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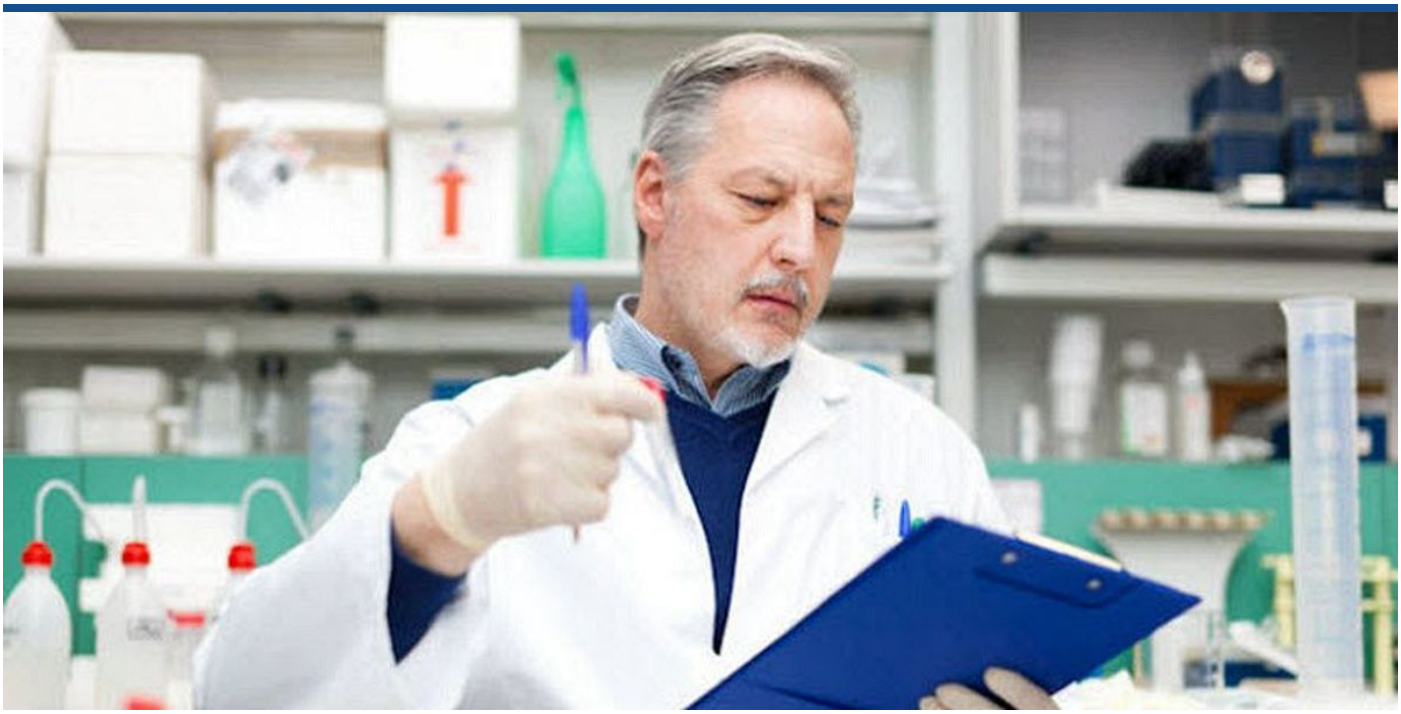

Lab Inventory Management Guide

Managing inventory in the lab can be a big task

Written by M2 Scientifics

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Although it can be easily forgotten about, it remains one of the single most effective ways to reduce costs and improve productivity. To help, the folks at M2 Scientifics have put together this handy guide to lab inventory management.

No matter the size of your lab, controlling inventory is one of the most important things you can do to make everything run smoothly. Monitoring consumable supplies, reagents, lab equipment, and instruments can be a big task. But doing so efficiently will increase productivity and reduce costs. Stretching your lab budget further and improving efficiency can be a reality with some simple, yet creative, tips.

Create a Starting Point

Whether you are starting a new lab or working to simplify the inventory process, creating a starting point is essential. Take stock of everything; and I mean everything. You can do this the old fashioned way with a pen and paper or with software. Whichever you choose, make sure every item is accounted for. This will be your initial inventory. Once you've completed, you can begin taking stock of things needed versus those that are not.

Assess Stocking Levels and Reductions

Now that you've finished your list, it is time to evaluate what you could use more and less of. While doing this, you should carefully consider every aspect of your daily routine. What products are used most often? How many are used per week or per month? Thinking back 6 months, how many times have you re-ordered these items? Does your current project require additional stock beyond the current levels? Have you ever had to throw away supplies that reached their expiration date? Asking yourself all of these questions will start to render a plan of action. It is a great idea to take notes so you have a point of reference to go back to.

Now it is time to put these findings to work. Create a new list or spreadsheet outlining all the products you will continue to use. Note the minimum amount your lab will keep on-hand. This will become the threshold for re-ordering. Once the supply has been reduced to this threshold, that would be the set time to re-order. If you can automate this process with lab inventory software, I recommend doing so. Take advantage of free lab management software products on the market.

This is also when you want to assess the possibility of reduction. You might notice upon closer inspection that some supplies continue to sit on the shelf. Although I strongly recommend ordering in bulk to save some cash, it isn't always wise to do so if you don't have the capacity to use it all. The cost of storage is one that most managers miss. Think of every square foot of your storage facility like a parking garage. You would want to maximize the amount of cars you can park in it to get the most money. You'd also want to make sure that what goes in, also goes out. A car parked in a space for a long period of time would not

yield the same profit as turning cars frequently (especially during events but that is a whole different story). So just like a parking garage, you want to make sure that inventory is being used and worthy of the space it is taking up. Purchasing in excess and using up a lot of space for lab supplies that aren't being used is wasteful and costly.

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Inventory Location Assignments

Once you've planned your lab inventory stocking levels, you should consider early on where it will all go. Careful planning can add to the efficiency of your lab. For instance, all supplies should be easy to access and placed in an area where they will be properly stored. You might put all the commonly used items together, products with similar expiration dates together and so on. Grouping inventory by frequency of use, expiration date and type creates an organized system that is easy to retrieve from and re-stock.

A great way to do this is to use a barcode system. You can place a barcode location assignment on individual shelves or areas of your storage facility. When stocking your supply orders, correlating barcodes can be applied to the product and scanned into their appropriate locations. Whenever an item is removed, it is scanned out and the stocking level is automatically removed from inventory. This keeps track of your stocking levels and locations easily and quickly. However, automation isn't always cost effective or necessary. A simple hand-written map can show the layout of the stocking room and the products in it. Keeping a spreadsheet posted to manually add and subtract supplies as they are used is quite handy. Although automation makes it seamless, sometimes a good ol' pencil and paper is plenty. You might also considering mounting a chalk board or white board to the wall and keeping track that way!

Store consumable supplies in organizing bins and storage containers when possible. If your budget allows, invest in dispensing bin systems. They are a great way to protect inventory from dust and debris and also makes retrieval quick and easy. Believe me. Constantly

opening and closing cardboard boxes (not to mention the risk of spills) is annoying and inefficient. Every second counts. The more time you can save in your stocking room, the more time spent in the lab.

Properly storing lab equipment and instruments should also be a priority item on your list. Keep in mind that equipment can really push your budget limits due to maintenance and calibration costs. It would be a shame if equipment was not stored properly, causing premature failure or damage. Although it seems pretty straight forward, here are a few things to consider when storing equipment.

- Do not store in or around extreme temperatures
- Keep away from water supplies (sinks, wash basins, etc)
- Invest in covers and shields to protect from debris and dust
- Keep equipment at waste level so it is easy to retrieve – Reduce risk or dropping
- Do not leave equipment plugged in when not in use (automation and networked equipment are an exception)
- ID every piece of lab equipment and monitor along with inventoried products
- Maintenance and calibration records should be stored close by

Leverage Pricing

Now that you've worked out your stocking levels, it's time to order! You can leverage products you'll be stocking in larger quantities to get better deals from lab supply dealers. I strongly suggest reaching out to them directly to inquire about bulk pricing discounts and other programs that will reduce costs. Standing orders are a great way to free up some space in your lab by allowing the supplier to handle regularly scheduled order fulfillment for you.

Don't be discouraged by small pack sizes and quantities. Take a couple minutes to contact the supplier and ask them if there are case quantities available. Many vendors will happily put together a custom order size for you to meet your requirements. Remember, just a couple minutes of your time to request information can really save you a lot of money. Stretch your budget further by leveraging your buying power. Trust me. We don't mind at all!

Equipment Maintenance Schedules

This isn't typically part of a lab inventory process but it deserves mention. It is a great idea to make lab equipment service and calibration part of your inventory management process. Make a list of every piece of equipment that requires service and put together a schedule following manufacturer recommendations. Keep the checklist handy where your equipment is stored and check it anytime you are completing inventory audits. This will act as a reminder to keep up on service and warn you of upcoming schedules. Properly maintaining your lab equipment can save you a lot of hassle and even more money. I highly suggest making this part of your inventory routine.

Maintain Records

Lab supplies are not the only thing you should be keeping close track of. Maintaining good records and ensuring safe storage is key to running a productive lab. I could write for hours about proper allocation of documents and notes, but I'll only focus on cost records. Keep ALL receipts! This seems pointless to mention as it is generally understood. However, I can not tell you how important this is. Other than keeping track of expenses, receipts are a valuable tool for recalling product numbers and suppliers you purchased from. I recommend creating digital copies of every invoice and saving them within lab software you use or even on an external hard drive. Hard copies should be kept as well. Fire-proof filing cabinets are a great way to protect important documents. One with locks to safely secure sensitive information isn't a bad idea either.

How is this relevant to lab inventory management? Simple. Inventory your records on a weekly or monthly basis and roll it into your stocking level checks. Make a checklist (yes, I like lists) of all the items you keep records of. While conducting stocking level audits, you can also run through records and make sure everything is in order. Check for missing invoices, ensure data is being collected, verify signatures and the list goes on. Whatever your lab requires to keep good records, making it an item on your inventory list will make sure you are always up to snuff.

Assign Team Duties

To make the entire process more achievable, it would be a great idea to assign team members individual responsibilities. For example, you could assign one lab technician the duty of stocking new orders while another is assigned the task of inventorying stocking levels. Other members of your team could be placed in charge of equipment service schedules. I would highly recommend conducting a quick meeting if you decide to disperse duties. Explain to everyone the goal of the new process, what your main priorities are, who exactly will be doing what and the follow-up procedures you'll be conducting. Every person on your team should have a strong understanding of the goal and how to achieve it. Getting everyone on the same page is one of the single best ways to make sure your lab inventory management system runs flawlessly.

Develop Inventory Audit Schedules

This step goes beyond the weekly, bi-weekly or monthly inventory replenishment counts you likely conduct. Developing and following through with an inventory audit schedule is a great way to follow up on the team and to make sure the process is running as it should. You already know what is coming don't you? Create a list! Yes. Another list. But this one is really simple. Just jot down the key components of your inventory process. Decide how often you'd like to complete the audit and then do so. You might decide to conduct it quarterly, semi-annually or even monthly if you're feeling ambitious. Use the list as a guide and inspect all elements of your lab inventory process. Make sure stocking levels are being maintained appropriately, ensure there is no costly waste, make sure records are being properly kept, inspect equipment maintenance compliance and check expiration dates on supplies. Of course, there might be more to look into but these are just of the items you can audit.

An audit is a great way to keep track of everything at a glance. It is also a great way to keep everyone on your team honest. You can delegate every part of the inventory management process but without proper follow-up, you will never know just how effective the efforts are.

Conclusion

Every laboratory has different requirements. Some stock more than others, but regardless of the amount of supplies on-hand, there is always potential to trim the fat and make inventory management more efficient.