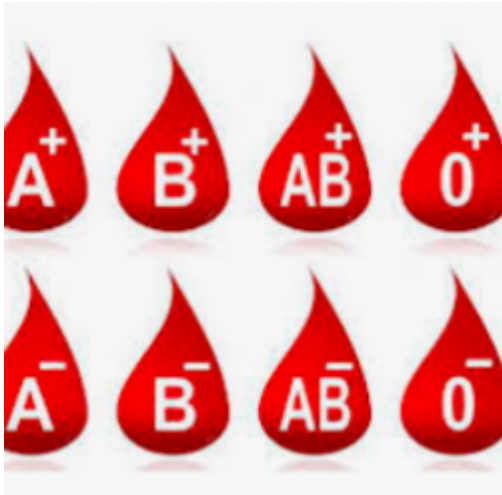


Do You Get The Stomach Bug While Others Dodge It? It Could Be Your Blood



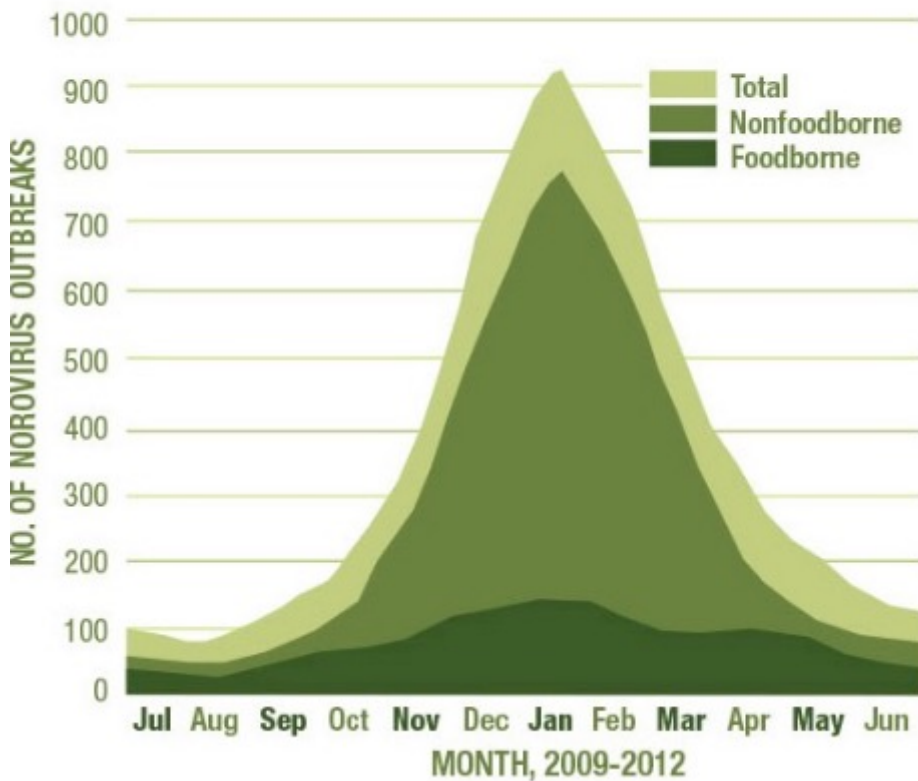
By Josh Bloom — March 5, 2019



Eight BloodTypes - Which Will Protect You From The Bug? Image: Daily Monitor [1]

If you set up a Google News alert for "norovirus" be prepared to get a whole lot of emails right now. The virus, which is erroneously called "stomach flu" or the "winter vomiting disease" is still hitting schools, hospitals, and nursing homes really hard, even though the peak months for transmission - January and February - have passed.

NUMBER OF REPORTED NOROVIRUS OUTBREAKS, BY PRIMARY TRANSMISSION MODE AND MONTH OF ONSET — NATIONAL OUTBREAK REPORTING SYSTEM, UNITED STATES, 2009–2012



Norovirus outbreaks by month. Source: [CDC](#) [2]

Not only is a case of norovirus gastroenteritis the personification of misery, but the virus that causes it is also one of the most contagious pathogens of all. It has been estimated that as few as 10 virus particles can be sufficient to cause infection. That is a crazy low number - one reason why [20 million](#) [3] Americans will fall victim to this heinous invader every year. The ease of transmission of the infection is one reason why when a kid brings it home from school it's common for everyone in the house to come down with it. But, some of you lucky folks rarely become infected, or when you do, experience either very mild or no symptoms at all.

If so, it's not because you've already had the bug, even in the same year. Some viruses generate an immune response which protects people from a second infection (measles, mumps, others). And others, like norovirus, influenza and the common cold do not; they can get you every year **(1)**, sometimes more than once.

Although luck (and staying the hell away from someone who is sick) play a part in determining who might avoid participating in the "Hurling Olympics," there is another factor involved, which may surprise you - your blood type.

How do we know this? It's because of a bunch of [lunatics who volunteered to be infected with the virus](#) [4] **(2)**. I'm all for volunteering, especially in the interest of furthering science, but I think I'd prefer to be testing out the efficacy of this instead...



Perhaps I should have thought this through...

To each his own.

The findings:

- Of the 50 lunatics volunteers, 40 got infected.
- Of the 40 who became infected, 27 became sick; 13 did not.
- 10 were not infected at all (and obviously, did not get sick).
- The absence or presence of norovirus antibodies had little impact on infection. In other words, people who had previously been exposed to the virus were as likely to be infected at those who were not.

Assuming that the lunatics in the study represent the population as a whole, we can see that people react very differently to the virus, but not because they've already had it. There must be something else going on. There is - blood type

- People with O type blood were not only more likely to get sick but also got sicker than the other following exposure to norovirus.
- People with blood types AB and B type blood had a lower risk of becoming infected.
- When those in the AB/B groups did get infected they were less likely to get sick.
- People with blood type A were least likely to get the bug.

The infection, or lack thereof, of one of the most contagious pathogens on earth, is clearly a complicated process involving some components of the immune system but not others. There isn't much that you can do with this information, but it is possible to get a DNA test to see how susceptible you are. That is if you believe the idiots at 23andme. This is [from their website](#) [5]. No, I'm not kidding:

*Some people, however, may be safer than most during this time of illness. About 30 percent of people with European ancestry and about 20 percent of those with African ancestry carry the AA version of SNP rs601338 in the FUT2 gene. For these lucky folks need not fear the most common strain of norovirus like the rest of us. They lack the molecules noroviruses use to enter the digestive tract cells. ... Whether you belong to the fortunate ones who carry this extra genetic protection or not, it is still a good idea to keep washing those hands. If you haven't already you also might consider getting a **flu shot** if available."*

Huh???????

OK, here's a company that you may be counting on to provide you with information about your health and they don't know that norovirus has absolutely nothing in common with influenza, except that they both make you sick. They aren't even in the same virus family. A flu shot will provide as much protection from norovirus as a tetanus shot. Or a Tootsie Pop.

So, let's finish with a contest! Let's rename the company.

Prizes will be awarded! The prizes may suck, but they will still be awarded. OK, I'll go first.

21andDumb

NOTE:

(1) Norovirus is the second most common infection. The common cold is first by a lot. Estimates run around one billion cold each year in the US.

(2) How are the volunteers inoculated with the norovirus? You don't want to know.

COPYRIGHT © 1978-2016 BY THE AMERICAN COUNCIL ON SCIENCE AND HEALTH

Source URL: <https://www.acsh.org/news/2019/03/05/do-you-get-stomach-bug-while-others-dodge-it-it-could-be-your-blood-13849>

Links

[1] <https://www.monitor.co.ug/Magazines/HealthLiving/Why-do-we-have-different-blood-types/689846-4868534-3air5xz/index.html>

[2] <https://www.cdc.gov/norovirus/trends-outbreaks/reported-outbreaks.html>

[3] <https://www.cdc.gov/norovirus/trends-outbreaks/burden-US.html>

[4]

https://www.ncbi.nlm.nih.gov/pubmed/8014518?ordinalpos=14&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_F

[5] <https://blog.23andme.com/23andme-research/genetic-armor-in-flu-season/>