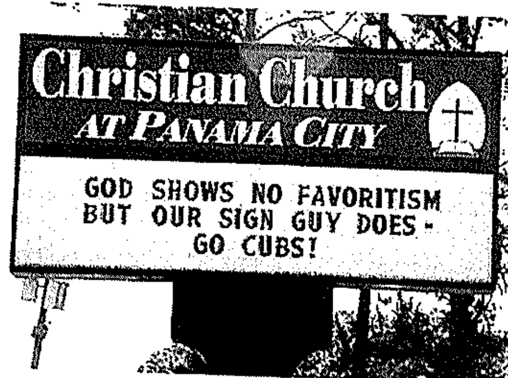

WORSHIP
ADAM & EVE
THE FIRST PEOPLE
TO NOT READ THE APPLE
TERMS & CONDITIONS

ST. JOSEPH THE WORKER
ROMAN CATHOLIC CHURCH
WEEKEND MASS Saturday 5:00 pm
Sunday 9:00 am 11:00 am
DAILY MASS
Mon - Sat 9:00 am
WE ARE STILL OPEN
BETWEEN
CHRISTMAS AND EASTER
905·432·2300


Holy Trinity Roman Catholic Church
111 South Cass Avenue
LENT IS COMING
GET YOUR ASH
IN CHURCH
WED 8:15AM NOON 7PM

ST. CATHERINE
OF SIENA SCHOOL
NOAH WAS A BRAVE
MAN TO SAIL IN A
WOODEN BOAT WITH
TWO TERMITES


MESSIAH
UNITED METHODIST CHURCH
COME HEAR OUR PASTOR, HE'S
NOT VERY GOOD BUT HE'S QUICK
SUN SCH 9:15 WORSHIP 10:30


Christian Church
AT PANAMA CITY
GOD SHOWS NO FAVORITISM
BUT OUR SIGN GUY DOES -
GO CUBS!