

<b>BLUE CROSS OF NORTHEASTERN PA</b> <b>"BCNEPA"</b> <b>MEDICAL POLICY BULLETIN</b>	<b>MANUAL: MEDICAL POLICY</b>
	<b>REFERENCE NO.: MPO-490-0125</b>
<b>EFFECTIVE DATE</b> May 1, 2014	<b>SUBJECT: Hyperbaric Oxygen (HBO)</b> Therapy

### **Blue Cross of Northeastern Pennsylvania ("BCNEPA") Medical Policy**

Medical policy is not an authorization, certification, explanation of benefits or a contract. Benefits and eligibility are determined before medical policy and claims payment policy are applied. Policies are provided for informational purposes only and are developed to assist in administering plan benefits and do not constitute medical advice. Treating providers are solely responsible for medical advice and treatment. Policies are based on research of current medical literature and review of common medical practices in the treatment and diagnosis of disease. Medical practices and information are constantly changing and BCNEPA may review and revise its medical policies periodically. Also, due to the rapid pace of changing technology and the advent of new medical procedures, BCNEPA may not have a policy to address every procedure. In those cases, BCNEPA may review other sources of information including, but not limited to, current medical literature and other medical resources, such as Technology Evaluation Center Assessments (TEC) published by the Blue Cross Blue Shield Association. BCNEPA may also consult with health care providers possessing particular expertise in the services at issue.

#### **I. DESCRIPTION:**

Hyperbaric Oxygen (HBO) Therapy involves breathing 100% oxygen at a pressure of more than one atmosphere (atm). Hyperbaric oxygen therapy is generally applied systemically with the patient inside a hyperbaric chamber. It can also be topical; that is, the body part to be treated is isolated, e.g., in an inflatable bag and exposed to pure oxygen.

#### **II. BENEFIT POLICY STATEMENT:**

BCNEPA makes decisions on coverage based on Policy Bulletins, benefit plan documents, and the member's medical history and condition. Benefits may vary based on product line, group or contract, therefore, Member benefits must be verified. In the event of a conflict between the Member's benefit plan document and topics addressed in Medical Policy Bulletins (i.e., specific contract exclusions), the Member's benefit plan document always supersedes the information in the Medical Policy Bulletins. BCNEPA determines medical necessity only if the benefit exists and no contract exclusions are applicable.

Benefits are determined by the terms of the Member's specific benefit plan document [i.e., the Fully Insured policy, the Administrative Services Only (ASO) agreement applicable to the Self-Funded Plan Participant, or the Individual Policy] that is in effect at the time services are rendered.

#### **III. MEDICAL POLICY STATEMENT:**

**Coverage is subject to the terms, conditions, and limitations of the member's contract.**

- A. BCNEPA will provide coverage for systemic hyperbaric oxygen pressurization when medically necessary.

1. Treatment sessions may last for 30-120 minutes and may be given for up to 5 times per week. Some conditions may only require one-two treatments while others may require ten-forty treatments depending upon the severity of the illness and the clinical response of the patient. Treatment may range from 1 week to several months duration, the average being 2-4 weeks. HBO therapy for more than 2 months is usually not medically necessary.
  2. The use of HBO therapy is covered as adjunctive therapy only after there are no measurable signs of healing for at least 30 days of treatment with standard wound therapy and must be used in addition to standard wound therapy.
  3. Failure to respond to standard wound care occurs when there are no measurable signs of healing for at least 30 consecutive days. Wounds must be evaluated at least every 30 days during administration of HBO therapy. Continued treatment with HBO therapy is not medically necessary if measurable signs of healing have not been demonstrated within any 30 day period of treatment.
- B. Systemic hyperbaric oxygen pressurization may be considered medically necessary for the recommended timeframes (when indicated) in the treatment of the following conditions:
1. Acute carbon monoxide poisoning;
    - a) Up to five HBO treatments.
  2. Acute traumatic ischemia e.g. crush injuries, reperfusion injury, compartment syndrome;
    - a) Three HBO treatments per day for 48 hours followed by two treatments per day over the second 48 hours and one treatment per day over the third period of 48 hours.
  3. Chronic refractory osteomyelitis;
    - a) For patients who respond to initial treatment with antibiotics, surgical debridement and HBO, therapy should be continued for approximately 4-6 weeks.
    - b) Review is indicated after 30-40 sessions.
  4. Compromised skin grafts or flaps;
    - a) The current standard includes twice daily treatments until the graft or flap appears viable and then once per day until completely healed.
    - b) Benefit should be seen by twenty treatments; if not, continuation of therapy should be reviewed.
  5. Cyanide poisoning, acute;
  6. Decompression sickness;

- a) Usual time between treatments ranges from 1.5 to 14.0 hours. Repetitive treatments may be necessary, depending on the patient's response. Treatment times vary depending on length of time elapsed between symptoms and initiation of treatment and between residual symptoms after initial treatment.
7. Gas embolism, acute;
8. Gas gangrene (i.e., clostridial myonecrosis);
- a) Ten HBO treatments.
9. Necrotizing soft-tissue infections;
- a) Ten HBO treatments.
10. Non-healing diabetic wounds of the lower extremities in patients who meet the following three criteria:
- a) Patient has type I or type II diabetes and has a lower extremity wound that is due to diabetes;
- b) Patient has a wound classified as Wagner grade 3 or higher\*; and
- c) Patient has no measurable signs of healing after 30 days of an adequate course of standard wound therapy.
- \*The Wagner classification system of wounds is defined as follows:  
grade 0 = no open lesion; grade 1 = superficial ulcer without penetration to deeper layers; grade 2 = ulcer penetrates to tendon, bone, or joint; grade 3 = lesion has penetrated deeper than grade 2 and there is abscess, osteomyelitis, pyarthrosis, plantar space abscess, or infection of the tendon and tendon sheaths; grade 4 = wet or dry gangrene in the toes or forefoot; grade 5 = gangrene involves the whole foot or such a percentage that no local procedures are possible and amputation (at least at the below the knee level) is indicated.
11. Pre- and post-treatment for patients undergoing dental surgery (non-implant related) of an irradiated jaw;
12. Profound anemia with exceptional blood loss: only when blood transfusion is impossible or must be delayed;
- a) HBO is indicated for class IV hemorrhage, when the patient will not accept blood replacement for medical or religious reasons and the following symptoms are present:
- shock, systolic blood pressure below 90 mm Hg, or pressure maintained by vasopressors;
  - disorientation to coma;

- ischemic changes of the myocardium as demonstrated on the electrocardiogram (EKG); and (d) ischemic gut. HBO therapy is continued as needed and discontinued when the red blood cells have been replaced in numbers to alleviate the preceding signs and symptoms.
- 13. Soft-tissue radiation necrosis (e.g., radiation enteritis, cystitis, proctitis) and osteoradionecrosis;
  - a) Up to sixty HBO treatments.
  - b) Treatments are usually given daily for 90 to 120 minutes
- C. Systemic hyperbaric oxygen pressurization for any other timeframes or conditions not specifically addressed elsewhere in this policy is considered not medically necessary.
- D. BCNEPA will not provide coverage for systemic hyperbaric oxygenation pressurization in the treatment of the following conditions as this is considered investigational:
  1. Acute thermal burns;
  2. Acute arterial peripheral insufficiency;
  3. Acute coronary syndromes and as an adjunct to coronary interventions, including, but not limited to percutaneous coronary interventions and cardiopulmonary bypass;
  4. Acute ischemic stroke;
  5. Acute osteomyelitis, refractory to standard medical management;
  6. Acute surgical and traumatic wounds;
  7. Autism spectrum disorders;
  8. Bell's palsy;
  9. Bone grafts;
  10. Brown recluse spider bites;
  11. Carbon tetrachloride poisoning, acute;
  12. Cerebral edema, acute;
  13. Cerebral palsy;
  14. Cerebrovascular disease, acute (thrombotic or embolic) or chronic;
  15. Chronic arm lymphedema following radiotherapy for cancer;
  16. Chronic wounds, other than those in patients with diabetes who meet the criteria specified in the medically necessary statement;

17. Demyelinating disease, e.g., multiple sclerosis, amyotrophic lateral sclerosis;
18. Delayed onset muscle soreness;
19. Early treatment (beginning at completion of radiation therapy) to reduce side effects of radiation therapy;
20. Fracture healing;
21. Hydrogen sulfide poisoning;
22. Idiopathic femoral neck necrosis;
23. Idiopathic sudden sensorineural hearing loss;
24. Intra-abdominal and intracranial abscesses;
25. In vitro fertilization.
26. Lepromatous leprosy;
27. Meningitis;
28. Migraine;
29. Pyoderma gangrenosum;
30. Pseudomembranous colitis (antimicrobial agent-induced colitis);
31. Radiation-induced injury in the head and neck;
32. Radiation myelitis;
33. Refractory mycoses: mucormycosis, actinomycosis, canidiobolus coronato;
34. Retinal artery insufficiency, acute;
35. Retinopathy, adjunct to scleral buckling procedures in patients with sickle cell peripheral retinopathy and retinal detachment;
36. Severe or refractory Crohn's disease;
37. Sickle cell crisis and/or hematuria;
38. Spinal cord injury;
39. Traumatic brain injury; and
40. Tumor sensitization for cancer treatments, including, but not limited to radiotherapy or chemotherapy.

- E. BCNEPA will not provide coverage for topical hyperbaric oxygen therapy as this is investigational.

#### **IV. DEFINITIONS:**

Topical Hyperbaric Oxygen Therapy: describes a technique of delivering 100% oxygen directly to an open, moist wound in a small limb-encasing device at a pressure slightly higher than atmospheric pressure.

Systemic Hyperbaric Oxygen Therapy (HBO2): describes a technique in which the entire patient is placed inside a pressurized chamber and breathes 100% oxygen under pressure greater than one atmosphere.

**-PLEASE SEE CODING ON NEXT PAGE-**

# PROPRIETARY - DO NOT PRINT - DO NOT MAIL

CPT only copyright 2013 American Medical Association. All rights reserved.

BLUE CROSS OF NORTHEASTERN PA "BCNEPA" MEDICAL POLICY BULLETIN	MANUAL: MEDICAL POLICY
	REFERENCE NO.: MPO-490-0125
EFFECTIVE DATE May 1, 2014	SUBJECT: Hyperbaric Oxygen (HBO) Therapy

The five character codes included in the **Blue Cross of Northeastern Pennsylvania's Medical Policy** are obtained from Current Procedural Terminology (CPT\*), copyright 2013 by the American Medical Association (AMA). CPT is developed by the AMA as a listing of descriptive terms and five character identifying codes and modifiers for reporting medical services and procedures.

The responsibility for the content of **Blue Cross of Northeastern Pennsylvania's Medical Policy** is with BCNEPA and no endorsement by the AMA is intended or should be implied. The AMA disclaims responsibility for any consequences or liability attributed or related to any use, nonuse or interpretation of information contained in **Blue Cross of Northeastern Pennsylvania's Medical Policy**. Fee schedules, relative value units, conversion factors and/or related components are not assigned by the AMA, are not part of CPT, and the AMA is not recommending their use. The AMA does not directly or indirectly practice medicine or dispense medical services. The AMA assumes no liability for data contained or not contained herein. Any use of CPT outside of **Blue Cross of Northeastern Pennsylvania** should refer to the most current Current Procedural Terminology which contains the complete and most current listing of CPT codes and descriptive terms. Applicable FARS/DFARS apply.

CPT is a registered trademark of the American Medical Association

# PROPRIETARY - DO NOT PRINT - DO NOT MAIL

## BCNEPA CODING

Covered procedure codes are dependent upon meeting criteria of the policy and appropriate diagnosis code.

Benefits are determined by the Member's fully insured policy or the administrative services only agreement applicable to the Self-Funded plan Participant that is in effect at the time services are rendered.

## PROCEDURE CODES

99183

A4575

C1300

# PROPRIETARY - DO NOT PRINT - DO NOT MAIL

CPT only copyright 2013 American Medical Association. All rights reserved.