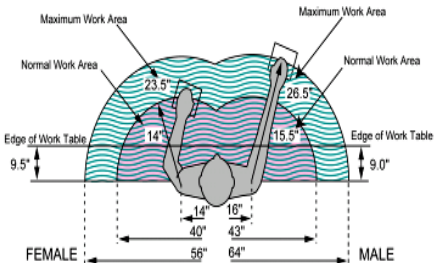
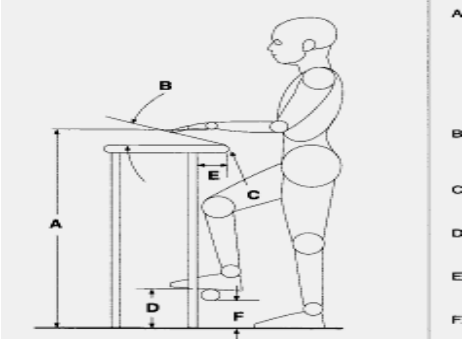
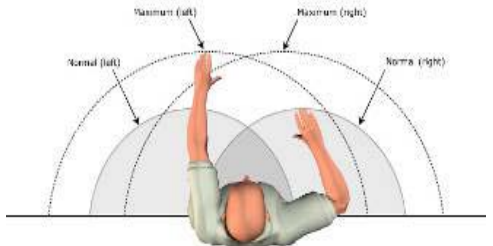


Laboratory Ergonomics Self-Evaluation Checklist	Standing & Sitting Benches	Yes	No	Change/Modification	Comments
	1. Is the height of the bench appropriate for the work performed? A. Work should be positioned close to elbow height (36-40") B. Work should be performed with shoulders relaxed.	☐	☐	☐ Adjustable height benches ☐ Adjustable chair ☐ Temporary standing platforms ☐ Move the task to a seated bench with adjustable chair	
	2. Are primary work tools and supplies located within arm's reach (4-18") from the bench edge?	☐	☐	☐ Reposition tools and supplies within 18" distance ☐ Provide tool organizers, turntable workstations, turntables, storage bins, pipette holders and carousels	
	3. Is there knee and foot clearance when completing standing tasks in front of the bench? A. 4" deep knee clearance B. 36-40" high clearance	☐	☐	☐ Work at open bench cut outs ☐ Remove supplies and equipment from bench cut out areas ☐ Modify bench surface with clamp on cut out extensions to increase knee and foot clearance	

Laboratory Ergonomics Self-Evaluation Checklist	Standing & Sitting Benches	Yes	No	Change/Modification	Comments
	4. Is a foot rail or prop available 6" from the floor?	☐	☐	☐ Install rails or foot props ☐ Use footrest ☐ If bench has undersurface cabinet, open or remove door and place foot on lower shelf	
	5. Are there floor mats in areas where prolonged standing tasks are completed?	☐	☐	☐ Provide floor mats ☐ Use cushioned shoes and in-soles	
	6. Does the bench have rounded or padded edges to reduce contact stress?	☐	☐	☐ Add edge rests and protectors to eliminate sharp edges ☐ Use gel pads on surface to protect elbows and forearms ☐ Wear custom padded sleeves under lab coats	

Laboratory Ergonomics Self-Evaluation Checklist	Standing & Sitting Benches	Yes	No	Change/Modification	Comments
	7. Are bench cutouts available for seated workers? A. Minimum 15" depth B. Minimum 20" width	☐	☐	☐ Redesign benches to provide cutouts for seated work ☐ Provide sit-stand chair or stool to improve knee clearance when working ☐ Clear out cutouts if cluttered with supplies or equipment	
	8. Are work items within close reach? A. Maximum 24"	☐	☐	☐ Reposition tools and supplies within 24" ☐ Provide tool organizers, turntable workstations, turntables, storage bins, pipette holders and carousels	
	9. Is seated bench available for tasks requiring precision and close inspection?	☐	☐	☐ Provide arm supports for stability if not available ☐ Provide sit-stand ☐ Provide adjustable work platforms to position work at optimal height	

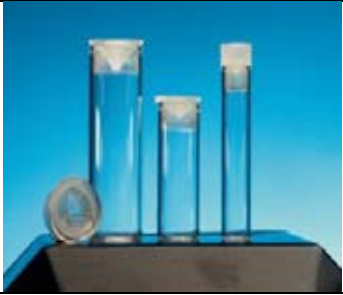
Laboratory Ergonomics Self-Evaluation Checklist	Chairs & Stools	Yes	No	Change/Modification	Comments
	10. Can the laboratory chairs/stools be adjusted to accommodate all workers? A. Seat height appropriate for work at height of benches. B. Feet supported on floor, ring or footrest.	☐	☐	☐ Provide chairs/stools with adjustable height, angle and backrest ☐ Provide chair/stools with foot rings ☐ Provide footrests ☐ Can a sit/stand be used	
	11. Are armrests if used adjustable or removable if needed to accommodate all workers?	☐	☐	☐ Adjust armrests to provide support with shoulder in neutral posture ☐ Remove armrests if needed	
	12. Are appropriate footrests or foot rings provided?	☐	☐	☐ Provide industrial footrest ☐ Install foot ring on chair or stool ☐ Install platform or proved foot rest	
	13. Do employees know how to adjust their chair or stool?	☐	☐	☐ Learn how to make adjustments to your chairs and stools	

Laboratory Ergonomics Self-Evaluation Checklist	Microscopes	Yes	No	Change/Modification	Comments
	14. Can employees view the eyepiece with neutral neck, shoulders and back postures? A. Neck flexion < 25% B. Shoulders relaxed C. Back upright and supported by the chair or stool back	☐	☐	☐ Reposition microscope by adjusting height or angle ☐ Reposition worker posture, seat height, seat angle	
	15. Can the microscope be positioned to promote neutral head, neck, shoulders and arm postures when used? Can awkward and static posture of the lower back, neck and shoulders be avoided? Can eye strain and fatigue be avoided?	☐	☐	☐ Repositions microscope by placing at the front of the workstation ☐ Use adapters, extended eye tube, eyepiece adapter or video system ☐ Use adjustable chair/stool or sit/stand ☐ Take breaks or rotate work tasks	
	16. Are arms supported by work surface, chair/stool arms or pads for prolonged work?	☐	☐	☐ Use arms supports, pads, adjust armrests or adjust worker position	

Laboratory Ergonomics Self-Evaluation Checklist	Microscopes	Yes	No	Change/Modification	Comments
	17. Can the worker use the microscope controls with arms supported and relaxed?	☐	☐	☐ If not reposition the microscope, use microscope adapters, use arm supports/pads, adjust armrests and adjust the worker position ☐ Adjust chair/stool or use sit/stand	
	18. Is there sufficient leg room and foot support when using the microscope?	☐	☐	☐ Work at bench cut out ☐ Clear cut-out clutter ☐ Provide footrest ☐ Provide foot ring on chair or stool ☐ Install rail or platform	
	19. Is microscope work limited to 5-hours or less in a day? Are work breaks taken on a regular basis?	☐	☐	☐ Institute and follow a 5-hour rule ☐ Institute a work rotation among workers ☐ Institute work breaks into the rotation	

Laboratory Ergonomics Self-Evaluation Checklist		Pipettes	Yes	No	Change/Modification	Comments
		20. Is manual pipette use limited to less than 4-hours per day?	☐	☐	☐ Institute and follow a 4-hour rule ☐ Institute a work rotation among workers ☐ Take frequent micro-breaks of 1-2 minutes every 30 minutes ☐ Consider use of alternative pipettes ☐ Alternate between sitting and standing ☐ Alternate right and left handed pipette use	
		21. If pipette use is more than 4-hours per day, are multi-channel, electronic or latch mode pipettes available?	☐	☐	☐ Evaluate the use of alternative pipettes like electronic, latch-mode or multi-channel	
		22. Have workers been trained to select appropriate pipettes for pipetting tasks?	☐	☐	☐ Establish training program	

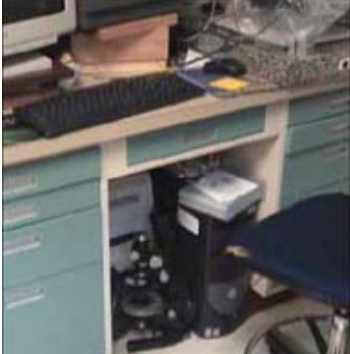
Laboratory Ergonomics Self-Evaluation Checklist		Pipettes	Yes	No	Change/Modification	Comments
		23. Are racks, trays, beakers and supplies available and placed within easy reach?	☐	☐	☐ Provide rack and trays ☐ Position supplies within close reach ☐ Use pipette racks and organizers	
		24. Are vials, tubes and receptacles as low profile as possible?	☐	☐	☐ Provide short beakers and vials ☐ Provide short tips and tubes ☐ Provide short/angled waste receptacles	
		25. Do workers pipette with shoulders relaxed and arms and wrists in the neutral posture?	☐	☐	☐ Worker posture training ☐ Adjust work position ☐ Adjust workstation set up ☐ Adjust chair/stool ☐ Alternate between sitting and standing	
Pipette Safety & Ergonomics Video		26. Are you still having issues when you pipette?	☐	☐	☐ View Video at www.ehs.wustl.edu , go to training, to specialized training and view the Pipette Safety & Ergonomics Video	

Laboratory Ergonomics Self-Evaluation Checklist	Micromanipulation	Yes	No	Change/Modification	Comments
	27. If forceps are used for prolonged periods, are locking mechanisms, or other adapted aides used to reduce prolonged or static pinch forces?	☐	☐	☐ Provide adapted tweezers or forceps like ☐ O-rings ☐ Pads/foam grips ☐ Self-closing ☐ Low force tools ☐ Alternative finger or hand use	
	28. Are vials easy to cap and thread?	☐	☐	☐ Provide easy opening caps ☐ Provide vials with minimal number of threads	
	29. Are cap openers available?	☐	☐	☐ Provide de-capping tools	

Laboratory Ergonomics Self-Evaluation Checklist	Microtome/Cryostat	Yes	No	Change/Modification	Comments
	30. Can workers operate the microtome with hands in a pistol grip position?	☐	☐	☐ Re-position worker ☐ Re-position height, angle or position of microtome ☐ Employee adjust work postures ☐ Use foot operated controls ☐ Modify handle position	
	31. Is equipment placed in a bench cut out allowing for adequate leg and knee clearance?	☐	☐	☐ Work at bench cut-out ☐ Clear area around microtome or cryostat of obstacles	
	32. Is an adjustable chair available at the microtome or cryostat that provides back and seating support?	☐	☐	☐ Provide adjustable chair or stool ☐ Provide chair with head support if working in reclined position ☐ Consider mirror system to improve view of samples	
	33. Do workers have access to a motorized microtome/cryostat for high intensity/volume work?	☐	☐	☐ Consider electronic equipment for high volume workloads	

Laboratory Ergonomics Self-Evaluation Checklist	Hoods & Cabinets	Yes	No	Change/Modification	Comments
	34. Is leg, knee clearance available to promote neutral sitting postures when using the hood or cabinet?	☐	☐	☐ Clear leg & knee area under cabinet or hood ☐ Use sit/stand stool	
	35. Can workers work with shoulders relaxed when sitting and standing?	☐	☐	☐ Consider height adjustable hood or cabinet ☐ Use sit/stand stool	
	36. Is padding available to reduce soft tissue compression (e.g. edge padding or arm pads)?	☐	☐	☐ Use elbow pads ☐ Use edge pads ☐ Use arm supports	
	37. Are materials inside the hoods and cabinets as close as possible to the worker to avoid over-reaching?	☐	☐	☐ Position receptacles within close reach ☐ Use turntables, rotating organizers, angled platforms	

Laboratory Ergonomics Self-Evaluation Checklist	Hoods & Cabinets	Yes	No	Change/Modification	Comments
	38. Are vials, tubes and receptacles as low profile as possible?	☐	☐	☐ Provide low profile vials, tubes and receptacles ☐ Angle receptacles to position within closer reach	
	39. Are anti-fatigue mats used if workers stand for more than 4-hours per day?	☐	☐	☐ Provide anti-fatigue mats ☐ Worker use foam insoles for shoes ☐ Worker provide supportive shoes	
	40. Are bottle dispensers and bottom dispensing carboys available to dispense liquids?	☐	☐	☐ Provide bottle dispensers ☐ Provide bottom dispensing carboys ☐ Provide bottles with handles	

Laboratory Ergonomics Self-Evaluation Checklist	Hoods & Cabinets	Yes	No	Change/Modification	Comments
	41. Is there adequate and appropriate storage for supplies? A. Is sufficient space available for supplies? B. Are heavy bottles and boxes stored on low shelves?	☐	☐	☐ Provide storage for supplies ☐ Place heavy items on shelves between knees and chest level for ease of handling	
	42. Are cut-outs clear of storage and available for use?	☐	☐	☐ Clear cut-outs ☐ Provide cut-out area for working at bench using work surface cut-outs or platforms	
	43. Are jar easy to open or are jar openers available?	☐	☐	☐ Provide jar openers ☐ Use jar openers	

Laboratory Ergonomics Self-Evaluation Checklist	Hoods & Cabinets	Yes	No	Change/Modification	Comments
 Example: 48x48x24-C (48" long, 48" high, 24" wide, 2" ramp on D side, one handhold on C side)	44. Are temporary platforms available for tasks that require elevating the arms above chest level for prolonged periods or repetitively?	☐	☐	☐ Consider standing platforms or elevated work areas(Consider safety issues related to repetitive lifting) ☐ Reduce fall risks before using	
	45. Are there adequate bins and racks for frequently used items?	☐	☐	☐ Provide bins, racks and shelves for frequently used items	