



## **GLOBAL RESPONSE TO CONGENITAL CYTOMEGALOVIRUS (CMV) AWARENESS THROUGH A PEDIATRIC HOSPITAL BLOG WEBSITE**

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# Texas Children's Blog



January 10, 2011 Dr. Gail Demmler-Harrison, Infectious Diseases

## CMV: Every Pregnant Woman Should Know About This Virus

Congenital cytomegalovirus (CMV) is the most common virus that most people haven't heard of.

Most every one will catch CMV at some time in their life and never know they have it.

If a woman gets CMV for the first time while she is pregnant, she can be in a potentially dangerous situation. CMV infects almost 1 out of every 100 newborns in the country and is the most common congenital infection.

The virus is passed to the unborn baby from the mother and can cause serious complications in the newborn, like platelet problems, liver disease, and lung disease. It can also cause long-term effects on hearing, vision, growth, and development by invading the brain, eyes, and ears.

What makes CMV even more dangerous is that most people, including pregnant women, have never heard of CMV. And, since CMV does not cause a rash like its cousin chicken pox, you do not know who is infected and shedding the CMV.

The good news is, CMV infection is potentially preventable.

If a pregnant woman is aware of CMV, she can take simple hygienic precautions to reduce her exposure to the virus. Toddlers are a "hot zone" for CMV, and by slightly modifying your behavior while pregnant, you can reduce your risk of catching this silent virus.

CMV is present in saliva and urine, so...

1. Do not share food or drink with your toddler — no more "one for mommy one for baby" mealtime games while you're pregnant.
2. Do not kiss your toddler on the lips or cheek, rather hug them and give them a loving kiss on the top of the head while you're pregnant.
3. Wash your hands carefully after changing diapers and wiping your toddler's nose and face.

An ounce of CMV awareness and 3 simple hygienic precautions while you're pregnant are all it takes to save your unborn baby from a potentially devastating infection.



### About Dr. Gail Demmler-Harrison, Infectious Diseases

I am a [pediatrician](#) at [Texas Children's Hospital](#) who specializes in [infectious diseases in children](#).

I'm an expert in congenital cytomegalovirus (CMV) infection, with over 25 years of experience diagnosing and treating babies born with congenital CMV. I also do research on the long term effects of CMV on children as they grow. I'm an advocate for CMV Awareness in the community.

## CMV Blog Post Comment from Aditi:



**Aditi** says:

February 26, 2012 at 11:29 am

Hi Doctor Gail,

I know this post is more than a year long but Please I will be very grateful to you if you can take some little time out and resolve my worry.

I am 28 years old from Delhi, India. I am 9 weeks pregnant and I got my Torch Test results 4 days back which shows all IGM as negative (which is good I suppose) and all IGG too are negative except one which is CMV IgG . It is 52 and hence positive.

I came across your blog accidentally while searching on "what CMV IgG positive means in pregnant ladies". Can you please suggest what precautions can I take and how bad is my result. This is my first pregnancy and hence I am very worried. I have read on onterenet if virus passes on to fetus in first 3 months then baby may have some or one congenital malformation , now what does this mean and is it true. I am really very very worried. Please reply to my concern.

Thanks ,  
Aditi



## Dr. Demmler's Response to Aditi's Blog Post Comment:



**Dr. Gail Demmler-Harrison, Infectious Diseases** says:

February 27, 2012 at 11:57 am

Dear Aditi,

Thank you for your post.

A CMV IgG positive results combined with a CMV IgM negative result means a past CMV infection. It is normal to have a past CMV infection and 50% to 80% of women around the world will have CMV IgG antibody positive and CMV IgM antibody negative blood test results.

The risk to the fetus or unborn baby is nil when the pregnant woman is CMV IgG antibody positive and CMV IgM antibody negative. It is remotely possible (<<1% of the time) that CMV will be transmitted to the unborn baby from the mother with an old CMV infection, or from another CMV infection she may catch, but that is very unusual, and almost all of the time the newborn baby does not have any problems from CMV.

Women who are pregnant should practice hygienic precautions when around young toddlers (children between ages 1 and 5 years of age) to reduce the risk of catching viral infections such as CMV and other viruses from the child's saliva or urine.

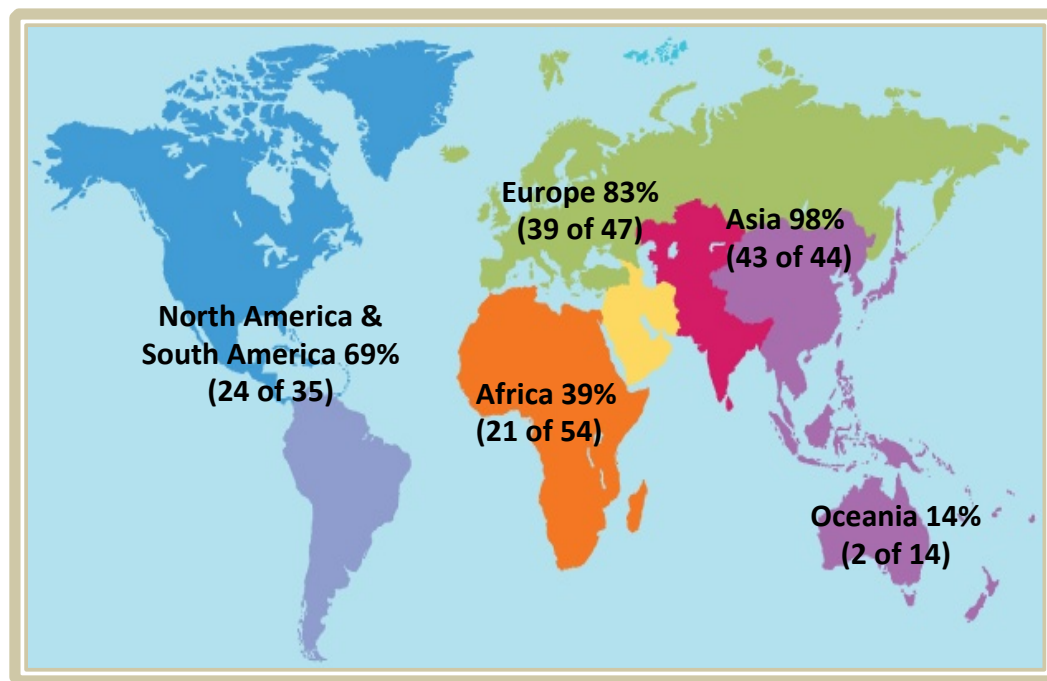
These three simple hygienic precautions are:

- 1) avoid contact with saliva by not kissing young children on or near the mouth, but instead kisses on top of the head and big hugs while pregnant
- 2) avoid sharing food and drink with young children
- 3) wash hands carefully after changing dirty diapers

I hope this is helpful to you.

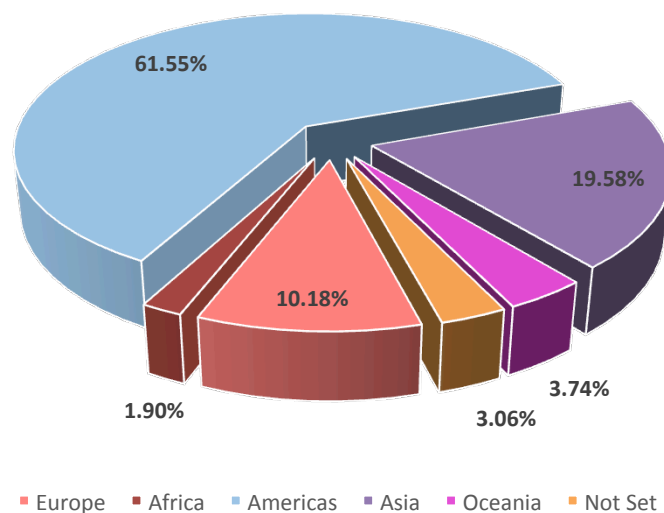
Best wishes and take care.

## Countries Impacted by CMV Blog



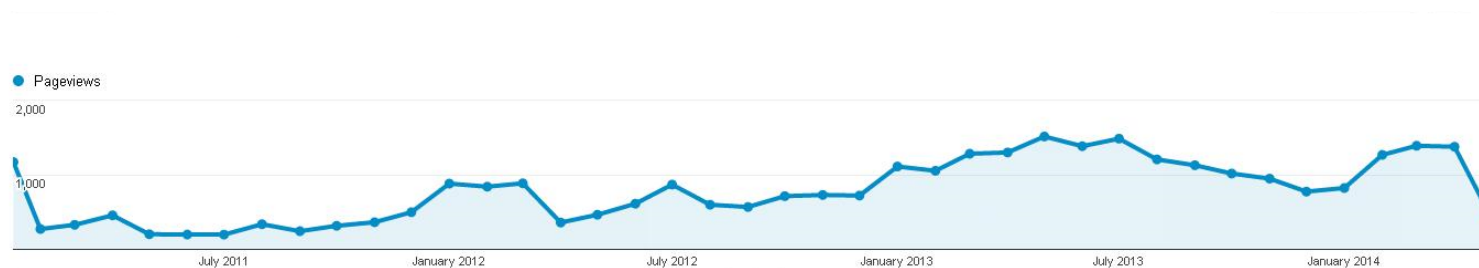
67% of the Worlds' Countries Impacted by CMV Blog 129 of 194 countries; 6 of 7 Continents.

## Blog views per continent

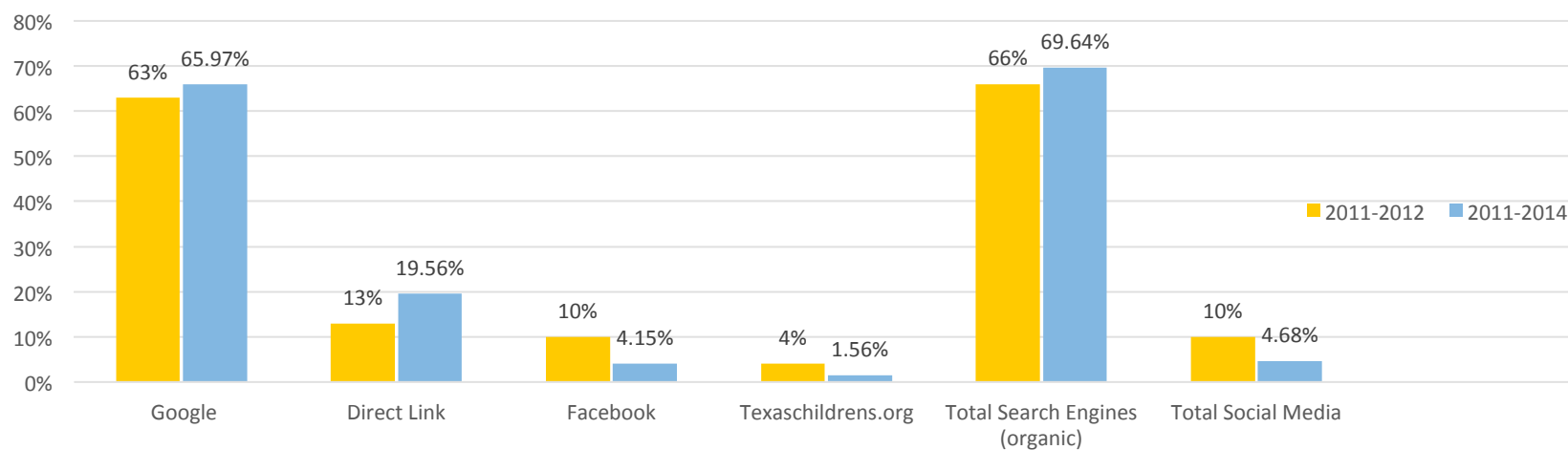


Unique page views totaled 26,559 of 32,294 total page views with an average time of 4:33 minutes on the blog page.

## Monthly pageviews 2011-2014

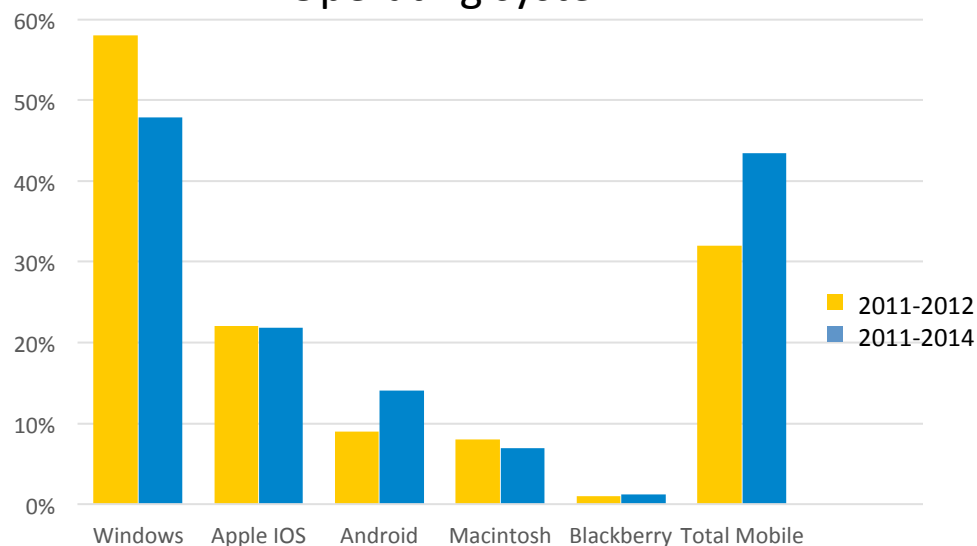


## Main source of blog views 2011-2014

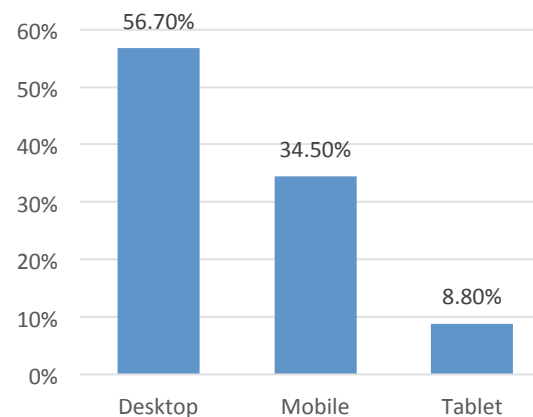


## Blog views per operating system and Device type

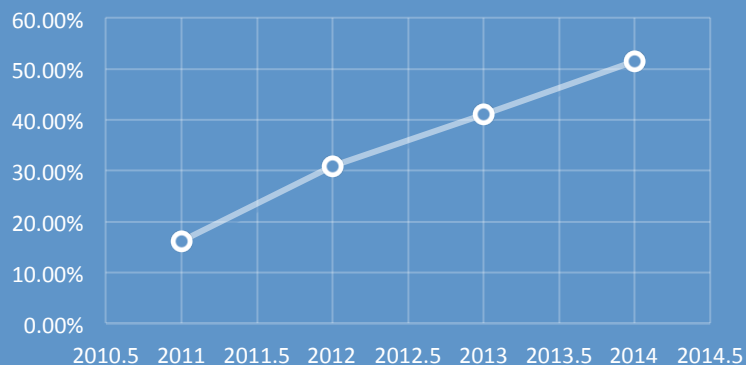
Operating system



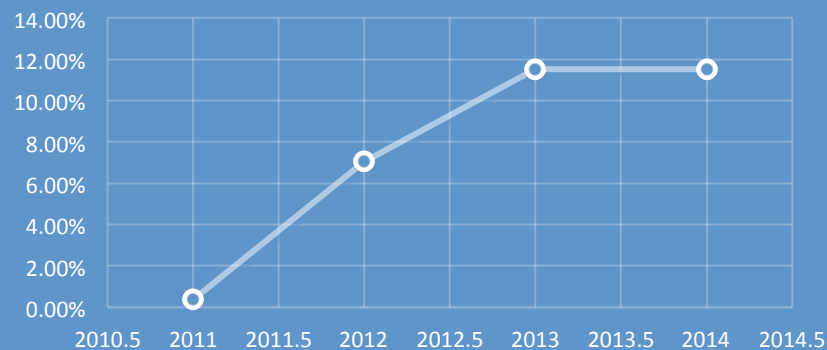
Device used 2011-2014



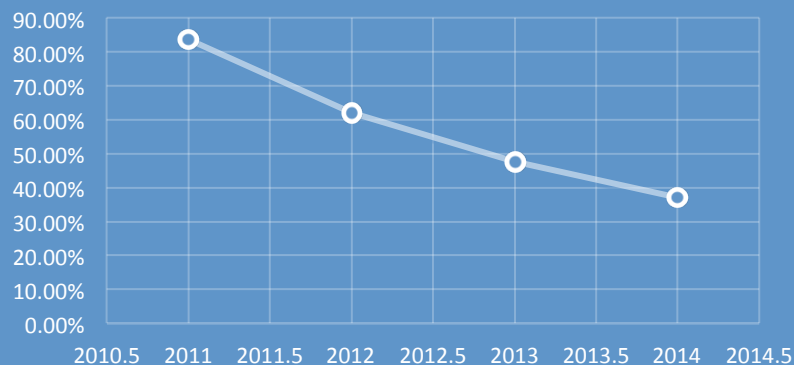
**PERCENTAGE OF MOBILE DEVICES USED TO ACCESS CMV BLOG FROM 2011-2014**



**PERCENTAGE OF TABLETS USED TO ACCESS CMV BLOG FROM 2011-2014**



**PERCENTAGE OF DESKTOPS USED TO ACCESS CMV BLOG FROM 2011-2014**



## Popular Keywords

Top 5 Searched Keywords	Page views
Not set/provided	18132
CMV pregnancy	241
CMV and pregnancy	209
How do I know I had CMV when pregnant	190
Cytomegalovirus CMV IGG precaution during pregnancy	112

## Blog use worldwide

Life of Blog	40 months
Avg time spent on blog	4:33 minutes
Total Pageviews	32294
Unique Pageviews	26559
Internet Sources/landing pages	224
Operating Systems	19
Keywords	3750
Cities	2494
Countries	129

As of May 9, 2014 the CMV TCH blog has a total of 506 responses and or comments.



**Brianne Hansen** says:

May 30, 2014 at 6:10 pm

I located your contact information via the internet regarding your expertise with CMV. I recently lost my baby boy as a stillborn at 31 weeks. Autopsy results showed the cause of death to be CMV which resulted in large cerebral hemorrhage. I was very surprised to learn how common CMV was, and also concerned as to why not one of my doctors had ever mentioned the risk or prevention strategies to me (I have a two year old daughter at home who goes to daycare). I work in healthcare, and that is why it was even more surprising to me. Anyway, I have discussed with my OB, a perinatologist and an infectious disease doctor regarding my case. Unfortunately, no one has been able to tell me my risk with subsequent pregnancies, when I can/should get pregnant again, etc. I do not want to put another child at risk, but really want to have another baby.

I requested that my OB order some labs for me to help determine risk. The results are as follows:

CMV IgG – Positive (36)

CMV IgM – Negative

CMV Avidity – HIGH

Serum PCR – Not Detected

Urine PCR – Detected

I understand the first three labs tell me that I am not currently experiencing active infection, and that my exposure was likely months ago. I do not know how to interpret the Positive Urine PCR test though, and unfortunately neither do my doctors. Should I be concerned about this viral load, or is the negative serum PCR enough to confirm a low viral load? Do I need to wait until my Urine PCR is not detectable prior to conceiving again?

I sincerely apologize for this informal consult, however I am at a loss as to how to proceed. As a healthcare professional I rely on data to assess risk, and unfortunately cannot find specific numbers regarding my risk at this time. Therefore I am seeking expert advice since my physicians seem not to have a ton of experience with patients like me. I greatly appreciate your time and consideration regarding my questions.





**Dr. Gail Demmler-Harrison, Infectious Diseases** says:

June 2, 2014 at 2:59 pm

Dear Brianne,

Thank you for your post on my TCH CMV BLOG. I am so sorry for your recent loss. Please accept my heartfelt condolences. Most people do not understand how serious CMV can be to the unborn fetus. It is estimated that 8 % of newborns die from the effects of congenital CMV disease in early infancy, and the exact percentages of unborn babies who die in the womb from severe in utero CMV still remain poorly appreciated and not well understood.

Your post bravely brings this important fact to light.

Regarding your situation, the presence of a high CMV IgG avidity and a negative CMV IgM antibody level and negative CMV DNA in your blood all suggest your CMV infection is now in the past or recent past category and therefore carries an estimated 1% or less risk of in utero transmission with the next pregnancy. Some studies suggest a risk of up to 20%, if the CMV infection is recent past, but not everyone fits in that higher category of risk after a past CMV infection. It is difficult to predict with certainty your risk of transmission with your next pregnancy, but it should be low.

CMV may be detected in the saliva, urine and cervical secretions of individuals experiencing a recent CMV infection, but also in individuals experiencing a past CMV infection with a recurrence. The urinary CMV excretion from a recent CMV infection usually lasts a few months, then resolves, but it also can be intermittent in many otherwise healthy individuals, and may recur months or years later, without any known consequence.

Urinary shedding does not help predict transmission to the fetus nor is it a standard method to help time the next pregnancy.

It would be prudent to wait three months from your last CMV testing to start to try and be pregnant again. Some women may resolve their serologic primary CMV infection in as short as 6 weeks, and some may take 52 weeks, so there is great variation in the CMV immune responses observed in otherwise healthy women of childbearing age.

Please consider taking the recommended CMV hygiene precautions with your next pregnancy to reduce the risk of CMV reinfection. Even though it is unusual, CMV reinfection can occur, plus the precautions may help you avoid other infections.

Serial Fetal ultrasounds would also be in order to assess placenta size and fetal well being.

No doubt your next pregnancy will be very carefully monitored.

Amniocentesis for CMV detection is probably not indicated, if the fetal ultrasounds remain normal and your next pregnancy otherwise progresses well and normally, since the procedure carries some risk and you are now in the "past CMV infection" category with much less risk to the fetus. However, your maternal fetal medicine specialists know your case the best, and they are the best doctors to provide you specific recommendations regarding management of your next pregnancy.

I hope this information is helpful to you.

Best wishes to you for a healthy pregnancy.

Dr Gail Demmler Harrison  
CMVDOC



**Subramani** says:

July 10, 2014 at 6:56 am

Hello Team,

First of thanks for creating a valuable blog. I am Subramani and I am from India. My wife delivered a boy baby on 5th June 2014. I have subscribed for Stem cell banking and and got their reports today ( 10-July-2014). In the maternal blood report the CMV IgM is Non-Reactive but the CMV igG is Reactive.

I searched the full blood test report of my wife which we took during the 5th week of her pregnancy but I dint find any results of the CMV tests done. I believe this test was not done to her during her initial phase of her pregnancy.

So what should i do now? should i screen my baby for the CMV infection. Is there any possibilities of my baby getting the infection? How safe is my baby. I am very depressed after seeing the report. Please help me.

Thanks in advance

-N Subramani

+91-9003915020

[venkat.oct10@gmail.com](mailto:venkat.oct10@gmail.com)

[Reply](#)





**Dr. Gail Demmler-Harrison, Infectious Diseases** says:

July 10, 2014 at 11:05 am

Dear Subramani,

Thank you for your post on my TCH CMV BLOG.

The presence of CMV IgG antibody is common and not abnormal. Between 50% to 80% of adults will have CMV IgG antibody in their blood. So it is normal and not usually a problem because CMV is a common virus that is usually silent in the body.

It is not likely at all CMV will affect your son or your wife.

If your son is normal appearing and developing normally and passed his newborn hearing screen, then I would not do further testing on him.

I hope this information is helpful to you.

Best wishes.

Dr Gail Demmler Harrison

CMVDOC

[Reply](#)



**Cisa** says:

May 5, 2014 at 6:47 am

Dear Dr. Demmler-Harrison,  
Congratulation for your great job in increasing awareness about CMV and answering the questions on TCH BLOG!  
I'm from Roumania.

My sister is 39 years old, with one miscarriages due to thrombosis. Now she is pregnant again, in 17 weeks. For her thrombosis she is takin Clexane 0.4ml on the daily base.

Recently her CMV test results are:

CMV IgG = 600 U/mL (positive)

CMV IgM = 0.24 (negative)

CMV IgG avidity = 0.92

Does she has to perform a amniocentesis to assess for virus in amniotic fluid?

[Reply](#)



## Dr. Demmler's Response to Cisa's Blog Post Comment:



**Dr. Gail Demmler-Harrison, Infectious Diseases** says:

May 6, 2014 at 3:03 pm

Dear Cisa,

Thank you for your post on my TCH CMV BLOG.

The CMV serology results you provided indicate your sister most likely has a past, resolved infection with CMV. They do not indicate a recent CMV infection. While it is possible your sister may reactive CMV and transmit CMV to her baby, this is not likely to occur. Therefore an amniocentesis for the sole reason to evaluate for congenital CMV infection would not be ordinarily recommended by most CMV experts under these circumstances. A fetal ultrasound may be indicated to assess fetal well being. Your sister of course should follow the recommendations of her own obstetrician, who knows her case in detail. Best wishes to your sister for a healthy pregnancy.

Dr Gail Demmler Harrison

CMVDOC

[Reply](#)



**Brendan says:**

April 15, 2014 at 1:35 pm

Hi,

I am in Cambodia and having a very hard time getting a proper explanation of these results.

My wife is 11 weeks pregnant, and has tested as follows:

CMV IgM – Negative

CMV IgG – Positive ( > 500 iu / ml)

My concern is that the titer level is so high... Could she have been infected after becoming pregnant with this high level?

Any info is greatly appreciated. :)

[Reply](#)





**Dr. Gail Demmler-Harrison, Infectious Diseases** says:

April 15, 2014 at 3:40 pm

Hello Brendan,

Thank you for your post on my TCH CMV BLOG.

The presence of CMV IgG antibody, even if it is "high" level and the absence of CMV IgM antibody (that is IgG positive and IgM negative) usually indicates a past CMV infection that likely occurred many months to years ago.

The height of the CMV IgG level usually does not mean anything significant.

It is unlikely CMV will be a problem for this pregnancy since your wife appears to have a past CMV infection and not a recent infection with CMV.

Regular prenatal care is important to assure your baby and your wife are staying healthy.

I hope this information is helpful to you.

Best wishes for a healthy pregnancy.

Dr Gail Demmler Harriosn

CMVDOC

[Reply](#)



**Pani says:**

November 13, 2013 at 4:56 am

Hi Dr Gail,

Thanks for providing so much information. It is very useful. I'm contacting you from UK.

I got pregnant thru IVF, but the pregnancy ended due to Primary CMV infection in the first weeks of gestation.

The infection occurred back in August 2013 and the pregnancy ended in October.

I have been told that I need to wait 6-12 months to get conceive, but because I am almost 36 and need to go thru IVF again I don't want to wait that long.

Can you please tell me what tests I need to do before trying to conceive to make sure I'm ready. And when do you propose I should not worry about CMV anymore?

Thanks so much!

Pani



## Dr. Demmler's Response to Pani's Blog Post Comment:



**Dr. Gail Demmler-Harrison, Infectious Diseases** says:

November 13, 2013 at 10:24 am

Hi Pani,

Thank you for your post on my TCH CMV BLOG.

It usually takes 3 to 6 months to resolve a primary CMV infection; for some women it may take 6 to 12 months.

Your doctors know your case best and are the best ones to provide recommendations.

However, CMV tests that can be used to determine if you have resolved your primary CMV infection include the following—and may be helpful in determining the safe time for next pregnancy try.

CMV IgG antibody- this will remain positive for life

CMV IgM antibody- this level should become negative in 3 to 12 months- when it does, it signifies a resolved primary CMV infection

CMV IgG avidity index- it is low index during a recent primary CMV infection and high index when the CMV infection is past and resolved.

I hope this information is helpful to you.

Best wishes for a healthy pregnancy next time around!

Dr Gail Demmler Harrison

CMVDOC

[Reply](#)

## CMV Blog Post Comment from Bonnie:



**Bonnie Frantzen** says:

January 25, 2011 at 8:50 am

This is so exciting for me as a CMV parent to have the medical community talk about this. There are so many of us out here who need help, guidance and support. When I talk to other medical professional people, they really do not have a clue – even new nurses graduating. That is scary to me. As our society get more and more social, the chances of spreading this around are going to get greater. Even CMV kids could be the carriers because those parents a lot of times do not know their little ones are contagious to others. Our child went 8 months without being diagnosed from the medical world until I was finally able to get a diagnosis. He even had physical and major symptoms- microcephaly, jaundice, failed baby hearing test twice, petechiae, could not hold head up, etc. I fought hard to find someone to diagnosis. The failed baby hearing should have been enough to do the test...So, I am frustrated with our journey. The more people know, then maybe others will not have to endure what we did.



**Dr. Gail Demmler-Harrison, Infectious Diseases** says:

January 25, 2011 at 9:45 am

Thank you everyone for your comments and suggestions. Part of what I will be doing with this blog is also educating doctors about how to diagnose and treat infants and children and their families affected by congenital CMV.

You are talking...

rin says:  
[May 12, 2011 at 7:04 pm](#)  
I am so glad to find this site

Pani says: [November 13, 2013 at 4:56 am](#)  
Hi Dr Gail,  
Thanks for providing so much  
information. It is very useful. I'm  
contacting you from UK....

Diana says:  
[January 25, 2011 at 12:26 am](#)  
Great info and so straight forward. This is  
a great post to share with every woman  
in their child bearing years.

Keri says: [January 21, 2011 at 6:38 pm](#)  
I wish I had known about this before my 3rd pregnancy.  
Having two perfectly healthy, normal pregnancies, I  
never thought I would have problems with my last. At my  
20 week appointment, there was no heartbeat. My son,  
Michael, died between the 16th/17th week. The  
pathology report showed I had contracted CMV around  
that time. Apparently had never had it and it ultimately  
caused Michael his life. I have a toddler and a 7-year-old,  
certain that I picked the virus up from day care/school.  
Wish I would have known about it before - so I could  
have been more careful.

Kosia says: [March 12, 2012 at 1:16 pm](#)  
Hello  
I'm from Poland and we don't talk  
much about this virus in my country.  
I'm very concerned about this  
problem.....

pankaj says: [January 25, 2011 at 4:18 pm](#)  
Thanks Dr Gail  
I will post this on my facebook

Ã¼bersetzung englisch deutsch  
says: [July 26, 2013 at 9:28 am](#)  
Hi colleagues, its great post  
about teaching and fully  
explained, keep it up all the  
time.

Lisa Saunders says:  
[January 11, 2011 at 5:26 am](#)  
Thanks so much for doing what you can to  
make women aware of CMV. I really hope  
someday that OB/GYNs will make a CMV  
prevention message a standard practice of  
care.

rakesh marpuri says: [June 28, 2014 at 1:01 pm](#)  
Dear Doctor,  
This is Rakesh from India. First of all appreciate  
your effort in creating awareness regarding the  
CMV virus....

Lynn Maloney says: [May 7, 2013 at 6:49 pm](#)  
Hello Dr. Gail,  
Your blog continues to be a wealth of  
information for people dealing with CMV ....

Dr. Stanley A. Plotkin says: [January 25, 2011 at 2:37 pm](#)  
Dear Gail-  
I see that you are party to this blog created for parents of  
CMV damaged children. That's great, and I just wanted to  
say that it might be useful if the parents pushed NIH to  
support vaccine studies. Also, IOM is doing a new review of  
vaccine priorities and we don't want CMV to fall from first  
priority.  
Thanks and regards,  
Stanley A Plotkin, MD  
Emiritus Professor of Pediatrics, University of Pennsylvania  
Vaxconsult

Alen says:  
[September 8, 2013 at 1:59 pm](#)  
Respected Dr Gail,  
I am very happy to see your comments  
and help you provide to those in  
need of your information....

We are Listening...