

## Google evidence of increasing prevalence of subfertility (difficulty to get pregnant) by trends in searches and in published books

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Let us first review the medical definition of the subfertility condition. Simply stated: If you are not pregnant after 6 months of trying, you are subfertile. Then, if you do not achieve pregnancy after a year of trying, you are classified as infertile.

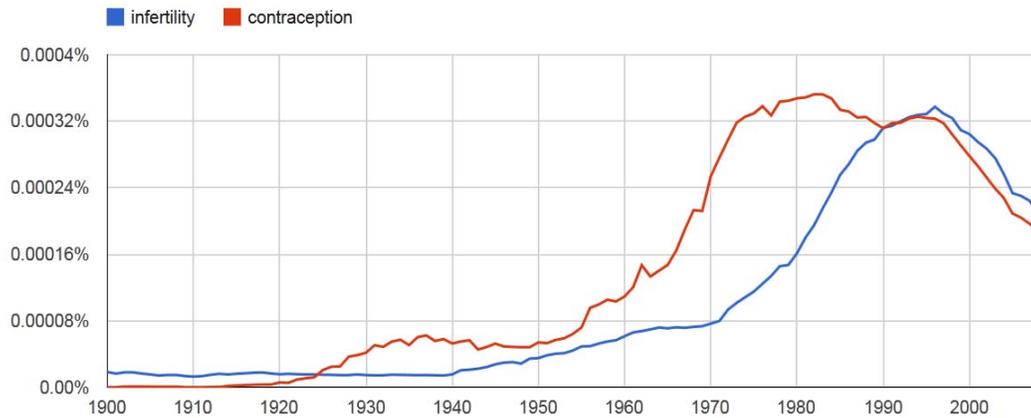
Prevalence means the condition of being widespread (of wide extent or occurrence); it is a medical and scientific word for high extent or frequency of a condition occurring.

For more insight on subfertility, go to the Alphabet of bioZhenia, <http://biozhenia.files.wordpress.com/2007/11/aeee-the-alphabet-of-biozhenia.pdf> , from which I cite (from the article on subfertility, found under S):

The latest research suggests that between 14 and 17 percent of couples are affected by subfertility at some time during their reproductive lives. In fact, only eight out of 10 couples trying for a baby do get pregnant within 12 months. For approximately 10 percent of couples, pregnancy will still not have occurred after two years (clinical infertility). Do read the short article if you want more info in a succinct form and clear language, including summarized prevalence and causes of the difficulty to conceive.

Adding to that, I cite for you from a medical paper by a team specialized in highlighting the importance of “focused intercourse”: Most of the pregnancies occur in the first six cycles with intercourse in the fertile phase (80%). This is cited from Hum. Reprod. (May 2005) 20 (5): 1144-1147 = <http://humrep.oxfordjournals.org/content/20/5/1144.full> , and it means subfertility rate of 20%. However, if intercourse occurring outside of the fertile phase (= outside of the fertile window of 3 days) is included, the 80% statistic drops significantly and the subfertility rate is therefore inevitably higher than 20%.

For background, I refer to the following Google Ngram graph of number of books on the subjects of infertility (blue) and contraception (red) published in English from 1900 (up to the most recent available data in 2008).



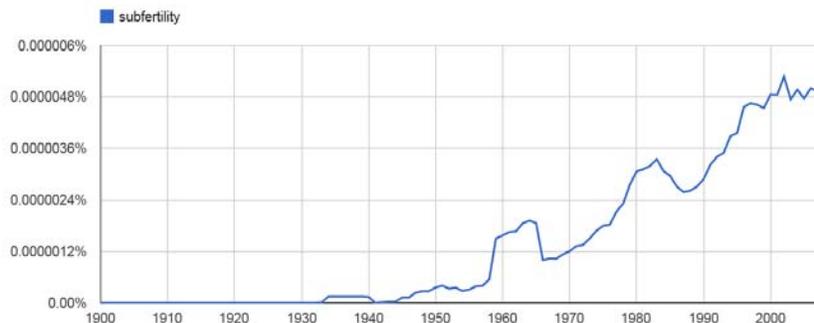
Search in Google Books:

[1900 - 1954](#)    [1955 - 1981](#)    [1982 - 1985](#)    [1986 - 2000](#)    [2001 - 2008](#)    [contraception](#)  
[1900 - 1955](#)    [1956 - 1995](#)    [1996 - 1998](#)    [1999 - 2002](#)    [2003 - 2008](#)    [infertility](#)

[http://books.google.com/ngrams/graph?content=infertility%2Ccontraception&year\\_start=1900&year\\_end=2008&corpus=0&smoothing=3](http://books.google.com/ngrams/graph?content=infertility%2Ccontraception&year_start=1900&year_end=2008&corpus=0&smoothing=3)

This graph shows how infertility rises after the rise of contraception (as reflected by the number of books on the respective subjects), and this is discussed in: <http://biozhena.wordpress.com/2011/11/14/seven-billion-people-%E2%80%93-after-half-a-century-with-the-pill/>

Here is a similar Ngram graph on the number of subfertility books (note the higher number of the leading zeros on the vertical axis, meaning a hundred times lower number of books on subfertility as compared to infertility or contraception):

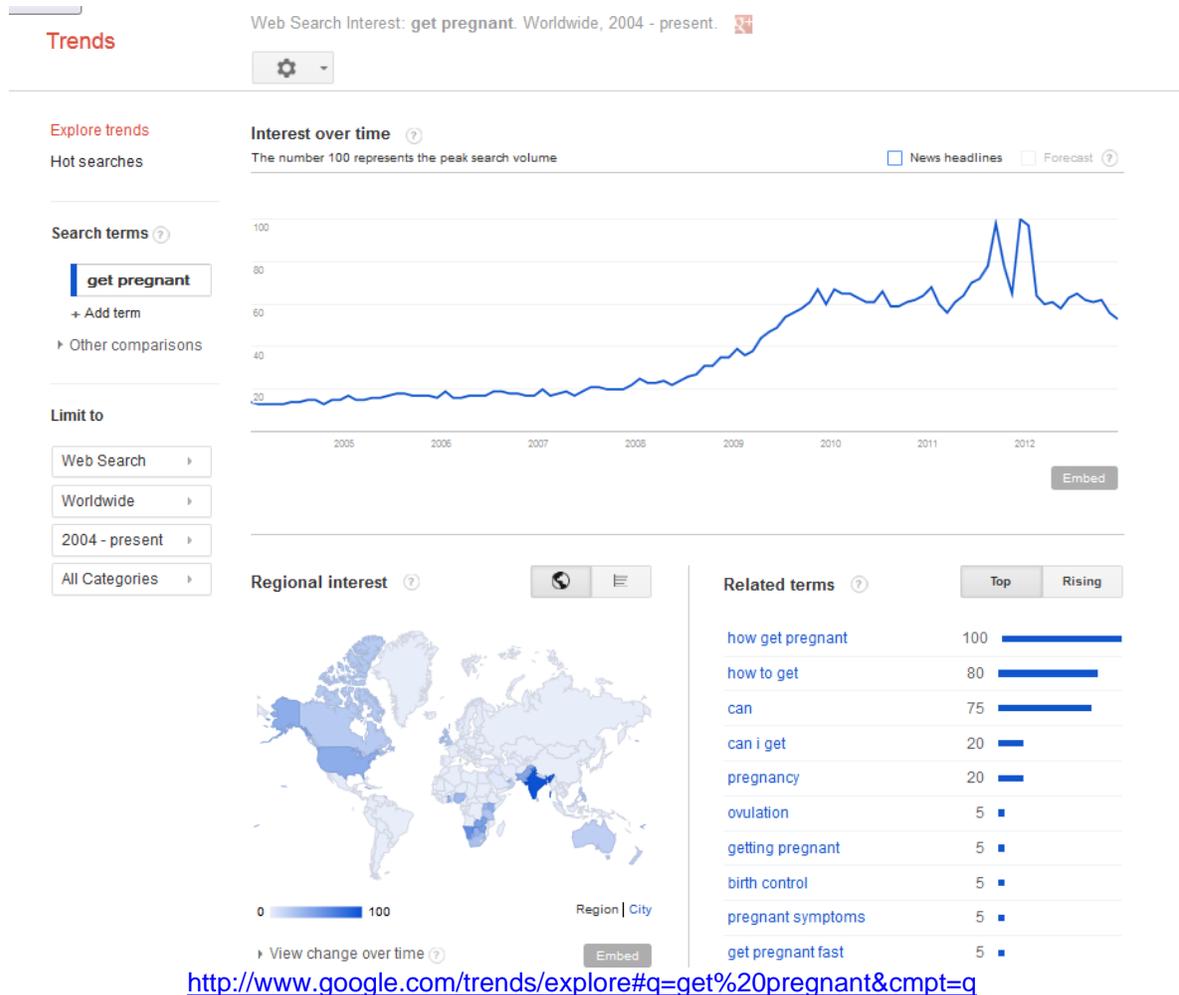


Search in Google Books:

[1900 - 1963](#)    [1964 - 1999](#)    [2000 - 2002](#)    [2003 - 2005](#)    [2006 - 2008](#)    [subfertility](#)

[http://books.google.com/ngrams/graph?content=subfertility&year\\_start=1900&year\\_end=2012&corpus=15&smoothing=3&share=](http://books.google.com/ngrams/graph?content=subfertility&year_start=1900&year_end=2012&corpus=15&smoothing=3&share=)

After this brief look at the statistics of books that are essentially all written by specialists on the given subjects, let's review Google's statistics of all people's searches on "get pregnant" from 2004 to the present – first the worldwide picture and then the US stats. We see both curves steadily increasing with the years, and both turning up sharply in about mid-2008. The worldwide stats are most contributed to by searches from the Indian subcontinent, and the most prevalent related term is "how get pregnant".



In the US searches that are graphed below, the most prevalent related term is "period" (followed by "pregnancy"), and regional interest is the highest in the American south. Looking back at the worldwide graph of Google trends, we notice a similarly high regional interest in the southern countries there, too. We realize that the picture is complicated by the different extent of online connectivity in different parts of the world (hence, for example, the highly connected North America exhibits a high regional interest in the worldwide picture, and is likely a significant contributor to the above Interest-over-time worldwide curve).

## Trends

Web Search Interest: **get pregnant**. United States, 2004 - present. 🇺🇸



### Explore trends

Hot searches

Search terms ?

**get pregnant**

+ Add term

▸ Other comparisons

Limit to

Web Search ▸

**United States** ▸

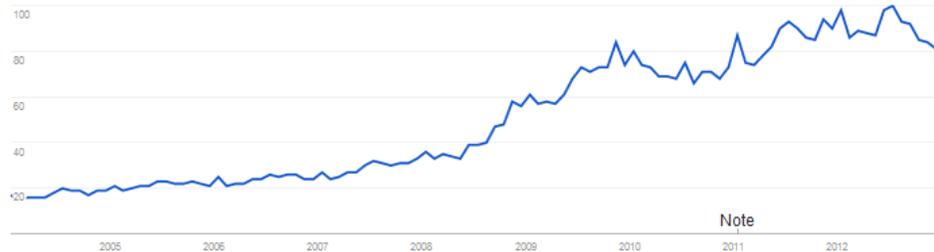
2004 - present ▸

All Categories ▸

### Interest over time ?

The number 100 represents the peak search volume

News headlines  Forecast ?

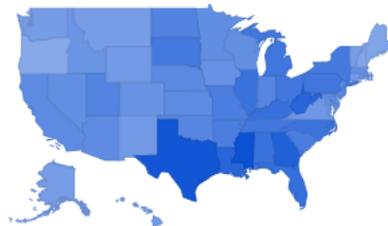


Note

Embed

### Regional interest ?

Worldwide > United States



0 100

Subregion | Metro | City

▸ View change over time ?

Embed

### Related terms ?

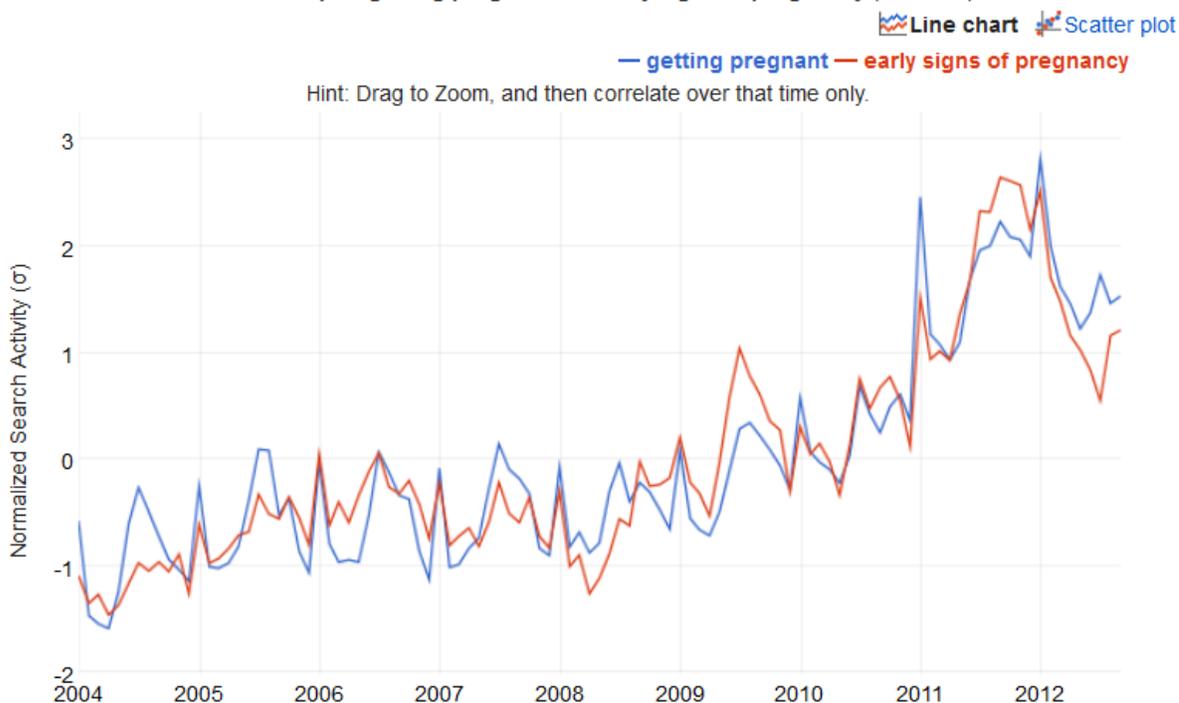
Top Rising

Term	Interest Score
period	100
pregnancy	65
ovulation	25
getting pregnant	25
birth control	25
pregnant symptoms	15
get pregnant fast	15
pregnancy test	15
precum	10
pregnancy symptoms	10

<http://www.google.com/trends/explore?q=get%20pregnant&geo=US&cmpt=q>

Interesting is also the seasonality of searches, which comes out in Google correlate data on search terms “getting pregnant” and “early signs of pregnancy”. In the US web search activity from 2004 till now, the getting pregnant peaks appear fairly consistently in July and very consistently in January of all the years. See this for yourself by going to the referenced Google correlate page and placing the cursor on the blue peaks (this works online, not here in the captured screen shot reproduction).

United States Web Search activity for **getting pregnant** and **early signs of pregnancy** ( $r=0.9380$ )



<http://www.google.com/trends/correlate/search?e=getting+pregnant&e=early+signs+of+pregnancy&t=monthly&p=us&filter=getting%20pregnant#default,40>

The correlation data is available for those countries where enough data is available (= where enough searches for the statistical analysis have occurred). “The getting pregnant peaks appear fairly consistently in July” means that some of those summer peaks are also in August or September – versus the winter peaks which occur essentially always in January. We can think of the January peak as reflecting many people’s New Year desire to achieve pregnancy, which did not happen for them by the end of the just-ended year.

In case of interest, the Alphabet of bioZhenia with a clickable table of contents for easier navigation can be downloaded at [biozhenia.files.wordpress.com/2007/12/the-alphabet-of-biozhenia-011207-with-tracking.doc](http://biozhenia.files.wordpress.com/2007/12/the-alphabet-of-biozhenia-011207-with-tracking.doc) . The Alphabet is a glossary of biomedical terms for the bioZhenia Corporation story, something of a primer. (The postal address indicated therein has been made obsolete by the High Park Fire of June 2012; the email and phone number have been saved from the devastation.)

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