



AREA	TOOLS	BASIC METHODS	ADDITIONAL ISSUES AND METHODS FOR 3-4 YEARS	ADDITIONAL ISSUES AND METHODS FOR 4-5 YEARS
<b>History and General Development</b>	<ul style="list-style-type: none"> <li>• Questionnaire</li> <li>• Interview</li> <li>• Behavioral observations</li> <li>• Interaction</li> </ul>	<ul style="list-style-type: none"> <li>• Reason for visit</li> <li>• History of present illness</li> <li>• Past</li> <li>• Family</li> <li>• Social</li> <li>• Review of systems</li> <li>• Motor/sensory</li> <li>• Language</li> </ul>	<ul style="list-style-type: none"> <li>• Developmental milestones – see Preschool Vision Development Checklist</li> <li>• Stands on one leg</li> <li>• Jumps up and down</li> <li>• Draws a circle and a cross (4yrs)</li> <li>• Can express themselves and cooperate for some subjective tests (3yrs)</li> </ul>	<ul style="list-style-type: none"> <li>• Developmental milestones - see Preschool Vision Development Checklist</li> <li>• Mature motor control</li> <li>• Skips, broad jumps</li> <li>• Dresses oneself</li> <li>• Copies a square and a triangle</li> <li>• Talks clearly / uses adult speech sounds with mastered basic grammar</li> <li>• Relates a story</li> <li>• Knows &gt; 2,000 words (5yrs)</li> </ul>
<b>Motility, Accommodation and Binocularity</b>	<ul style="list-style-type: none"> <li>• Light source</li> <li>• Penlight</li> <li>• Finger puppet or other appropriate target</li> <li>• Direct ophthalmoscope, retinoscope, MEM cards, stereopsis tests, prism bars</li> </ul>	<ul style="list-style-type: none"> <li>• Brückner</li> <li>• Hirschberg</li> <li>• Cover Test</li> <li>• Versions</li> <li>• NPC</li> <li>• Krinsky</li> <li>• MEM</li> </ul>	<ul style="list-style-type: none"> <li>• Symmetry of reflex: ophthalmoscope or retinoscope</li> <li>• Range of movement</li> <li>• Alignment issues</li> <li>• Avoidance of cover</li> <li>• Estimation of strabismus</li> <li>• Convergence</li> <li>• Accommodation</li> <li>• Near dynamic retinoscopy</li> </ul>	<ul style="list-style-type: none"> <li>• Pursuits and saccades</li> <li>• Aware of diplopia</li> <li>• Stereopsis <ul style="list-style-type: none"> <li>- Keystone basic binocular</li> <li>- Lang</li> <li>- Randot</li> </ul> </li> <li>• Most Common: <ul style="list-style-type: none"> <li>- Accommodative esotropia</li> </ul> </li> <li>• Accommodation <ul style="list-style-type: none"> <li>- MEM expected is +0.25 to +0.75</li> </ul> </li> </ul>
<b>Refractive Status</b>	<ul style="list-style-type: none"> <li>• Retinoscope</li> <li>• Automated refractor</li> </ul>	<ul style="list-style-type: none"> <li>• Retinoscopy</li> <li>• Static distance</li> <li>• Near dynamic</li> <li>• Mohindra</li> <li>• Cycloplegic</li> <li>• Autorefraction</li> </ul>	<ul style="list-style-type: none"> <li>• See AOA pediatric clinical practice guideline</li> <li>• Retinoscopy</li> <li>• Mohindra Add (-)1.25 to gross sph</li> <li>• 1% Cyclopentolate if using cycloplegia</li> <li>• Expected is +1.00D hyperopia</li> </ul>	
<b>Visual Acuity</b>	<ul style="list-style-type: none"> <li>• Preferential viewing test</li> <li>• Symbol optotype</li> <li>• Letter matching</li> <li>• Eye patch</li> </ul>	<ul style="list-style-type: none"> <li>• Preferential looking tests (Cardiff cards)</li> <li>• Pictures/ LEA Symbols/ HOTV</li> </ul>	<ul style="list-style-type: none"> <li>• Cardiff Cards</li> <li>• Broken Wheel</li> <li>• LEA Symbols</li> <li>• HOTV</li> <li>• Picture chart</li> </ul>	<ul style="list-style-type: none"> <li>• Numbers</li> <li>• Snellen</li> </ul>
<b>Ocular Health and Systemic Health</b>	<ul style="list-style-type: none"> <li>• Observation</li> <li>• Magnifying lens</li> <li>• Direct, monocular, or binocular indirect ophthalmoscope</li> <li>• Dilation</li> <li>• Color vision</li> </ul>	<ul style="list-style-type: none"> <li>• Anterior segment</li> <li>• Posterior segment</li> <li>• Pupillary responses</li> <li>• Confrontation fields</li> <li>• Tonometry – iCare, Tonopen, Pulsair</li> <li>• Color Vision Test Made Easy</li> </ul>	<ul style="list-style-type: none"> <li>• Most common: <ul style="list-style-type: none"> <li>- Hordeolum</li> <li>- Blepharitis</li> <li>- Conjunctivitis</li> </ul> </li> <li>- See medications for birth to three</li> <li>- IOPs if symptoms/signs</li> </ul>	<ul style="list-style-type: none"> <li>• Most common: <ul style="list-style-type: none"> <li>- Conjunctivitis</li> <li>- Accommodative esotropia</li> <li>- IOPs if symptoms/signs</li> </ul> </li> </ul>

This quick reference guide should be used in conjunction with AOA's *Evidence-Based Clinical Practice Guideline: Comprehensive Pediatric Eye and Vision Examination*, (February 2017). It provides a summary and is not intended to stand alone in assisting the clinician in making patient care decisions. These recommendations include but are not limited to the areas, procedures and recommendations listed. Professional judgment and individual symptoms, findings and developmental level may significantly influence the nature and course of the examination.

## OCULAR MEDICATIONS APPROVED FOR USE WITH CHILDREN 3-5 YEARS

### ANTI-ALLERGY AGENTS – APPROVED FOR CHILDREN ≥ 2 YRS

Medication	Dosage	Age Approved
Alcaftadine 0.25%	qd	2 yrs
Bepotasine 1.5%	bid	2 yrs
Lodoximide 0.1%	qid	2 yrs
Azelastine 0.05%	bid	3 yrs
Emedastine 0.05%	qid	3 yrs
Epinastine 0.05%	bid	3 yrs
Ketorolac 0.4%	qid	3 yrs
Ketotifen 0.025%	qid	3 yrs
Nedocromil 2%	bid	3 yrs
Olopatadine 0.2%	qd	3 yrs
Olopatadine 0.1%	bid	3 yrs
Pemrolast 0.1%	qid/bid	3 yrs
Cromolyn 4%	qid	4 yrs

### ANTI-INFECTIVE AGENTS – APPROVED FOR INFANTS

Medication	Dosage	Age Approved
Erythromycin 0.5%	qid-qd	2 mo
Tobramycin 0.3%	q1-4hrs; ung 2-4 x daily	2 mo
Trimethoprim and Polymyxin B	q3hrs for 7-10 days	2 mo
Moxifloxacin 0.5%	bid x 7days	4 mo
Azithromycin 1%	bid x2 days, qd x 5days	1 yr
Besifloxacin 0.6%	tid	1 yr
Gatifloxacin 0.3%	q2hrs x 2days, then qid x 3-7days	1 yr
Levofloxacin 0.5%	q2hrs x 2days, then q4hrs x 5days	1 yr
Ofloxacin 0.3%	q2-4hrs x 2days, then qid x 5days	1 yr

### ANTI-INFLAMMATORY AGENTS – APPROVED FOR CHILDREN ≥ 2 YRS

Medication	Dosage
Fluorometholone 0.1%	2-4 x daily; ung 3 x daily

### ANTIVIRAL AGENTS – APPROVED FOR CHILDREN ≥ 2 YRS

Medication	Dosage
Ganciclovir 0.15%	5 x daily, taper tid x 7days

### STEROID-ANTIBIOTIC COMBINATION AGENTS – APPROVED

#### FOR ≥ 2 YRS

Medication	Dosage
Fluoromethalone 0.1%/Sulfacetamide 10%	q4-6hrs
Neomycin 0.35%/PolymyxinB/ Dexamethasone 0.1%	q3-4hrs; ung 4 x daily
Tobramycin 0.3%/Dexamethasone 0.1%	q3-4hrs; ung 1-4 x daily

## PRESCHOOL VISION DEVELOPMENT CHECKLIST\*

### Expected Visual Performances

#### 3 YEARS TO 4 YEARS:

- Can now begin to keep coloring on the paper (34-38 months)
- “Reads” pictures in books (34-38 months)
- Looks for toys he or she drops (32-38 months)
- Visually inspects toys he or she can hold (38-40 months)
- Creeps after favorite toy when seen (40-44 months)
- Sweeps eyes around room to see what’s happening (44-48 months)
- Visually responds to smiles and voice of others (40-48 months)

#### 4 YEARS TO 5 YEARS:

- More and more visual inspection of objects and persons (46-52 months)
- Uses eyes and hands together well and in increasing skill
- Moves and rolls eyes in an expressive way
- Draws and names pictures
- Colors within lines
- Cuts and pastes quite well on simple pictures
- Copies simple forms and some letters
- Can place small objects in small openings
- Visually alert and observant of surroundings
- Tells about places, objects, or people seen elsewhere
- Shows increasing visual interest in new objects and place

#### PARENTS SHOULD WATCH FOR SIGNS THAT MAY INDICATE A VISION PROBLEM, INCLUDING:

- Sitting close to the TV or holding a book too close
- Squinting
- Tilting their head
- Frequently rubbing their eyes
- Short attention span for the child’s age
- Turning of an eye in or out
- Sensitivity to light
- Difficulty with eye-hand-body coordination when playing ball or bike riding
- Avoiding coloring activities, puzzles and other detailed activities

\*Checklist courtesy of the Optometric Extension Program Foundation

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