

# Protocol Template: Implant Placement and Removal Services

## Introduction

[NAME OF SETTING] offers contraceptive implant placement and removal services for all individuals that may be able to become pregnant and do not desire pregnancy at this time.

The implant is available in the United States as a single rod with 68mg of etonogestrel. The FDA has approved the duration of use for up to 3 years.

**NOTE:** Post-marketing studies show the implant is effective for 5 years. Clients should be counseled regarding the effectiveness of the implant beyond the FDA-approved duration of 3 years. The decision to replace the implant at 3 or 5 years should be accomplished using shared decision-making with the client.<sup>1</sup>

## Mechanism of Action

The implant works to prevent pregnancy by releasing progestin, which prevents ovulation. Fewer than 1 out of 100 users become pregnant in the first year of use. Implants are long-acting, reversible, and can be used by individuals who can conceive in all age groups, including adolescents. The implant does not protect against sexually transmitted infections (STIs).<sup>2</sup>

## Medical Eligibility

To determine if the patient is a candidate for the etonogestrel implant, the [U.S. Medical Eligibility Criteria](#) can be utilized based on the patient's medical history.<sup>3</sup>

## Initiation

To determine when to insert the implant, the CDC's "[How to Be Reasonably Certain a Woman is Not Pregnant](#)" criteria can be used.<sup>4</sup>

- If the patient meets any one of the "Box 2" criteria, it is acceptable to insert the implant same day.
- If the patient cannot meet any one of the "Box 2" criteria, utilize [the U.S. Selected Practice Recommendations](#) to determine the timing of insertion and if a backup method is needed.<sup>5</sup>

## Protocol Purpose

Client-centered contraceptive counseling may be done at the time of the implant placement or at a separate visit.<sup>5</sup> This protocol applies only to the

implant insertion visit which may occur the same day or on a separate visit. All healthcare providers performing insertions and/or removals of the implant should receive instructions and training prior to inserting or removing the implant.<sup>6</sup>

## Implant Insertion

### Pre-Insertion

- Confirm the client's identity and the reason for their visit (chief complaint).
- Weight measurement is not required for eligibility. However, baseline BMI (height and weight) are helpful to monitor changes in weight associated with their contraceptive method.<sup>4</sup>
- Complete/update the client's medical history to include the following:
  - First day of LMP and end date of last pregnancy, date of last sexual intercourse, current method of contraception, and if currently breastfeeding
  - History of medical conditions (i.e. hypertension, diabetes, vascular heart disease, stroke, lupus with positive or unknown antiphospholipid antibodies, current or past history of breast cancer, liver disease, cirrhosis, etc.)
  - Review of systems: screen for unexplained vaginal bleeding<sup>3</sup>
  - Review of current medications and supplements for contraindications/drug interactions
  - Surgical history, when applicable

### Counseling and Consent

- Perform client-centered contraceptive counseling, prioritizing the patient's values, preferences, and lived experiences in the selection or discontinuation of a contraceptive method.<sup>5</sup>
- Discuss the risks, benefits, and common side effects of the implant.<sup>6</sup>
- Inform the client the implant is not an effective form of contraception for 7 days after insertion. Recommend the client abstain from sex, or use an alternative contraceptive method during this period.
- Ask the client if they have any questions, and have them sign the consent form.

## Procedure Setup

- Iodine (alternative skin antiseptic if allergic)
- Surgical marker/pen to mark insertion site and guiding mark
- Syringe with 2-3cc of lidocaine 1% (with or without epinephrine)
- Sterile gloves
- Sterile gauze
- Small adhesive bandage or steri strips
- Pressure bandage

## Insertion Procedure

- Place client in supine position with their non-dominant arm bent at the elbow and their hand under the head.
- Locate and mark insertion site (A) with a surgical marker or pen located at the intersection of 8-10 cm from the medial epicondyle and 3-5 cm below the sulcus groove between the bicep and triceps muscle.
- Mark second mark (B) 2 inches proximal (toward the shoulder) as a guiding mark.
- Clean the insertion site with iodine (or alternate antiseptic solution if allergic).
- Inject 2-3cc of 1% lidocaine (with or without epinephrine) along the insertion canal from point A to B.
- Slide cap horizontally from implant inserter and verify white progesterin rod is in inserter.
- With the skin stretched, insert the needle bevel just below the skin at a 20-degree angle.
- Once only the bevel is under the skin, drop the wrist and tent up the skin, lifting the inserter as you slide the needle in fully.
- With the needle fully inserted, hold the inserter steady while you pull down on the purple flange on the top of the inserter. This pulls back the needle allowing the implant to lie in position.
- Confirm placement with palpation and ask the client to palpate the implant.
- Use sterile gauze to control any bleeding.
- Affix a small adhesive bandage/steri strip followed by pressure dressing.<sup>7</sup>

## Homecare Instructions

- Client should be counseled to leave pressure dressing in place for 24 hours, then it can be removed.
- Continue to wear a small adhesive bandage/steri strip for 2-3 days.
- Call the clinic or return if any redness, swelling, heat, drainage, or tenderness.<sup>7</sup>

## Follow-Up

Clients may return at any time to discuss side effects, concerns, desire to change methods, or when it is time to remove or replace the method. No routine follow-up visit is required.

During routine visits, assess satisfaction with the method, any concerns, changes in health status, and weight changes.<sup>4</sup>

## Documentation

The implant template prebuilt into the EHR is the most efficient method to document the procedure. The template should include, but is not limited to:

- Right or left arm for placement
- Location of the insertion site
- Amount and type of lidocaine injected (i.e., 2.5 cc 1% lidocaine with epinephrine)
- Confirmation of placement by palpation by provider and client (if desired)
- Hemostasis and bandage applied
- Client tolerance of the procedure
- Lot number, expiration date, and removal date for implant

## Implant Removal

The client may return any time during the 3-year period<sup>1</sup> for removal. Patient should be counseled that within 7-14 days their normal state of fertility will return. Therefore, if they do not wish to become pregnant, another method of choice should be offered.<sup>7</sup> All healthcare providers performing insertions and/or removals of the implant should receive instructions and training prior to inserting or removing the implant.

### Client Intake

- Confirm the patient's identity and reason for their visit (chief complaint).
- Weight measurement is not required for eligibility, however, baseline BMI (height, and weight) helpful to monitor changes in weight associated with their contraceptive method.<sup>4</sup>
- Obtain/update medical history if the client wishes to start another method of contraception.

### Counseling and Consent

- Perform client-centered contraceptive counseling, prioritizing the patient's values, preferences, and lived experiences in the selection or discontinuation of a contraceptive method.
- Complications related to removal may include pain, tingling, bleeding, bruising, scarring, or infection.<sup>7</sup>
- Assess the location of the implant, exact location, and that it is easily palpable.
- After giving the client time to ask and have questions answered have the client sign the removal consent form.

### Procedure Set Up

- Iodine (alternative skin antiseptic if allergic)
- Sterile gloves
- Sterile scalpel #11 blade
- Surgical marker/pen to mark head of the implant
- Syringe with 0.5-1 cc of lidocaine 1% (with or without epinephrine)
- Sterile gauze
- Steri-strips for wound closure
- Small adhesive bandage
- Pressure bandage

### Implant Removal Procedure

- Place client in supine position with implant arm bent at elbow and hand under head.
- Locate the implant by palpation. Push down at the end of the implant and mark the bulge of the tip of the implant. Mark the tip of the implant.
- Clean site with iodine (or alternate antiseptic solution if allergic).
- Inject 0.5-1 cc of 1% lidocaine (with or without epinephrine) where the incision will be made. Note: inject lidocaine underneath implant to keep implant close to surface.
- Push down on the distal portion of the implant to keep it stable while making a 2 mm longitudinal (parallel to the implant) incision.
- The tip of the implant should be visible and can be removed with forceps.
- If the tip is not visible, gently push the implant toward the incision until the tip is visible and can be grasped with forceps.
- If needed, gently remove adherent tissue using blunt dissection.
- If the implant is not exposed using blunt dissection, make an incision into the tissue sheath then remove implant with forceps.
- Use sterile gauze to control bleeding.
- Upon implant removal, provider and patient are to view the implant and verify entire implant (4 cm) was removed.
- Apply steri-strip to close small incision.
- Affix small adhesive bandage followed by pressure dressing.<sup>7</sup>

### Homecare Instructions

- Client should be counseled to leave pressure dressing in place for 24 hours, then it can be removed.
- Continue to wear small adhesive bandage/steri strip for 2-3 days. Steri-strips will fall off on their own within 4-5 days.
- Call clinic or return if any redness, swelling, heat, drainage, or tenderness.

## Follow-up

Clients may return at any time to discuss side effects, concerns, or desire to restart/change methods. No routine follow-up visit is required.

## Documentation

The implant removal template prebuilt into the EHR is the most efficient method to document the removal procedure. The template should include, but is not limited to:

- Right or left arm for removal
- Location of the removal site
- Amount and type of lidocaine injected (i.e., 1 cc 1% lidocaine with epinephrine)
- Confirmation of removal of 4 cm implant by provider and client (if desired)
- Hemostasis and steri-strip/adhesive bandage applied
- Client tolerance of the procedure
- Patient's choice of contraceptive method (if desired)

## References

- 1 Dethier, D., Qasba, N., & Kaneshiro, B. (2022). Society of family planning clinical recommendation: Extended use of long-acting reversible contraception. *Contraception*, 113(2022), 13-18. <https://doi.org/10.1016/j.contraception.2022.06.003>
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- 3 Curtis, K.M., Tepper, N.K., Jatlaoui, T.C., Berry-Bibee, E., Horton, L. G., Zapata, L. B., Simmons, K. B., Pagano, H. P., Jamieson, D. J., & Whiteman, M. K. (2016). U.S. medical eligibility criteria for contraceptive use, 2016. *Morbidity and Mortality Weekly Report*, 65(3), 1–104. <http://dx.doi.org/10.15585/mmwr.rr6503a1>
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- 5 Committee on Health Care for Underserved Women and Committee on Ethics. (2022). American College of Obstetricians and Gynecologists Committee Statement: Patient-centered contraceptive counseling. American College of Obstetricians and Gynecologists. <https://www.acog.org/-/media/project/acog/acogorg/clinical/files/committee-statement/articles/2022/02/patient-centered-contraceptive-counseling.pdf>
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