Ophthalmology Guidance

Federal Bureau of Prisons

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Table of Contents

1. Frequency of Eye Care Evaluations **1**
Intake Visual Acuity Screening 1
Follow-Up Visual Acuity Screening 1
Ophthalmologic Care 1
Risk-Based Eye Examinations 1

2. Assessment **1**
Visual Acuity (Distance) 2
Visual Acuity (Near) 2
Low Visual Acuity 3

3. Refraction **3**
Indications for Eyeglasses 3
Indications for Contact Lenses 4
Documentation of Receipt of Eyewear 4

4. Referrals **4**
Medical Evaluations by an Eye Specialist 4
Surgical Evaluations 5

1. Frequency of Eye Care Evaluations

Intake Visual Acuity Screening

Visual acuity testing should be performed as part of the intake physical for all inmates. Criteria for referral for eye glasses are outlined on page 3.

Follow-Up Visual Acuity Screening

- Inmates may request a follow-up visual acuity test from their primary care provider. A referral can be made for refraction if the referral criteria for eyeglasses are met.
- Inmates who are age 65 and over should have visual acuity testing performed annually.

Ophthalmologic Care

To receive an evaluation by an ophthalmologist, a referral must be made by an optometrist, a physician or mid-level practitioner.

Risk-Based Eye Examinations

The following categories of inmates should receive regular funduscopic eye examinations:

- Diabetes (Type I): within 5 years after disease onset and annually, thereafter
- Diabetes (Type II): upon diagnosis and annually, thereafter
- Hypertension: at baseline and then every one to two years
- HIV infection: at diagnosis; annually if CD4+ T cell count <50 cells/mm^3

2. Assessment

Visual acuity is usually tested one eye at a time, with an occluder covering the eye not being tested. The right eye is usually tested first, with the left eye covered. If an occluder is not available, and the inmate is wearing eyeglasses, a tissue can be slipped behind the lens of the glasses. The inmate can also be asked to hold a card over the eye, so long as it does not allow the inmate to "peek." Avoid having inmates cover their eyes with their own hands. This might allow the inmate to "peek" and the pressure placed on the eye could affect the measurement. Use normal room light. Make sure no shadow or glare is on the chart or card.

Large differences of recorded visual acuity over a short period of time may be an attempt on the inmate's part to deceptively present with worsened visual acuity. If questionable data are suspected, repeat visual acuity test on another day (with a different chart, if possible). Compare the visual acuity that you obtain with visual acuity noted on entrance to the FBOP.

Visual Acuity (Distance)

Inmates should be tested for visual acuity, using the standard Snellen eye chart. In cases where the inmate is a non-English speaker or cannot otherwise read the English alphabet, testing should be based on the "Tumbling E" or "illiterate" eye chart.

In the Snellen fraction 20/20, the first number represents the test distance (20 feet). The second number represents the distance that the normal eye can see the letters on a certain line of the eye chart. Therefore, a result of 20/20 means that the eye being tested can read a certain size letter when it is 20 feet away. If a person sees 20/40 at 20 feet distance from the chart, it means that the person can read letters that someone with 20/20 vision could read from a distance of 40 feet.

Procedure:

1. If the inmate normally wears glasses or contact lenses for *distance* vision, have the inmate wear them for this test. The goal is to assess the inmate's corrected vision. Do not check distance acuity with the reading glasses on if the inmate's glasses are for *reading* only.
2. Position the inmate 20 feet in front of the eye chart.
3. Have the inmate cover the left eye, so the right eye can be tested.
4. Ask the inmate to read (aloud) progressively smaller rows of letters.
5. Once they stop reading letters, ask them if they can read any letters at all on the next line down. If they can read the majority of the letters in the next line, ask if they can read any letters on the next line down. Repeat until they can no longer read any more letters. Record the smallest line in which the inmate was able to read every letter with the right eye (OD).
6. Repeat steps 4 and 5 above, with the inmate covering the right eye.
7. Record the smallest line in which the inmate is able to read every letter with the left eye (OS).

Note: If the inmate can't see any line, repeat steps 2 through 7 at a distance of 10 feet. Record the number "10" first (rather than "20"), e.g., 10/100.

Visual Acuity (Near)

Utilize the Rosenbaum Pocket Vision Screener to screen for near visual acuity.

1. If the inmate normally wears *reading* glasses, have the inmate wear them for this test.
2. Have the inmate cover the left eye, so the right eye can be tested.
3. Have the inmate hold the reading card at normal reading distance, about 14 inches away.
4. Have the inmate read aloud the smallest line they can.
5. Record the measurement for the right eye (OD). If the inmate reads at least one-half of the letters in a line, credit is given for reading that line. The number of letters missed is written in a superscript (i.e., $20/40^{-2}$). The number of letters missed is not as important as the smallest line read.
6. Repeat steps 3–5 above with right eye covered so the left eye (OS) can be tested.

Low Visual Acuity

Inmates who cannot read any of the lines on a chart with one or both eyes, should have the vision in those eyes recorded in terms of counting fingers, hand motion, light perception or no light perception.

1. **Counting Fingers (CF):** If the inmate cannot read any letters on the chart with the uncovered eye, stand 5 feet away and hold up one, two, or five fingers. If the inmate cannot see the number of fingers being held up, move closer until he or she can see them, changing the number of fingers that are up each time you move. If the inmate can see your fingers correctly at 5 feet, move back until they no longer can be seen. Acuity for that eye is recorded as the maximum distance at which the inmate can count your fingers (e.g., CF at 5 ft.).
2. **Hand Motion (HM):** If the inmate cannot count your fingers at any distance with the uncovered eye, stand 5 feet away again and move your hand up-and-down or side-to-side. Ask the inmate to tell you when they can see your hand is moving. As with the finger counting, move forward or back to verify the maximum distance at which the inmate can see your hand moving. Record the acuity for that eye (e.g., HM at 5 ft.).
3. **Light Perception (LP):** If the inmate's vision is diminished to the point where hand movements are undetectable, then perform a test for light perception. With the opposite eye completely covered, shine a bright light back and forth across the patient's eye. Ask the inmate to tell you when the light goes on as you move the light back and forth across their eye. A positive response is recorded as "LP"; a negative response is recorded as NLP (no light perception). If the inmate can only see the light from a specific direction from the eye, specify that in terms of "Light Projection" (e.g., LProj from Left).

3. Refraction

Indications for referring the inmate for eyeglasses or contact lenses are listed below.

Indications for Eyeglasses

- Inmates who already have corrected visual acuity of 20/40 or better in the worse eye will not be referred for refraction except as noted below. Inmates who have visual acuity worse than 20/40 may be referred by the physician or mid-level practitioner for refraction.
- Inmates enrolled in vocational or educational programs, or in job assignments requiring constant reading such as data entry, who complain of headache or other symptoms potentially related to vision, may be referred for refraction at the discretion of the physician or mid-level practitioner. This applies even when the inmate's corrected visual acuity is 20/40 or better.
- Upon follow-up evaluation, eyeglass replacement is at the institution's discretion if the change in refraction is less than 0.5 diopters for either distance or near correction.

Indications for Contact Lenses

Contact lenses are not allowed in the institution unless approved by the consulting ophthalmologist in accordance with BOP guidance. Contact lenses cannot be prescribed for cosmetic reasons. One of the following medical criteria must be met:

- Keratoconus (unilateral or bilateral) with best spectacle correction less than 20/60–20/80 range.
- Unilateral aphakia (post-cataract with no lens implant) with the aphakic eye having best corrected visual acuity of 20/100 or better. Contact lenses are not required if the eye is amblyopic (lazy eye) or has extensive macular damage.
- Corneal trauma resulting in significant corneal toricity (astigmatism) or central scarring.
- Greater than 4.0 diopters of anisometropia (difference in prescription power) between the eyes, provided an amblyopia (lazy eye) or strabismus (squint) is not present.
- Severe myopia (nearsightedness greater than -10.00D), but only if it is documented that contact lenses provide better vision.
- Severe hyperopia (greater than +10.00), but only if it is documented that contact lenses provide better vision.

Notes:

- Contact lenses should only be prescribed if it is anticipated that the inmate will remain within the FBOP for at least a year after the initial fitting. If the inmate is scheduled for release within a year's time, contact lenses should *not* be prescribed because of insufficient time to assure a healthy fit. If an inmate with contact lenses leaves prior to a final fitting, *do not* send the contact lenses with them.
- Prescriptions for contact lenses are not provided to an inmate who wants to order them from the private sector.

Documentation of Receipt of Eyewear

When inmates are provided prescription eyewear at an institution, they must sign and date a copy of the prescription. It should then be placed in the inmate's chart under the "Consultation" tab.

4. Referrals

Medical Evaluations by an Eye Specialist

Medical evaluations are warranted for the following conditions:

- Failure to achieve normal visual acuity in either eye, unless impairment has been medically confirmed by prior examination (normal = 20/30 or better).
- Significant eye injury or recent undiagnosed eye pain.

- Flashes of light; a recent onset of floaters, halos, transient dimming, or distortion of vision; obscured vision; loss of vision; pain in the eye, lids, or orbits; double vision; or excessive tearing.
- Transient or sustained loss of any part of the visual field, or clinical suspicion or documentation of visual field loss.
- New onset abnormalities or opacities in normally transparent media of the eye, or new onset abnormalities in the fundus or optic nerve.
- Tumors or swelling of the eyelids or orbit.
- Protrusion of one or both eyes (without a hyperthyroid diagnosis).
- Eye and orbital abnormalities associated with thyroid disease.
- Inflammation of the eyelids, conjunctiva, or globe (with or without discharge) that has not resolved with topical antibiotic treatment.
- New onset strabismus or crossed eyes, or eyes that turn out (longstanding, unchanged strabismus does not require referral).
- Abnormal intraocular pressure (normal pressure is up to 20 mm Hg)--especially with a family history of glaucoma and in those of African descent (who have a five-fold increased risk of glaucoma).
- Diabetic patients (type II--upon diagnosis; type I--within five years of onset).
- HIV-infected inmates upon diagnosis; annually if CD4 + T cell count is <50 cells/mm^3; and if ocular symptoms develop.
- Other history, symptoms, or signs that indicate the need for examination/treatment by an ophthalmologist, as determined by a physician or mid-level practitioner.

Surgical Evaluations

Medically indicated, *emergent or urgent* ophthalmologic surgeries should never be delayed, and should be approved by the Clinical Director (or designee) at the local institution. Proper and complete documentation is required.

The Regional Medical Director (in consultation with a BOP consultant ophthalmologist, as necessary) must approve all *elective* ophthalmologic surgery, including surgery for cataracts, keratoconus, and pterygium, as well as laser surgery for glaucoma and the retina. The provision of prosthetic eyes or any cosmetic eye surgery requires Medical Director approval.

The following are criteria for ophthalmologic surgery for BOP inmates:

- **Cataract Surgery:** There must be documentation of a best-corrected visual acuity of less than 20/60 in both eyes with current (less than six months old) refraction. Second eye surgery requires a documented, best-corrected visual acuity of 20/100 or less.

  Exceptions could be made for town drivers at camps, or inmates working in UNICOR who require good stereoscopic vision (depth perception) for safety reasons. Occasionally, a retina

specialist will request cataract surgery in a diabetic patient for retinal visualization (i.e., not for improvement in vision).

- **Keratoconus:** There must be documentation of best-corrected visual acuity of less than 20/60 in both eyes with current (less than six months old) refraction. Accurate, current keratometer readings (corneal curvature measurements) must be included. If keratoconus is bilateral, the second eye may be approved if the best-corrected visual acuity is less than 20/100 in that eye. All requests for surgery in keratoconus patients must include documentation of attempts to improve visual acuity with single and/or piggy back contact lenses with fitting parameters.

- **Pterygium Surgery:** There must be documentation of significant interference with visual acuity and/or astigmatism change of greater than 3.0 diopters and/or a change of 30^0 or more in axis (the second and third number in the prescription, respectively).

- **Laser Surgery for Glaucoma:** Laser surgery for glaucoma should be considered upon the recommendation of the consulting ophthalmologist. Proper, complete documentation of failed attempts at intraocular pressure control on maximum medical therapy is required. Requiring that eye drops be administered at pill line will help document eye drop compliance for a period of time prior to laser surgery. This documentation should be included with the surgery consultation request.

- **Laser Retinal Surgery:** Laser retinal surgery should be considered upon the recommendation of the consulting ophthalmologist. Proper, complete documentation of the retinal findings are required.