



**Subject:** *Hyperbaric Oxygen Therapy (HBOT)*

**Number:** *200311-0003*

Effective date: 11/24/2003

Revision date(s): 09/2000, 01/2001, 11/17/2003

**Important note**

Even though this policy may indicate that a particular service or supply is considered covered, this conclusion is not based upon the terms of your particular benefit plan. Each benefit plan contains its own specific provisions for coverage and exclusions. Not all benefits that are determined to be medically necessary will be covered benefits under the terms of your benefit plan. You need to consult the *Evidence of Coverage* to determine if there are any exclusions or other benefit limitations applicable to this service or supply. If there is a discrepancy between this policy and your plan of benefits, the provisions of your benefits plan will govern. However, applicable state mandates will take precedence with respect to fully insured plans and self-funded non-ERISA (e.g., government, school boards, church) plans. Unless otherwise specifically excluded, federal mandates will apply to all plans. With respect to Medicare and Medicaid members, this policy will apply unless Medicare and Medicaid policies extend coverage beyond this Medical Policy and Criteria Statement. Medicare and Medicaid policies will only apply to benefits paid for under Medicare or Medicaid rules, and not to any other health benefit plan benefits. The Centers for Medicare and Medicaid's *Coverage Issues Manual* can be found on the following Web site:  
<http://www.cms.hhs.gov/manuals/pub06pdf/pub06pdf.asp>.

**Overview**

**Hyperbaric oxygen therapy** (HBOT or hyperbaric O<sub>2</sub>) is a technique of delivering higher pressures of oxygen to the tissues. The two methods of administration are in a large chamber or via a mask, head tent or endotracheal tube. In systemic or large chamber hyperbaric oxygen, the patient is entirely enclosed in a pressure chamber and breathes oxygen at a pressure greater than one atmosphere (the pressure of O<sub>2</sub> at sea level). This technique relies on the patient's systemic circulation to deliver highly oxygenated blood to the target site, usually a wound. HBOT can also be used to treat systemic illness, such as air or gas embolism, carbon monoxide poisoning and clostridial gas gangrene.

**Policy and criteria**

**NOTE:** These services require prior authorization by the plan medical director.

**When services are covered:**

We cover **HBOT** as treatment for ANY of the following conditions:

- Acute carbon monoxide intoxication
- Decompression illness
- Gas embolism
- Gas gangrene
- Acute traumatic peripheral ischemia. HBOT is a valuable adjunctive treatment to be used in combination with accepted standard therapeutic measures when loss of function, limb, or life is threatened.
- Crush injuries and suturing of severed limbs. As in the previous conditions, HBOT would be an adjunctive treatment when loss of function, limb, or life is threatened.
- Progressive necrotizing infections (necrotizing fasciitis)
- Acute peripheral arterial insufficiency
- Preparation and preservation of compromised skin grafts (not for primary management of wounds)
- Chronic refractory osteomyelitis, unresponsive to conventional medical and surgical management

- Osteoradionecrosis as an adjunct to conventional treatment
- Soft tissue radionecrosis as an adjunct to conventional treatment
- Cyanide poisoning
- Actinomycosis, only as an adjunct to conventional therapy when the disease process is refractory to antibiotics and surgical treatment
- Diabetic wounds of the lower extremities in patients who meet the following three criteria:
  1. Patient has type I or type II diabetes and has a lower extremity wound that is due to diabetes.
  2. Patient has a wound classified as Wagner grade III or higher.
  3. Patient has failed an adequate course of standard wound therapy.

**NOTE:** The use of HBOT 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 care. Standard wound care in patients with diabetic wounds includes: assessment of a patient's vascular status and correction of any vascular problems in the affected limb if possible, optimization of nutritional status, optimization of glucose control, debridement by any means to remove devitalized tissue, maintenance of a clean, moist bed of granulation tissue with appropriate moist dressings, appropriate off-loading, and necessary treatment to resolve any infection that might be present. 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 HBOT. Continued treatment with HBOT is not covered if measurable signs of healing have not been demonstrated within any 30-day period of treatment.

***When services are not covered:***

We **do not cover** services when the above criteria are not met or for any procedures or devices not listed above.

We **do not cover topical (or partial) hyperbaric oxygen therapy or topical oxygen therapy.** Topical HBOT is therapy administered to the open wound in small limb-encasing devices. This method is considered investigational, as its efficacy has not been established through controlled clinical trials.

We **do not cover HBOT** in any of the following conditions, as it is considered experimental and investigational due to insufficient evidence in the medical literature establishing HBOT as being more effective than conventional therapies:

- Acute cerebral edema
- Intracranial abscesses
- Acute or chronic cerebral vascular insufficiency
- Lepromatous leprosy
- Acute renal arterial insufficiency
- Lyme disease
- Acute thermal and chemical pulmonary damage, i.e., smoke inhalation with pulmonary insufficiency
- Meningitis
- Aerobic septicemia
- Multiple Sclerosis
- Anaerobic septicemia and infection other than clostridial
- Myocardial infarction
- Anemia due to exceptional blood loss
- Nonvascular causes of chronic brain syndrome (Pick's disease, Alzheimer's disease, Korsakoff's disease)
- Arthritic diseases, including rheumatoid arthritis
- Ophthalmologic diseases (including diabetic retinopathy, retinal detachment, central retinal artery occlusion, radiation injury to the optic nerve)

- Bone grafts or fracture healing
- Organ transplantation and/or storage
- Brown recluse spider bites
- Pulmonary emphysema
- Cardiogenic shock
- Pyoderma gangrenosum
- Cerebral palsy
- Radiation-induced cystitis, myelitis, enteritis, or proctitis
- Chronic peripheral vascular insufficiency
- Senility
- Cutaneous, decubitus, and stasis ulcers
- Severe or refractory perineal Crohn's disease
- Headaches, including migraine or cluster
- Sickle cell anemia
- Hepatic necrosis
- Skin burns (thermal)
- Intra-abdominal abscess, pseudomembranous colitis (antibiotic-induced colitis)
- Systemic aerobic infection
- Tetanus

**Codes:**

Codes	Number	Description
CPT	99183	Physician attendance and supervision of hyperbaric oxygen therapy, per session

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**FCHP products to which this policy applies:**

- ⊕ FCHP Direct and FCHP Select Care (HMO)
- ⊕ FCHP Flex Care Direct and Select (POS)
- ⊕ Fallon Preferred Care (PPO)
- ⊕ FCHP MassHealth
- ⊕ Non-Group: FCHP Independent Care, Direct enrollment and Bill-at-home
- ⊕ Medicare plan – *reminder* to refer to CMS for policy and criteria

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