

when surgery causes menopause

Surgery causes menopause only when both ovaries are removed (called bilateral oophorectomy). Surgery that involves bilateral oophorectomy is performed primarily for various forms of cancer, but ovaries can be removed for treatment of benign (non-cancerous) conditions, such as endometriosis, recurrent infections (pelvic inflammatory disease), or uterine fibroids. In these benign cases, the decision to remove both ovaries depends on the severity of the disease and the woman's age. If you need surgery, ask your physician whether, and to what extent, your ovaries might be affected, so you can provide input on whether your ovaries are removed or retained.



Hysterectomy (surgical removal of the uterus) does not typically cause menopause unless both ovaries are removed as well.

Both ovaries could possibly be removed during the following surgical procedures:

- *Hysterectomy.* Surgical removal of the uterus performed for benign conditions (such as endometriosis, uterine fibroids) and for various forms of cancer (endometrial, ovarian, cervical). Depending on your age and the reasons for your hysterectomy, your surgeon may be able to leave one or both of your ovaries intact.

Hysterectomy without removal of the ovaries does not usually cause menopause, but menstrual bleeding will stop. However, removal of the uterus occasionally results in menopause even if one or both ovaries are left in place. Some experts believe this occurs because removal of the uterus lessens the blood supply to the ovaries.

- *Abdominoperineal Resection.* Performed for colon cancer. Involves removal of the lower colon and rectum and – sometimes – the uterus, ovaries, and rear wall of the vagina.
- *Total Pelvic Exenteration.* Usually performed only when cervical cancer has recurred after surgery or radiation. Involves removal of the uterus, cervix, ovaries and fallopian tubes, vagina, urethra, and rectum.