Mothers trying to decide whether or not to nurse their children are faced with a sea of confusing information. But despite the conflicting information found on the internet and elsewhere, mothers aren't left with a clear-cut answer. And as for women who do choose to breastfeed, it's not often clear which scenarios call for a suspension of the practice, such as when the mother has the flu.

Mothers looking to the CDC for information will be disappointed. On its website, in the section on caring [1] for this population, there's no mention of whether mothers have to cease breastfeeding, or not, if they are infected. The site does note that breastfeeding mothers should get the seasonal flu vaccine.

Infants under the age of six months do not have a fully-developed immune system and cannot receive the vaccine.

The agency did release guidelines [2] on this scenario six years ago during the H1N1 outbreak, but the site now makes it painfully obvious that the information might be outdated. Nevertheless, what information that is posted states that it's unknown if the virus can be passed through mother's milk, but breastfeeding should continue if the mother is ill because she will pass antibodies to the virus to the infant.

While this is true, it may not be the safest option, as flu antibodies will take days to develop in the mother and in the meantime the infant is being exposed to the virus.

The best thing mom can do to protect her newborn during flu season is to get vaccinated, but the reality is that the annual vaccine is not perfect (as we saw during the 2014-2015 flu season). A vaccinated mom still needs to take precautions to protect her infant, particularly because infants are one of two high-risk groups prone to flu complications (the elderly being the other).

Unfortunately, there haven't been too many studies that have investigated whether the influenza
virus can be transmitted through breast milk. That is, until now.

One recent study [3], published in PLOS Pathogens, did find that the virus was able to transmit from mother to infant via nursing. The researchers used ferrets as subjects, because they have a similar infection course from the influenza virus to humans, and ferret-to-ferret transmission appears to closely mimic human-to-human transmission.

First, researchers infected the infants and found that within a few days mothers were infected with the virus throughout their respiratory tract. Then they reversed course and infected mothers first, and again shortly after this the infants were infected, too.

However, this does not necessarily show the transmission was through breast milk, so the researchers examined the mammary glands of the mothers. They found that all mothers had at least one mammary cell with live and infectious virus. Examination of the milk itself also turned up infectious virus.

They also infected healthy mammary tissue with flu virus and noted that infants subsequently became infected. Taken together these data provide strong evidence that the virus is transmitted via breast feeding.

For the study researchers used the H5N1 virus, which for ferrets was observed to cause more complications than seen in humans. This could mean transmission through milk is a phenomenon unique to ferrets, indicating more work needs to be done. However, the possibility that this may occur in humans highlights the need for women with newborns to take every precaution when protecting their infants from the flu. The easiest and most important of which is to get vaccinated.