



## Dangers of Clostridial Infection after Mifepristone Ingestion for Induced Abortion: A Public Health Concern

Our country is facing a public health crisis. Infections from *Clostridium sordellii* are life-threatening, and they are especially dangerous because of the symptoms – women present *without* a fever and with other non-specific symptoms, like nausea, vomiting, diarrhea, and abdominal pain. They differ from a normal picture of sepsis and require a high index of suspicion on the part of the treating clinician in order to diagnose and quickly treat. **This crisis is being exacerbated by drug-induced abortions.**

Under the current dispensing regime, mifepristone is available online, with no follow up or readily available clinician to address complications. If women experience complications and go to the emergency room, they are told to lie about ingesting mifepristone and instead say they are having a miscarriage.<sup>1</sup> **This recklessness and deception is unnecessarily endangering women.**

### Background

*What are Clostridial infections and what are their symptoms and dangers?*

- *Clostridium sordellii* and *Clostridium perfringens* are bacteria that can cause life-threatening infections after induced abortions.
- Situations which create an environment hospitable to these infections include uterine tissue injured by surgical instruments/trauma, non-viable pregnancy tissue, or clotted blood.<sup>2</sup> All of these are found in induced abortion, specifically mifepristone and misoprostol-induced abortion.
- The danger in these symptoms is that they are also symptoms of a mifepristone abortion as well as side effects of misoprostol<sup>3</sup> and so often a diagnosis is significantly delayed. This delay in care allows for rapid worsening of the infection which can quickly lead to death.

*Does mifepristone increase a woman's risk of these infections?*

- Mifepristone is known to block the body's natural immune responses. Further, its anti-progesterone effects prepare the aborting uterus as the ideal bacterial culture for *C. sordellii* by causing ischemia (inadequate blood supply) that leads to necrotic products of conception (the dying preborn child).
  - Animal experiments support the hypothesis that mifepristone can facilitate infection and lead to lethal septic shock.<sup>4,5</sup>
- There has not been a documented case of *C. sordellii* associated toxic shock syndrome (CSTS) after first trimester miscarriage and only one case of *C. perfringens* fatality in the medical literature.<sup>6</sup>
- Recent reviews find little to no evidence that misoprostol increases the risk of CSTS.<sup>7,8</sup>

*What is the incidence and associated mortality of these infections?*

- From 2003-2005, FDA received reports of the deaths of four women who had recently undergone mifepristone abortions. All were positive for *C. sordellii*.<sup>9</sup>
- These reports ultimately led to a black box warning being placed on mifepristone to warn of the risk of these fatal infections.<sup>9</sup>
- Despite some advances in therapy, mortality from these infections is 70-90%.<sup>1</sup>
- True number of *C. sordellii*-related deaths from induced abortion are likely underestimated due in part to a lack of reporting requirements to the CDC and FDA.

## **Recommendations**

- Given the aggressive nature of these kinds of infections, which are largely occurring after mifepristone-induced abortions, the FDA and CDC should immediately investigate the true incidence of these infections and use that knowledge to direct evidence-based assessment of the overall safety of mifepristone.
- Because these infections have not been documented in first trimester miscarriages (and so suspicion would be low), educate women and the medical community on why it negatively impacts the care women receive for treating physicians not to know that their patient took mifepristone.
- In-person follow up on days 3 and 7 after taking mifepristone is essential to ensure that a woman has completed her abortion and to screen for early signs of these life-threatening infections.
- Urgent research is needed into faster identification and treatment of these infections given their high rate of mortality.
- Mandatory non-fatal complication reporting following mifepristone-induced abortions must be reinstated to identify severe morbidity from *C. sordellii* that does not lead to death.
- CDC must report pregnancy mortality by specific pregnancy outcome (live birth, induced abortion, miscarriage, ectopic pregnancy, molar pregnancy, and “unknown outcome of pregnancy”). Then, analyze the trajectories of mortality over the past 20 years (and going forward) for each of these specific outcomes to better inform policy and medical practice on the true causes of maternal mortality in the US.

## **References**

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