

**Fever:** Fever is less common than shivering and does not in itself indicate infection. Elevated body temperature is often preceded by shivering, peaks 1-2 hours after treatment with misoprostol, and gradually subsides within 2-6 hours. Some populations may be more susceptible to misoprostol's thermoregulatory effects. An antipyretic (e.g. paracetamol) and cool compress can be used for relief of fever, if needed. Fever persisting beyond six hours after misoprostol use may indicate infection requiring additional investigation and/or care.

**Diarrhea, Nausea and Vomiting:** Diarrhea, nausea and vomiting may occur, but are infrequent. Diarrhea should resolve within a day. Nausea and vomiting will resolve 2-6 hours after taking misoprostol. An antiemetic can be used, if needed.

**Cramping:** Cramping or painful uterine contractions, as commonly occur after childbirth, may be stronger after misoprostol administration. Nonsteroidal anti-inflammatory drugs (NSAIDs) or other analgesia can be used for pain relief without affecting the success of misoprostol.

### SUGGESTED CITATION

Instructions for Use: Misoprostol for Treatment of Postpartum Hemorrhage. Gynuity Health Projects. Updated: December 2017.

For more information, refer to [www.gynuity.org](http://www.gynuity.org)

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## INSTRUCTIONS FOR USE



### MISOPROSTOL FOR TREATMENT OF POSTPARTUM HEMORRHAGE

#### BACKGROUND

Misoprostol is a synthetic prostaglandin analog originally registered for the prevention and treatment of gastric ulcers. Misoprostol also induces uterine contractions and is used in gynecology and obstetrics for a variety of indications, including postpartum hemorrhage (PPH).

Primary PPH, heavy blood loss within 24 hours of childbirth, is an obstetric complication that can occur without warning, often in women with no known risk factors, and can quickly lead to death if bleeding is not controlled. The most common cause of primary PPH is uterine atony -- when the uterus fails to contract. Oxytocin, administered intravenously, is considered the gold standard uterotonic treatment for PPH due to uterine atony. If IV oxytocin is unavailable or not feasible, misoprostol is a safe and easy-to-use alternative first line treatment.

Misoprostol is a thermostable tablet that requires no additional supplies or specialized skills for its use. It is effective in controlling postpartum bleeding in both women who receive a prophylactic uterotonic during the third stage of labor as well as those that do not. Active bleeding will be controlled within 20 minutes of administration for nine out of 10 women with PPH caused by uterine atony.



The following information about the correct use of misoprostol for the treatment of PPH is presented for the guidance of healthcare providers.

## INDICATION

Misoprostol is indicated for the treatment of PPH suspected to be due to uterine atony following vaginal delivery.

## RECOMMENDED REGIMEN

The recommended regimen for treatment of PPH is a **single sublingual dose of 800 micrograms (mcg) misoprostol** (four 200 mcg tablets). Note: this is different from the recommended regimen for PPH prevention (600 mcg oral).

## USAGE

Precise blood measurement is not necessary for determining when to administer treatment.

A pre-emptive treatment dose, administered sublingually, can be given to women with above-average blood loss (approximately 350mL or more).

**Sublingual Administration:** When misoprostol is taken sublingually, the woman holds the pills under her tongue for 20 – 30 minutes. Any pill fragments remaining after this time can be swallowed. This route is easy for providers and acceptable to women. In treating PPH, rapid induction of uterine contractions is desirable and is best achieved through the sublingual route which has the fastest absorption, highest serum levels, and highest bioavailability.

Compared to sublingual route, the pharmacokinetic profile for the rectal route of administration is not associated with the best efficacy. Use of the rectal route is not recommended.

It is safe to use misoprostol for treatment of PPH (800 mcg sublingual) if misoprostol has already been used for prevention of PPH (600 mcg oral).

There is no added benefit to providing misoprostol at the same time as oxytocin for treating PPH. Simultaneous treatment with misoprostol and oxytocin does not improve effectiveness and is associated with increased side-effects. When both are available, IV oxytocin is the uterotonic of choice.

## CONTRAINDICATIONS

History of allergy to misoprostol or other prostaglandins.

## PRECAUTIONS

Factors other than uterine atony can cause excessive postpartum bleeding, including vaginal, uterine, and/or cervical injury; blood clotting disorders; and retained placenta. Providers should try to determine if the heavy blood loss is due to one of these factors.

Small amounts of misoprostol or its active metabolite may appear in breast milk. No adverse effects on breast-fed infants have been reported.

## SIDE-EFFECTS

Side-effects are short-lived and easily-managed. Prolonged side-effects are rare.

**Shivering:** It is common for women to experience shivering, sometimes accompanied by fever, following use of misoprostol. Shivering usually occurs within the first hour of use. Use of misoprostol for both prevention and treatment of PPH in the same birth may result in increased post-delivery shivering. This side-effect is transient and will subside within 2-6 hours after administration. A blanket can be used to cover the woman.

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