

This decision support tool is effective as of February 2014. For more information or to provide feedback on this or any other decision support tool, email [certifiedpractice@crnbc.ca](mailto:certifiedpractice@crnbc.ca)

---

## GENITAL WARTS

---

### DEFINITION

Skin or mucosal infection caused by the genotypes of Human Papillomavirus (HPV). HPV is one of the most common STI.

Currently, there are more than 130 types of HPV classified on the basis of DNA sequence; 40 of these types can infect the anogenital skin. Genital warts are rarely found in the mouth. HPV types are classified in terms of low to high risk based on their association to cervical, anal and penile cancers.

### CAUSES

Human Papilloma Virus

### PREDISPOSING RISK FACTORS

- sexual contact where there is skin to skin contact with an individual who has HPV infection
- immunosuppression (HIV infection, organ transplant and immunosuppressive drug therapy)

### TYPICAL FINDINGS

#### Sexual Health History

- client may describe a change in the affected area from “normal” to a wart-like or bumpy appearance
- at least one sexual partner
- may report either current or past partner as having HPV infection presently or in the past
- condoms may or may not have been used for sexual contact
- may describe bumps that are painless
- may have received HPV vaccine
- may report itching/irritation to affected area (particularly when perianal warts are present)

---

CRNBC monitors and revises the CRNBC certified practice decision support tools (DSTs) every two years and as necessary based on best practices. The information provided in the DSTs is considered current as of the date of publication. CRNBC-certified nurses (RN(C)s) are responsible for ensuring they refer to the most current DSTs.

The DSTs are not intended to replace the RN(C)'s professional responsibility to exercise independent clinical judgment and use evidence to support competent, ethical care. The RN(C) must consult with or refer to a physician or nurse practitioner as appropriate, or whenever a course of action deviates from the DST.

THIS DST IS FOR USE BY REGISTERED NURSES CERTIFIED BY CRNBC

© CRNBC April 2014/Pub. 726

**Note:** Most anogenital HPV infections are asymptomatic and subclinical.

## Physical Assessment

### Males

- may appear in clusters or as single bumps on the penis, scrotum, anal and perianal area (HPV in the mouth is rare)
- usually painless
- may cause bleeding and pruritus (perianal)
- may appear as:
  - flat
  - cauliflower-like
  - flesh coloured
  - darker in color than surrounding skin

### Females:

- may appear in clusters or as single bumps in the vulva, vaginal introitus, cervix and anal or perianal area (HPV in the mouth is rare)
- usually painless
- may cause bleeding and pruritus
- may appear as:
  - flat
  - cauliflower-like
  - flesh coloured
  - darker in color than surrounding skin

## Diagnostic Tests

Full STI screening is recommended for men and women when they are initially assessed for genital warts to rule out other STI presentations such as syphilis condylomata lata that may look like genital warts.

- diagnosis is confirmed through clinical findings from visual inspection
- routine diagnostic screening for genital HPV is not currently available
- routine Pap testing for women as per British Columbia Cancer Agency Guidelines
  - the presence of genital warts is not an indication for a change in routine Pap screening recommendations

## CLINICAL EVALUATION

### On clinical findings of HPV

- review all treatment options with client
- treatment of internal warts including intravaginal, cervical, and rectal requires referral to a physician or nurse practitioner for treatment.

## MANAGEMENT AND INTERVENTIONS

### Goals of Treatment

- mainly aesthetic, to remove visible warts
- reduce transmission

## TREATMENT OF CHOICE

Review anogenital wart treatment options with client, including benefits and risks of each. Cryotherapy and Trichloroacetic acid (TCA) are not scheduled drugs. The treatment of anogenital warts with these substances are carried out by RN(C)s<sup>1</sup> according to the *CRNBC Standards for Acting Without an Order*. For use of alternate cryotherapeutic agents, follow agency specific guidelines and policies.

The treatment options are:

- defer treatment and monitor – many genital warts will resolve spontaneously
- client-applied: consult/refer required for assessment and prescription drugs such as Imiquimod or Podofilox. These treatment options can be expensive.
- provider-applied:
  - First Choice: Cryotherapy with liquid nitrogen (preferred) or alternate cryotherapy regimens approved for the treatment of genital warts (e.g. dimethyl ether propane (Histofreezer®))
  - Second Choice: Podophyllin 10% tincture or 25% resin
  - Alternate: Trichloroacetic acid (TCA)

### First Choice: Cryotherapy with liquid nitrogen

Note: Over the counter (OTC) cryotherapeutic remedies for wart treatment are *not* indicated for the treatment of genital warts. OTC package insert: indications for use do not include condyloma acuminata. Further, clinical diagnosis is required prior to treatment recommendation.

---

<sup>1</sup> Note: RN(C) is an [authorized title](#) recommended by CRNBC that refers to CRNBC-certified RNs, and is used throughout this Decision Support Tool (DST).

**METHOD OF USE:**

1. May be applied using spray canister or swab. Adjust lighting and use magnification as needed.
2. Stretch the area to be sprayed or dabbed with swab as required. If applying by canister, hold the spray nozzle approximately 1 cm away from the skin. Distance may vary slightly dependent on amount of freezing required.
3. Spray intermittently to create and maintain a whitish frozen area involving the wart, with a halo of 1-2 mm around the wart. Or alternatively using a swab, apply to wart to sufficiently cover the wart and a 1-2 mm halo around the wart. Freeze should be maintained for 5-10 seconds post-application.
4. Allow to thaw. The frozen whitish area returns to normal colour (may be slightly reddened).
5. Repeat steps 2 to 4 for 1 or 2 more treatment cycles, depending on wart location – see bullet below:
  - 2 cryotherapy treatment cycles for all visible warts, 3 treatment cycles for any warts at the urethral meatus or in the perianal area
6. Treatment is repeated every 7 to 14 days. Ensure previously treated areas are completely healed prior to subsequent treatment.

**Second Choice: Podophyllin 10% or 25%****DO NOT USE Podophyllin:**

- in pregnancy
- for the treatment of any internal warts – cervical, meatal, vaginal, or anal. Podophyllin may be used around, but not in the meatus, around the introitus, but not in the vagina or on the cervix, and around, but not in the anus.
- on open sores or excoriated skin

**METHOD OF USE:**

1. Measure out 0.5 ml Podophyllin using syringe/needle.
2. Dab Podophyllin on warts with cotton swab – limit the area of application to < 5cm<sup>2</sup>. The dose per visit is not to exceed 1.0 mL.
3. Allow area to dry.
4. Remind the client to wash off the Podophyllin in 1-4 hours or sooner if irritation occurs.
5. Podophyllin application may be repeated at seven day (weekly) intervals (see Note 2 and consult and referrals for maximum number of applications).

**Notes:**

1. Side effects of treatment may include mild to moderate local skin reactions which may include discomfort, tenderness, stinging or pain at the site. Blistering, erythema and itching may also occur. Reactions are managed by decreasing the intensity of future treatments.
2. If there is no improvement in the warts after 3 provider-applied treatment sessions, consider adding additional treatment options (e.g., Cryotherapy first, then apply Podophyllin to the treated area with instructions to wash off within 1-4 hours).

### **Alternate Treatment: Trichloroacetic acid (TCA)**

#### **DO NOT USE TCA:**

- for the treatment of any internal warts – cervical, meatal, vaginal, or anal.
- on open sores or excoriated skin.

#### **METHOD OF USE:**

1. Measure out small amount using syringe/needle.
2. Apply petroleum jelly or 2% Xylocaine ointment to the surrounding area to protect healthy skin.
3. Use a cotton swab to dab the acid preparation on. Apply sparingly.
4. Allow area to dry until a “white frosting” appearance is noted. Do not need to wash off.
5. Can be used weekly for up to 6-8 weeks.

#### **Notes:**

1. TCA is a highly caustic solution that can cause blistering and ulcerations if used in excess. The viscosity is lower than water, and can spread very quickly.
2. If painful, soap or sodium bicarbonate can be used to neutralize the area. Powder the area with talc or sodium bicarbonate, or apply soap to any un-reacted acid.

### **PREGNANT OR BREASTFEEDING WOMEN**

- for clients who are pregnant or breastfeeding consult/refer to physician or nurse practitioner
- Podophyllin is contraindicated in pregnancy

### **PARTNER COUNSELLING AND REFERRAL**

Counsel client to recommend their sexual partners have an examination for genital warts.

## POTENTIAL COMPLICATIONS

- pre-cancerous or cancerous lesions from co-infection with specific HPV subtypes
- overgrowth of external warts in immune compromised individuals
- perinatal transmission (rare)
- recurrent episodes of growth after treatment

## CLIENT EDUCATION

### Counsel client:

- that genital warts are common
- that routine Pap testing is recommended and that clinical findings of genital warts is not an indication for a change in the frequency of Pap testing
- that they may be eligible for a HPV vaccine that can protect against some strains of HPV
- that external visible warts are generally not associated with cancer of the cervix, they are considered low-risk and are usually benign
- that warts may resolve on their own and most people will clear the virus within 24 months even without treatment.
- treatment is mainly aesthetic to remove visible warts; a small risk of recurrence remains until the virus is completely cleared
- that genital warts are sexually transmitted through skin to skin contact (condoms are helpful in reducing transmission when they cover the area of skin that is affected by HPV)
- that HPV is transmissible whether or not there are visible warts present on the affected skin
- if they are HIV positive, to follow up with their HIV care provider for potential further follow up and/or screening (e.g. anal Paps for men who have sex with men ).
- that it is possible to be infected by more than one strain of HPV
- that most people are asymptomatic and that partners who are both infected with HPV can have different clinical manifestations (e.g., one person may be asymptomatic while the other may experience visible affects such as warts)
- that side effects of treatment may include mild to moderate local skin reactions which may include discomfort, tenderness, stinging or pain at the site. Blistering, erythema and itching may also occur. Reactions are managed by decreasing the intensity of future treatments.

## CONSULTATION AND/OR REFERRAL

Consult a physician or nurse practitioner for clients who:

- have received 6 to 8 treatments, spaced 1-2 weeks apart (depending on type of treatment) for the same outbreak as recommended, and the warts persist
- are pregnant and/or breastfeeding
- have warts that are atypical in appearance, are larger than 1-2cm or have suspicious pigmentation
- have internal genital warts
- have an unusual, unexpected or severe reaction to genital wart treatment
- are unable to tolerate cryotherapy or other provider applied treatment and require a prescription for client applied treatment

## DOCUMENTATION

- HPV is not reportable
- as per agency policy

## REFERENCES

For help obtaining any of the items on this list, please contact CRNBC Helen Randal Library at [circdesk@crnbc.ca](mailto:circdesk@crnbc.ca)

More recent editions of any of the items in the Reference List may have been published since this DST was published. If you have a newer version, please use it.

Abdullah AN, Walzman M, Wade A. Treatment of external genital warts comparing cryotherapy (liquid nitrogen) and Trichloroacetic acid. *Sex Transm Dis* 1993;20:344–345

B.C. Cancer Agency. (n.d.). Office Manual Collection Procedures for Diagnostic Cytology. Retrieved from <http://www.bccancer.bc.ca/NR/rdonlyres/1D3B57D3-75D8-45AD-9C6A-B741FC75AFDC/52239/Cytology91.pdf>

British Columbia Centre for Disease Control. (2014). *British Columbia treatment guidelines. Sexually transmitted infections in adolescent and adults*. STI/HIV Prevention and Control Division, B.C. Centre for Disease Control.

Breen, E. & Breen, R. (2013). Condylomata acuminata (anogenital warts). In A. O’Ofori (Ed.), *UpToDate*. Retrieved from <http://www.uptodate.com>

Centers for Disease Control and Prevention. (2010). Genital Warts. *Sexually Transmitted Diseases Treatment Guidelines 2006*. CDC - Division of STD Prevention National Centre for HIV/AIDS. Retrieved from <http://www.cdc.gov/STD/treatment/2006/genital-warts.htm>

College of Registered Nurses of British Columbia. (2013). Scope of Practice for Registered Nurses. Standards, Limits, Conditions. Retrieved from <https://www.crnbc.ca/Standards/Lists/StandardResources/433ScopeforRegisteredNurses.pdf>

Godley MJ, Bradbeer CS, Gellan M, Thin RN. Cryotherapy compared with Trichloroacetic acid in treating genital warts. *Genitourin Med* 1987;63:390–392.

National Skin Center. (2008). Dermatological nursing: Cryotherapy for viral warts. National Skin Center. Retrieved from <http://www.nsc.gov.sg/showpage.asp?id=323>[4/10/2013 10:45:28 AM]

OraSure Technologies, Inc. (2007). Histofreezer® portable cryosurgical System: directions for use. Orasure Technologies, Inc. Bethlehem PA. Retrieved from [http://www.histofreezer.com/intl/pdf/3001-1498\\_1107\\_NE\\_GB\\_PL.pdf](http://www.histofreezer.com/intl/pdf/3001-1498_1107_NE_GB_PL.pdf)



Public Health Agency of Canada. (2008). *Canadian guidelines on sexually transmitted infections* (updated January 2008). Retrieved from <http://www.phac-aspc.gc.ca/std-mts/sti-its/index-eng.php>