Beaumont	Origination Last Approved	11/6/2020 11/17/2022	Document Contact	Jennie Green: Mgr, Division Laboratory
	Effective Last Revised	11/17/2022 11/17/2022	Area	Laboratory- Quality
	Next Review	11/16/2024	Applicability	All Beaumont Hospitals
			Key Words	GEN.55400

Color-Blindness Testing for Laboratory Employees

Document Type: Procedure

Status (Active) PolicyStat ID (12585660

I. PURPOSE AND OBJECTIVE:

Color-blindness is a deficiency in the way one sees certain colors, such as blue and yellow, and red and green. This is usually an inherited condition that affects males more frequently than females. Red-green deficiency is the most common color-blindness deficiency. At the present, there is no cure for color-blindness. The purpose of this policy is to define for whom Color-blindness testing applies.

II. POLICY STATEMENT:

It is the policy of the clinical Laboratory all personnel performing testing or other tasks that require color discrimination are evaluated for difficulty with visual color discrimination. Evaluation is not required for personnel who do not perform such functions. Evaluation limited to discrimination of those colored items pertinent to the job is sufficient.

III. DEFINITIONS:

- A. **Color-blindness** = Color vision-deficiency
- B. Ishihara test: This is a color perception test for red-green color deficiencies. The test consists of a number of colored plates, called Ishihara plates, each of which contains a circle of dots appearing randomized in color and size. Within the pattern are dots which form a number or shape clearly visible to those with normal color vision, and invisible, or difficult to see, to those with a red-green color vision defect. Other plates are intentionally designed to reveal numbers only to those with a red/green color vision deficiency and be invisible to those with normal red/green color vision.

IV. PROCEDURE:

- A. Color-Discrimination Testing is performed by the Employee Health & Safety Services (EHS) Dept. on each new hire. The "Pass or Fail" results are forwarded to the Laboratory for Laboratory employees. Employees are given a copy of the Colorblindness Test results and are instructed to give this copy to their immediate manager/supervisor. If the manager/supervisor does not receive the form from the employee, the manager/supervisor should ASK the employee for the form. If the employee was not given the form by EHS, please notify EHS.
- B. If, for some reason, Color-Discrimination Testing is NOT performed by EHS, notify EHS, and in the interim, the section manager/supervisor or delegated employee is to perform the testing:
 - 1. Obtain the Ishihara book/material.
 - 2. Perform the test with adequate lighting.
 - 3. Test the employee using ALL 14 plates in the book. Correct answers are listed at the back of the book.
 - 4. Record the employee's answers onto the proper form.
 - 5. All answers must be CORRECT in order to PASS.
 - 6. Forward the form to the Quality manager who will forward the form to EHS. The section supervisor is to file a copy of the completed form in the employee's personnel file.

V. NOTES:

A. For the **Dearborn, Taylor, Trenton and Wayne** laboratories, the EHS department does all screening at the point of hire and keeps all the records. If there is a fail for color blindness, EHS notifies HR, and HR works with the manager/supervisor to determine appropriate accommodation.

VI. FOR EMPLOYEES WHO FAIL THE ISHIHARA TEST:

- A. It is the responsibility of the section manager/supervisor to:
 - 1. Identify employees who need supervision with color-discrimination.
 - 2. If an employee is found to be color-blind, a secondary investigation will be performed by the EHS.
 - 3. For employees who are color-blind, the manager will determine which tasks the employee can and cannot perform and will determine to what extent supervision is required.
 - 4. If no tasks can be performed by this employee, the manager/supervisor will manage reassignment, if possible.
 - 5. The information in 2 and 3 above will be documented in writing, with a copy to the employee's personnel file, and a copy to the Laboratory Manager.

VII. COLLEGE OF AMERICAN PATHOLOGISTS (CAP) EVIDENCE OF COMPLIANCE:

Record of color discrimination testing.

VIII. REFERENCES:

Ishihara's Test for Colour Deficiency, Shinobu Ishihara, Kanehara Trading Inc., Tokyo, Japan, 2015. College of American Pathologists Laboratory General Inspection Checklist, Northfield, IL, Current Version

Attachments

Color Discrimination Testing Form 2017 EHS.pdf

Approval Signatures

Step Description	Approver	Date
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