Developed in collaboration with the Wound Care Champions, Wound Care Specialists, Enterostomal Nurses, and South West Regional Wound Care Program (SWRWCP) members from Long Term Care Homes, Hospitals, and South West CCAC contracted Community Nursing Agencies in the South West Local Health Integration Network.	
Title	**Guideline and Procedure: Conservative Sharp Wound Debridement (CSWD)**

Background[1-5]	• CSWD is the removal of loose, de-vascularized tissue, callus, or hyperkeratotic tissue (above the level of viable tissue), using sharp instruments, i.e. scalpel, scissors and/or a curette
	• Under the 1991 Regulated Health Professions Act (Ontario), debridement is within the controlled acts authorized for nursing
	• An RN or RN(EC) who meets certain conditions, i.e. has the knowledge, skill, and judgment, may initiate and/or provide an order for an RN or RPN to perform care below the dermis or mucous membrane, which includes cleansing, soaking, irrigating, probing, **debriding**, packing, and dressing, as per the College of Nurses of Ontario standard, 'Decisions About Procedures and Authority'[1]
	• However, the Long Term Care Homes Act and the Public Hospitals Act do **NOT** allow a nurse to **initiate** CSWD in the hospital or in a long-term care home in the absence of a physician's order. Nurses working in the community setting do not have an Act that precludes this, and therefore may initiate CWSD in the absence of a physician order. However, it is **strongly** suggested that the community nurse communicate with the physician to inform them of any intent to perform CSWD and to collaborate with them, documenting these actions. Some community nursing agencies require that nurses obtain a physician order prior to initiating CSWD for legal protection (please abide by your organization's policy)
	• As CSWD is not generally included in the RN's basic preparations, it is **strongly** suggested that RNs successfully complete additional education/training in CSWD and follow an established institutional policy when carrying out CSWD. NOTE: there are NO known credible certificate programs available that provide certification in CSWD. At this time it is up to each employer to create a competency-based learning and mentoring program in order to teach the skill, and to develop policies and procedures that include, at a minimum, sections on scope of practice, assessment of the individual, indications and contra-indications, management of pain, correct equipment and action in case of unexpected bleeding, expected outcomes, and consequences of inappropriate debridement. It is up to the nurse to maintain competency in CSWD
	• A nurse who performs CSWD is expected to have:
	  ○ The ability to determine the appropriateness of the procedure;
	  ○ Knowledge of the purpose, indications, contraindications,

	risks, expected outcomes, and health teaching and decision support to safely and appropriately execute the procedure; o Knowledge of relevant anatomy; o The capability to identify viable and non-viable tissue; o Access to appropriate equipment, lighting and assistance; o The capacity to explain the procedure and obtain informed consent; o The ability to manage pain prior to, during, and following the procedure; o The skill to deal with complications, such as bleeding; o Recognition of skill limitations and those of the technique; o The ability to adhere to infection control practices; o The ability to utilize secondary debridement techniques, if needed, and; o The authority to perform the procedure, including an institutional policy and procedure to follow. • People undergoing CSWD require an interdisciplinary approach to provide comprehensive, evidence-informed wound assessment and treatment
Indications and Contraindications[2-5]	**CSWD is indicated if:** • The person has been holistically assessed by an interdisciplinary team and their wound has been deemed 'healable', i.e. there is adequate blood supply to the wound, the person agrees to the plan of care and their concerns have been addressed to their satisfaction, and the person's heath/risk factors for healability have been optimized (see "Determining Healability Tool"), for the purpose of removing non-viable, contaminated and/or infected tissue to reduce the bacterial burden, reduce exudates, better manage odor, and/or promote wound closure • The wound etiology has been determined and the wound is not malignant, arterial, inflammatory, stable gangrene, or a stable dry necrotic heel ulcer, as regardless of healability stable dry necrotic heels are not debrided • The person does not have any clotting disorders and is not on any anticoagulant medications • There is advancing cellulitis or sepsis associated with necrotic tissue and the person is taking and responding to systemic antibiotics **CSWD should be carried out with CAUTION, in collaboration with the person's primary care practitioner, and in a controlled setting if:** • There is evidence of moderate to severe arterial compromise, i.e. an ankle brachial index (ABI) less than 0.6 or greater than 1.2 • The person has an untreated systemic infection or sepsis • There is exposed bone, ligament and/or tendons • The person has significant wound pain or pain is anticipated with

	debridement • The person takes anti-platelet and/or anticoagulant medications and their Hgb is less than 70g/L, their PTT is greater than 45 seconds, their INR is greater than 1.3, and/or their platelet count less than 100 giga/L (lab values must be less than ten days old) • The person has an absolute neutrophil count less than $500mm^3$ • Pyoderma gangrenosum is the wound etiology (CSWD may result in further inflammation and ulceration) **CSWD is contraindicated if:** • The wound is proximal to a prosthesis or device, i.e. an a-v dialysis shunt, arteries, grafts, or tendons • Underlying structures cannot be clearly identified • The interface between viable and non-viable tissue cannot be clearly identified • The person has a PTT greater than 65 seconds, an INR greater than 2.5, and/or a platelet count less than 75 giga/L (bloodwork should be less than 10 days old) • The wound etiology is malignant, inflammatory, or arterial • The wound presents as a heel ulcer covered in dry stable black eschar (regardless of healability) • The person has a traumatic wound or skin tear/pre-tibial injury and has NOT had a tetanus shot in the past 10 years (tetanus vaccination must take place prior to debridement) • The nurse is unable to maintain aseptic technique for any reason This procedure is intended to be used by front line registered health care providers trained and competent in CSWD, to assist with their management of individuals admitted with or presenting with a healable wound containing necrotic tissue, that is appropriate for CSWD.
Procedure	**NOTE: The use of the following procedure is but one part of the holistic management of an individual admitted with or presenting with a healable wound that contains necrotic tissue, and that is appropriate for CSWD.** **Assessment** 1. Thoroughly review the person's available medical records: a. To glean information to help you determine whether the person and their wound are appropriate for CSWD (see the indications, precautions, and contraindications noted above) b. To determine orders for wound care, wound debridement, and/or application of topical agents c. To ensure that the wound is considered 'healable', and that all person-centered concerns (including **PAIN**) and

risk factors for wound healability have been addressed

d. To determine if the person has any allergies that may affect the implementation of CSWD

Planning

1. Expected outcomes:
    a. Information from the person's chart, the person and/or their substitute decision maker (SMD)/power of attorney for personal care (POA C), and your assessment will allow for accurate selection of appropriate CSWD candidates
    b. The person reports minimal discomfort associated with the procedure and experiences no or very little/controllable bleeding
    c. There is a reduction in the amount of necrotic tissue
    d. Saap and Falanga (2002) developed a system with which to document the status of a neurotrophic diabetic foot ulcer and the degree of debridement performed, called the Debridement Performance Index (DPI)[6]:

Category	Debridement Intervention			
	Needed But Not Done	Needed and Done	Not Needed	Score
Callus	0	1	2	0 to 2
Skin undermining	0	1	2	0 to 2
Wound bed necrotic tissue	0	1	2	0 to 2

DPI = Total score 0 to 6

    e. Registered nursing staff, in collaboration with other involved health care disciplines, the person with the wound and/or their SDM/POA C (if applicable), will be able to use the information gleaned from the debridement process to initiate/modify and implement an appropriate, interdisciplinary, person-centered plan of care which contains clear directions to staff and others who are providing the person with direct care
2. Explain the procedure and its purpose to the person and/or their SDM/POA C, and obtain informed verbal or implied consent
3. Assess the need for pre-debridement analgesia. If required, the person **must** be allotted enough time to allow for the drug's peak effect to take place BEFORE initiating CSWD

Implementation

1. Provide for privacy and ensure that the person is in a comfortable position that will allow the nurse to easily access the wound in the most optimal ergonomic position for themselves
2. Ensure you have someone available to assist with stabilization of the area to be debrided if the person has known involuntary movements

	or spasms 3. Wash your hands and attend to the person with your wound documentation tool and dressing/debridement supplies 4. Ensure adequate lighting 5. Don clean disposable gloves and expose the person's wound by removing the existing wound dressing as per the manufacturer's instructions. You may consider application of gown, goggles, and/or mask if the risk for spray or splash back exists. Observe the dressing for drainage characteristics 6. Dispose of the soiled dressings and your gloves in the appropriate receptacle 7. Wash your hands and apply a new pair of clean disposable gloves and cleanse the wound as per the SWRWCP's "Dressing Selection and Cleansing Enabler – Healable". If required, gently pat the wound dry with gauze 8. Assess the wound using the "NPUAP PUSH Tool 3.0" (see "Procedure: NPUAP PUSH Tool 3.0") 9. Remove and dispose of your gloves and wash your hands 10. Set up the sterile dressing tray and add the required sharp instruments (sterile) and supplies (sterile) to the sterile field in an aseptic fashion. Instruct the person NOT to touch the dressing field 11. Don sterile gloves 12. Initiate CSWD: a. Using tissue forceps, gently grasp the edges of the necrotic tissue, lifting it to reveal the separation between viable and non-viable tissue, and then begin removing the necrotic tissue in layers, using a scalpel, scissors, curette or a combination of tools: i. Scalpel technique: hold the scalpel like a pen, 3-4cm away from the handle/blade joint. Cut using the belly of the blade with the scalpel parallel to or angled away from the wound bed. Movement of the scalpel should follow tissue planes ii. Scissor technique: Hold the scissors using a tripod grip (the thumb and ring fingers are through the scissor handles, and the index finger rests on the area of the scissors distal to the screw). Use the tip of the scissors to carefully cut away necrotic tissue iii. Curette technique: Hold the ring curette like a pen at a 10-20 degree angle toward the area to be debrided. Stretch the skin-wound base with the non-dominant hand, and move the curette toward yourself, scraping away loose non-viable tissue b. Remove as much necrotic tissue as is safely possible, but

limit CSWD to a 15 minute session

c. Aggressiveness of debridement should be guided by:
    i. The amount of necrotic tissue present
    ii. The person's pain tolerance limits
    iii. Person and practitioner fatigue
d. S**TOP** CSWD if bleeding occurs.
    i. Apply direct pressure with sterile gauze for a minimum of five minutes. If possible, elevate the bleeding area above the level of the heart
    ii. If bleeding continues, apply silver nitrate to the specific bleeding site, followed by direct pressure and elevation (if possible) for another five minutes (minimum). You may consider application of ice as well
    iii. For small amounts of oozing blood, use calcium alginate dressings to manage bleeding
e. **STOP** CSWD if pain occurs:
    i. Offer the person an analgesic and resume debridement once the analgesic has taken effect, if the person so agrees. If not, complete the debridement at another time
f. STOP CSWD if there is:
    i. Impending bone or tendon
    ii. You are close to a fascial plane or other underlying structure
    iii. You feel uncomfortable or nervous

13. Once debridement is completed (or 15 minutes has passed), cleanse and dress the wound as ordered or as per the Program's "Dressing Selection and Cleansing Enabler – HEALABLE"
14. Remove gloves and other personal protective equipment and dispose of them and of soiled supplies in the appropriate receptacle
15. Dispose of sharps in a sharps container
16. Clean reusable equipment/surfaces touched during the procedure with soap and water or detergent wipes and dry thoroughly to prevent cross infection, returning reusable equipment to the appropriate places
17. Wash your hands
18. Assist the person to a comfortable position if required, and assess for any concerns
19. Educate re the importance of monitoring/reporting any unintended outcomes
20. Lower the person's bed to an appropriate height (if applicable), and ensure the person's safety, i.e. apply side rails, personal alarms, restraints, etc. as per the person's care plan/medical orders
21. Discuss your findings of the assessment and your thoughts re the debridement procedure with the person and/or their SDM/POA C and

	implement referrals and further interventions as indicated 22. Share your wound assessment and debridement results/outcomes with the interdisciplinary members of the person's wound care team. Immediately contact the person's primary care provider if: a. The person presents with an elevated temperature b. The wound has not been reducing in surface area as expected c. There are signs of cellulitis or gross purulence/infection d. There is impending bone or tendon exposure e. An abscessed area is anticipated or exposed f. An extensively undermined area is observed 23. Complete/update and initiate an appropriate, person-centered, interdisciplinary plan of care, based on your holistic assessment and interventions, and as per your organization's policy **Evaluation** 1. Unexpected outcomes: a. The wound bleeds uncontrollably with debridement b. The person reports poorly managed pain associated with the procedure c. The person develops an acute wound infection secondary to poor debridement technique 2. Determine and subsequently determine if the CSWD procedure was successful, i.e. there is a reduction in the amount of necrotic tissue present and the wound proceeds to timely closure
References	1. College of Nurses of Ontario. Decisions about procedures and authority. Pub. No. 41071. Toronto. Last retrieved October 21, 2014 from: http://www.cno.org/Global/docs/prac/41071_Decisions.pdf 2. Harris RJ. The nursing practice of conservative sharp wound debridement: promotion, education, and proficiency. Wound Care Canada. 2009;7(1):22-30. 3. Sibbald RG, et al. Best practice recommendations for preparing the wound bed: update 2006. Wound Care Canada. 2006;4(1):15-29. 4. Sibbald RG, et al. Preparing the wound bed – debridement, bacterial balance, and moisture balance. Ostomy Wound Management. 2000;46(11):14-35. 5. Falanga V, et al. Maintenance debridement in the treatment of difficult-to-heal chronic wounds. Recommendations of an expert panel. Ostomy Wound Management Supplement. June 2008:1-15. 6. Saap LJ and Falanga V. Debridement performance index and its correlation with complete closure of diabetic foot ulcers. Wound Repair and Regeneration. 2002;10:354-359.
Related Tools (NOTE: these tools and their instructions can be found on the SWRWCP's	• Determining Healability Tool • Dressing Selection and Cleansing Enabler – Healable • NPUAP PUSH Tool 3.0

website: swrwoundcareprogram.ca)	• Procedure: NPUAP PUSH Tool 3.0