



Job Task Analysis

Employer:	Stanislaus County
Occupation:	Clinical Laboratory Scientist I,II
Classification:	Clinical Laboratory Scientist I,II
Company Contact:	Risk Management 1010 10 th Street Modesto, California 95354 (209) 525-5770
Date:	September 2008
Analysis Provided By:	Lyle Andersen, PT, CWCE Andersen Physical Therapy, Inc. 3500 Coffee Road, Suite 3 Modesto, California 95355 (209) 549-4626

INTRODUCTION:

A complete job description is available through Stanislaus County Human Resources. The environmental factors, physical and functional demands for this Job Task Analysis were documented by Andersen Physical Therapy, Inc. The methodology for documentation consisted of on-site visits, using various measuring devices such as dynamometers and scales, as well as observation and interviews with employees and managers. A detailed record was made of the physical and functional demands of the job in terms of force pounds, weight, frequency, height, distance, anthropometric measurements, stamina, and degrees of range of motion. The determination of the frequencies of functional activities is based on standards provided by the National Institute for Occupational Safety and Health (NIOSH) and the Work Practice Guide for Manual Lifting (U.S. Department of Commerce, National Technical Information Service).

The Job Task Analysis is organized as follows: General work description; safety requirements; equipment; environmental factors; and physical/functional demands.

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GENERAL WORK DESCRIPTION:

The frequency of the following activities may vary according to the physical requirements of the specific job tasks that the employee may be required to perform at random intervals.

Under the general supervision of the department, *Clinical Laboratory Scientist I,II* works in various clinical departments within the laboratory doing all departmental testing and operating manual and automated laboratory equipment; to perform calculations, reports, analyze and verify testing data; report and sign off lab testing reports, do daily, weekly, monthly and yearly preventative maintenance on testing analyzers as scheduled; and perform and document quality control with all tests run.

SPECIFIC DUTIES: Available through the Human Resources Department at the County of Stanislaus.

<http://www.stancounty.com/riskmgmt/risk-dm-jta-class-sub-main.shtm>

Safety Requirements: All employees are required to observe company safety procedures and standards to insure individual and collective safety, in addition to avoiding unnecessary risk to oneself, co-workers, customers, and property.

Uniform:

- | | |
|--------------------|----------------------------|
| 1. Eye protection. | 4. Hand wear protection. |
| 2. Face shields. | 5. Lab coats. |
| 3. Gowns. | 6. Respiratory protection. |

Equipment:

- | | |
|---------------------------------------|---|
| 1. 3-step ladder | 15. Lab glass/plastic ware |
| 2. Autoclave | 16. Media plates |
| 3. Bar code printers | 17. Microscopes |
| 4. Biological fluid slide staining | 18. Refrigerator |
| 5. Biological Safety Cabinet | 19. Step stool |
| 6. Blood/body fluid testing analyzers | 20. Test pipettes (glass) |
| 7. Calculators | 21. Test pipettes (plastic) |
| 8. Centrifuges | 22. Test tubes (various sizes) |
| 9. Computers and printers | 23. Tube shakers |
| 10. Copier | 24. Tube vortexes |
| 11. Facsimile machine | 25. Vacutainer tubes, needles, syringes |
| 12. Freezer | 26. Vehicle |
| 13. Glassware cleaner/Washer | 27. Weighing scale |
| 14. Incubator | |

*All employees within the **Clinical Laboratory Scientist I,II** position are required to provide physical assistance for all weight and frequency requirement needs of all job tasks in order to maintain a safe work environment. Employees must be physically capable of working in any of the job tasks within the **Clinical Laboratory Scientist I,II** position.*

ENVIRONMENTAL FACTORS

The following percentages are given in terms of an eight-hour workday:

Seldom =	1% - 2%	Frequent =	34% - 66%
Occasional =	3% - 33%	Constant =	67% - 100%

ENVIRONMENTAL FACTORS		MAXIMUM FREQUENCY
1.	Unprotected heights: step stool, 3-step ladder.....	Seldom
2.	Being around moving machinery: traffic.....	Seldom
3.	Exposure to marked changes in temperature and humidity: outside temperatures may seasonally vary between 28-110 degrees.	Not Applicable
4.	Exposure to dust, fumes, smoke, gases, or other irritating substances (specify): formaldehyde, acetone, miscellaneous chemicals.	Occasional
5.	Driving: vehicle.....	Seldom
6.	Exposure to excessive noise:..... <i>Hearing protection is available</i>	Not Applicable
7.	Exposure to radiant or electrical energy: ultraviolet light.....	Seldom
8.	Exposure to solvents or chemicals:..... <i>Refer to MSDS document.</i>	Frequent
Q	Exposure to slippery or uneven walking surfaces:.....	Not Applicable
10.	Working below ground:.....	Not Applicable
11.	Unusual fatigue factors:	Not Applicable
12.	Working with explosives: potential acetone fumes in freezer.....	Not Applicable
13.	Excessive vibration:	Not Applicable
14.	Working with hands in water or other substance:..... <i>Hand protection is available</i>	Occasional
15.	Working proximity:.....	Alone: Occasional Closely with others: Continuous
16.	Working inside:.....	Continuous
17.	Working outside:.....	Occasional

FUNCTIONAL ACTIVITIES



The frequency of the following activities may vary according to the physical requirements of the specific job tasks the employee may be required to perform at random intervals.

PHYSICAL AND FUNCTIONAL REQUIREMENTS

<u>FREQUENCY DEFINITIONS</u>	<u>SELDOM</u>	<u>OCCASIONAL</u>	<u>FREQUENT</u>	<u>CONSTANT</u>
Percent of the Day	1-2%	3-33%	34-66%	67-100%
Material Handling	1-4 Reps	5-32 Reps	33-250 Reps	251-2,000 Reps
Non Material Handling	1-4 Reps	5-32 Reps	33-250 Reps	251-2,000 Reps
Repetitive & Static Work	1-50 Reps	51-250 Reps	251-1,000 Reps	1,001-20,000 Reps

1.) **PUSH**: *Pushing activities may require use of the back in conjunction with leg and arm musculature.*

MAXIMUM REQUIREMENT

0-10 pounds: Occasional
11-75 pounds: Not Required

Maximum Force: 10 Pounds

Assistive Devices: 4-Wheeled Cart, Hand Truck. Additionally, one person assistance is available with forces greater than 10 pounds.

Comments: Pushing is utilized with activities such as retrieving, returning, storing, moving and/or transporting equipment and supplies (e.g. inventory, door, drawer). The employee exerts up to 10 pounds of force in a horizontal plane from waist to shoulder height of a distance up to 100+ feet when performing job tasks (e.g. push up to 10 pounds of force to travel with lab cart; open/close door, drawer, file).

2.) **PULL**: *Pulling activities may require use of the back in conjunction with leg and arm musculature.*

MAXIMUM REQUIREMENT

0-10 pounds: Occasional
11-75 pounds: Not Required

Maximum Force: 10 Pounds

Assistive Devices: 4-Wheeled Cart, Hand Truck. Additionally, one person assistance is available with forces greater than 10 pounds.

Comments: Pulling is utilized with activities such as retrieving, returning, storing, moving and/or transporting equipment and supplies (e.g. inventory, door, drawer). The employee exerts up to 10 pounds of force in a horizontal plane from waist to shoulder height of a distance up to 5+ feet when performing job tasks (e.g. pull up to 10 pounds of force to travel with lab cart; open/close door, drawer, file). *Pushing is the preferred method of moving carts.*

3.) **STAND-UP LIFT:** *Lifting weighted objects between floor and waist height.***MAXIMUM REQUIREMENT**

0-10 pounds:	Seldom
11-25 pounds:	Not Required
26-75 pounds:	Not Required

Maximum Force: 10 Pounds

Assistive Devices: One person assistance is available with weights greater than 10 pounds.

Comments: A stand-up lift is utilized with activities such as retrieving, returning, storing, moving and/or transporting equipment and supplies (e.g. storage inventory). The employee lifts items weighing between less than 1 pound and 10 pounds when performing job tasks (e.g. lift up to 10-pound case of miscellaneous stored inventory; miscellaneous individual items removed from cases and stored in cabinets and shelves).

4.) **LEVEL LIFT:** *Lifting weighted objects from between waist and chest height level for a maximum horizontal distance of up to four feet.***MAXIMUM REQUIREMENT**

0-10 pounds:	Occasional
11-25 pounds:	Not Required
26-75 pounds:	Not Required

Maximum Force: 10 Pounds

Assistive Devices: 4-Wheeled Cart, Hand Truck. Additionally, one person assistance is available with weights greater than 10 pounds.

Comments: A level lift is utilized with activities such as retrieving, returning, storing, moving and/or transporting equipment and supplies (e.g. storage inventory). The employee lifts items weighing between less than 1 pound and 10 pounds when performing job tasks (e.g. lift up to 10-pound case of miscellaneous stored inventory; miscellaneous individual items removed from cases and stored in cabinets and shelves; microbiology and specimen containers).

5.) **WEIGHT CARRY:** *Carrying weighted objects between waist and chest height beyond a distance of four feet.***MAXIMUM REQUIREMENT**

0-10 pounds:	Occasional
11-75 pounds:	Not Required

Maximum Force: 5 Pounds

Assistive Devices: 4-Wheeled Cart, Hand Truck. Additionally, one person assistance is available with weights greater than 5 pounds.

Comments: Weight carry is utilized with activities such as retrieving, returning, storing, moving and/or transporting equipment and supplies (e.g. specimen containers; storage inventory). The employee carries items weighing between less than 1 pound and <5 pounds between 5 feet and 100+ feet when performing job tasks (e.g. carry miscellaneous inventory; up to 5-pound phlebotomy tray; specimen and microbiology containers).

6.) **OVERHEAD LIFT/PULL DOWN:** *Lifting weighted object from/to chest and overhead height level.***MAXIMUM REQUIREMENT**

0-10 pounds: Seldom
11-75 pounds: Not Required

Maximum Force: 5 Pounds

Assistive Devices: A vertical ladder, step ladder or step stool is available to bring items to eye or shoulder level.

Additionally, one person assistance is available with weights greater than 5 pounds.

Comments: Overhead lift/pull down is utilized with activities such as retrieving, returning, storing and/or transporting equipment and supplies (e.g. storage items). The employee lifts items weighing between less than 1 pound and 5 pounds to a maximum height of 84 inches when performing job tasks (e.g. reach and lift up to 5-pound miscellaneous stored inventory). *Variables to overhead reaching will be the employee's height and anthropometric reach.*

7.) **OVERHEAD REACH:**

MAXIMUM FREQUENCY: Occasional

Comments: Overhead reach is performed to a maximum height of 84 inches when retrieving, returning, storing and/or transporting supplies (i.e. reach overhead cabinets and shelves for storage inventory). *A ladder (appropriate height) or step stool may be utilized to bring items to eye or shoulder level. Variables to overhead reaching will be the employee's height and anthropometric reach.*

8.) **FORWARD REACH:**

MAXIMUM FREQUENCY: Frequent

Comments: Forward reach is performed to a distance of 28 inches when retrieving, returning, storing, adjusting, moving and/or transporting equipment, controls and supplies (e.g. reach for storage inventory; phlebotomy procedures; assist in tissue preparation; making reagents; run test procedures; pipeting; biological safety cabinet procedures; microbiological procedures; testing human biological specimens; telephone). *The degree of elbow extension required for reaching will vary according to the employee's anthropometric reach.*

9.) **STOOP:**

MAXIMUM FREQUENCY: Seldom

Comments: Stooping is performed when retrieving, returning, storing and/or transporting equipment and supplies (e.g. stoop to reach below waist height for phlebotomy procedures; maintaining storage inventory; operating laboratory instruments). *Variable to stooping will be the employee's height. Stooping of the head, trunk and knees can be minimized or avoided by substituting alternate positions of squatting, kneeling or bending when performing job tasks.*

10.) **SQUAT:** *(Unloaded)*

MAXIMUM FREQUENCY: Seldom

Comments: Squatting is performed when retrieving, returning and/or storing equipment and supplies (e.g. squat to reach below waist height for inventory maintenance; equipment maintenance and observation). *Squatting may be minimized or avoided by substituting alternate positions of bending or kneeling. Partial squatting is a preferred lifting posture.*

11.) FORWARD BEND:

**MAXIMUM
FREQUENCY:** Occasional

Comments: Bending forward at the waist is performed when retrieving, returning, storing and/or transporting equipment and supplies (e.g. bend to reach below waist height for phlebotomy procedures; maintaining storage inventory; operating laboratory instruments). Maximum forward trunk flexion required is 45 degrees. *Employee may avoid excessive forward bending of the trunk up to 80 degrees by using alternate positions of bending at the hips, kneeling, half kneeling, stooping, sitting or squatting.*

12.) TWIST:

**MAXIMUM
FREQUENCY:** Occasional

Comments: Twisting at the waist is performed when retrieving, returning, storing and/or transporting equipment and supplies (e.g. twist to reach for phlebotomy procedures; maintaining storage inventory; operating laboratory instruments). *Twisting at the waist may be minimized by turning the whole body, including the feet and working from a swivel chair.*

13.) TURN:

**MAXIMUM
FREQUENCY:** Occasional

Comments: Turning at the waist is performed when retrieving, returning, storing and/or transporting equipment and supplies (e.g. turn to reach for phlebotomy procedures; maintaining storage inventory; operating laboratory instruments).

14.) KNEEL:

**MAXIMUM
FREQUENCY:** Seldom

Comments: Kneeling is performed when retrieving, returning and/or storing equipment and supplies (e.g. kneel to reach below waist height for inventory and equipment maintenance and/or observation). *Kneeling may be minimized or avoided by substituting alternate positions of bending, squatting, or half kneeling.*

15.) CRAWL:

**MAXIMUM
FREQUENCY:** Not Required

Comments: Crawling is not required to perform job tasks.

16.) STAIR CLIMB:

**MAXIMUM
FREQUENCY:** Not Required

Comments: Stair climb is not required when performing job tasks.

17.) **LADDER CLIMB:**

**MAXIMUM
FREQUENCY:** Seldom

Comments: Ladder climbing is performed onto/off of safety ladders or steps to access equipment and supplies (e.g. storage inventory) located up to 7 feet above floor level (e.g. reach for miscellaneous items stored in/on overhead cabinets and shelves). *Variables to overhead climbing will vary according to the employee's height and anthropometric reach.*

18.) **WALK:**

**MAXIMUM
FREQUENCY:** Frequent

Comments: Walking is performed when retrieving, returning, storing, adjusting, moving and/or transporting equipment, controls and supplies (e.g. work within laboratory department, store room; off site facilities assignment). Walking length varies between 3 feet and 600+ feet depending on job task.

19.) **SIT:**

**MAXIMUM
FREQUENCY:** Occasional

Comments: Sitting is performed for a maximum of 30-minute intervals when operating controls (e.g. sit to drive to/from off-site facilities for assignments; computer keyboard usage; counter work; desktop work). *Specific work tasks may require up to frequent sitting and/or walking.*

20.) **STAND: (Static)**

**MAXIMUM
FREQUENCY:** Occasional

Comments: Static standing is performed for a maximum of 30-minute intervals when retrieving, returning, operating, storing and/or adjusting equipment, controls and supplies (e.g. stand for inventory maintenance; assisting with body fluid testing; telephone usage; customer service; glassware cleaning). *Specific work tasks may require up to frequent sitting and/or walking.*

21.) **BALANCE:**

**MAXIMUM
FREQUENCY:** Frequent

Comments: Frequent balance is required for safe walking, climbing and lifting.

22.) **HAND/FOOT CONTROL:**

<u>MAXIMUM REQUIREMENT</u>	
HAND:	
Right:	Seldom
Left:	Seldom
Both:	Seldom
Either:	Not Required
FOOT:	
Right:	Seldom
Left:	Seldom
Both:	Not Required
Either:	Occasional

Comments: Hand controls are utilized to operate equipment (e.g. vehicle; sanitizer) when adjusting controls (e.g. drive vehicles; autoclave). Foot controls are utilized to operate equipment (e.g. drive vehicle; hand washing sink).

23.) **UPPER AND LOWER EXTREMITY COORDINATION:**

<u>MAXIMUM REQUIREMENT</u>	
Simple Grasp:	Frequent
Firm Grasp:	Occasional
Fine Manipulation:	Continuous
Eye/Hand Coordination:	Continuous
Hand/Foot Coordination:	Seldom

Comments: Grasping and coordination activities are performed when retrieving, returning, storing, adjusting, moving and/or transporting equipment, controls and supplies (e.g. assisting with body fluid testing; maintaining departmental supplies; cleaning and maintaining testing devices; miscellaneous office work).

Simple grasping is utilized to perform job tasks (e.g. lift and manipulate objects less than 5 pounds; filing glass slides; phlebotomy procedures; cleaning equipment; handling body fluid containers).

Firm grasping is utilized to perform job tasks (e.g. lift and manipulate objects 5 pounds or greater; maintain stored inventory; making reagents).

Fine manipulation is utilized to perform job tasks (e.g. mouse, keyboard, handwrite; streak and plate cultures; phlebotomy procedures; operate testing and centrifuge equipment; specimen processing; batch specimens; measure, pour and weigh specimen).

Eye/hand coordination is utilized to perform job tasks (e.g. mouse, keyboard, handwrite; streak and plate cultures; phlebotomy procedures; operate testing and centrifuge equipment; specimen processing; batch specimens; measure, pour and weigh specimen).

Hand/foot coordination is utilized to perform job tasks (e.g. drive vehicle). *Depending on individual hand dominance, one hand may be used more frequently than the other when performing job tasks.*

24.) **CERVICAL (NECK) MOVEMENT:**

	<u>MAXIMUM REQUIREMENT</u>
Static Neutral Position:	Frequent
Flexing:	Frequent
Rotating:	Occasional
Extending:	Seldom

Comments: Neck movement is required when performing job tasks (e.g. maintain stored inventory; assist with laboratory techniques and testing procedures; record keeping; data entry; clean, maintain and operate testing equipment). *Participating in observation of work environment allowing for safe working conditions. Full cervical range of motion is required to safely perform the job tasks.*

{End of Report}



Stanislaus County

JOB TASK ANALYSIS SUMMARY

<u>FREQUENCY DEFINITIONS</u>	<u>SELDOM</u>	<u>OCCASIONAL</u>	<u>FREQUENT</u>	<u>CONSTANT</u>
Percent of the Day	1-2%	3-33%	34-66%	67-100%
Material Handling	1-4 Reps	5-32 Reps	33-250 Reps	251-2,000 Reps
Non Material Handling	1-4 Reps	5-32 Reps	33-250 Reps	251-2,000 Reps
Repetitive & Static Work	1-50 Reps	51-250 Reps	251-1,000 Reps	1,001-20,000 Reps

The following is a summary of the physical demands of the Job Task Analysis that were obtained for the position of:

CLINICAL LABORATORY SCIENTIST I, II

Functional Activities	Maximum Requirements	Functional Activities	Maximum Requirements
<i>Push (Force)</i> ¹	10 pounds	<i>Stair Climb</i>	Not Required
<i>Pull (Force)</i> ¹	10 pounds	<i>Ladder Climb</i>	Seldom
<i>Stand Up Lift</i> ¹	10 pounds	<i>Walk</i> ¹	Frequent
<i>Level Lift</i> ¹	10 pounds	<i>Sit</i> ¹	Occasional
<i>Weight Carry</i> ¹	5 pounds	<i>Stand (Static)</i> ¹	Occasional
<i>Overhead Lift/Pull Down</i>	5 pounds	<i>Balance</i> ¹	Frequent
<i>Overhead Reach</i> ¹	Occasional	<i>Hand Control</i>	Seldom
<i>Forward Reach</i> ¹	Frequent	<i>Foot Control</i>	Occasional
<i>Stoop</i> ¹	Seldom	<i>Simple Grasp</i> ¹	Frequent
<i>Squat</i>	Seldom	<i>Firm Grasp</i> ¹	Occasional
<i>Forward Bend</i> ¹	Occasional	<i>Fine Manipulation</i> ¹	Continuous
<i>Twist</i> ¹	Occasional	<i>Eye/Hand Coordination</i> ¹	Continuous
<i>Turn</i> ¹	Occasional	<i>Hand/Foot Coordination</i> ¹	Seldom
<i>Kneel</i>	Seldom	<i>Cervical (neck) Movement</i> ¹	Frequent
<i>Crawl</i>	Not Required		

¹ The critical demands of the job.

Lyle Andersen, PT

_____ Date: _____ _____ Date: _____
 Lyle Andersen, PT, CWCE Contact Person
 Preparer Signature Title

_____ Date: _____ _____ Date: _____
 Contact Person Contact Person
 Title Title

LA/au