# How to store wine

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**Factors affecting wine over time**

Once it is firmly stoppered in a bottle, wine should be protected from its greatest enemy, the oxygen in the air. If, however, the cork dries out and eventually shrinks so that it no longer acts as an airtight seal, it may start to allow oxygen in to the wine and spoil it. For this reason, wine bottles have traditionally been stored on their sides, so that the wine keeps the cork thoroughly damp and swollen to fill the bottleneck. Screwcapped bottles can be stored at any angle however.

There is a revolutionary new school of thought, however, which suggests that it may be better for wine to store bottles at an angle, which ensures that both wine and the air bubble are in contact with the cork. This will keep the cork damp but allow any expansion and contraction of the air bubble due to temperature variation to result in air, and not wine, passing through the cork. When bottles are stored horizontally the distance of the air bubble from the cork means that when higher temperatures cause it to expand, wine may be forced out between the cork and bottle-neck (the sugary deposits round the neck of many sweet wines are cited as evidence for this). Then when the temperature drops, the air bubble contracts to form a vacuum and oxygen may be drawn into the bottle. That amount of oxygen may reach harmful levels if temperatures fluctuate dramatically.

For the moment, most wine racks in commercial circulation are blithely ignorant of this new theory, however, so if you want to store wine in a place in which the temperature can vary by more than 10°C (18°F) it might be wise to put a wedge underneath the front of the rack so as to tilt the whole thing at the (newly) approved angle.

For the reasons outlined previously, temperature fluctuation is the most serious hazard for wine storage, although the cooler wine is kept, the slower, and very possibly more interestingly, it will develop. The warmer it is stored, the faster it will mature (because heat inevitably speeds up all reactions and vice versa).

The actual temperature at which wine is stored is also important, evolution being accelerated at higher temperatures. Care should be taken than it never falls below -4°C, the temperature at which the lightest wines freeze and can fatally force corks out of bottlenecks. On the other hand, there is a temperature, about 30°C or 86°F, above which a wine's more volatile compounds may be boiled off forever, and the colour and clarity is affected. (See some detail consideration of this in the your turn archive ) In very general terms the ideal wine storage temperature is probably between 10 and 15°C, but no great harm will come to wine stored between 15 and 20°C so long as the temperature does not fluctuate too dramatically causing the wine to expand and contract rapidly, with a risk of letting air in. Maximum and minimum thermometers can be very useful for monitoring potential places to store wine.

Wine dislikes light as well as heat. Strong light can adversely affect the taste of wine, particularly sparkling wine, and particularly if the bottles are made from clear or pale glass. (This is why wine is sold increasingly in almost black bottles, and why champagne is often wrapped in tissue paper or a special light-proof cellophane.)

Humidity is also quite important. If wine is stored in too dry an atmosphere for several years, the corks can dry out and stop being an effective seal. Damp coal holes are good for the condition of the wine but can rapidly damage labels and make wine more difficult to re-well.

Lack of vibration is useful for wines with a sediment, although this widespread belief is based more on hunch than hard evidence, and an absence of strong smells is absolutely vital (no old cans of paint or garden chemicals). In practice, security has to be weighed against ease of retrieval, with the relative importance of these two factors dependent on things like your income and willpower.

**The ideal cellar**

It follows from all of the above that the ideal place for wine storage is a nice, dark, roomy, slightly damp cellar with a single discreet entrance to which only you have the key. It is lined with wine racks but has masses of room to walk around and to stack wine in its original cases, as well as little tasting corner and a large desk for keeping cellar records up to date.

For most of us, alas, this cellar belongs in the realm of fantasy. Most modern dwellings have a shortage of storage space of any kind, let alone somewhere cool, dark, quiet, slightly damp and roomy enough for a cache of bottles. Garden sheds and all but the most protected outbuildings are unsuitable in the British climate because of the danger of the temperature's dropping below -4°C. The main problem with most possible indoor places, on the other hand, is that they are too warm. Central heating boilers tend to be put wherever there is spare storage space, which rules out storing wine there - unless the boiler can be insulated. Insulation of this sort is generally the key to establishing some decent permanent territory for a large wine collection, whether of a basement, an attic, or a slice of a room which becomes a walk-in wine cellar. Many people will be unwilling to make this much commitment however and are really looking for somewhere to store a dozen or two bottles. They could be kept in an attic, basement or corner of a spare-room under an insulation blanket, or even in an old fireplace or possibly under the stairs. It is useful if possible to keep a bowlful of water on the ground near the wine to keep the humidity level up.

Bottles can be stored in wooden wine cases, or those made from the strongest cardboard, so long as the corks are kept damp. A proper wine rack will last longer and can be made to any shape you specify. Double depth models can be useful.

The worst place to store wine (a fact unbeknown to many kitchen designers) is by a cooker or on top of a fridge where there are frequent blasts of hot air.

If you are serious about wine you can buy an 'artificial cellar', a temperature- and humidity-controlled cabinet like a refrigerator which keeps reds and whites at pre-ordained temperatures in different parts of it. Eurocave is the leading supplier in the UK. Click on the Eurocave link on the home page or see details of a special offer

for purple pagers - save 10%!

It is also possible to buy a spiral cellar which can be sunk into a specially excavated hole under ground level, but the installation can be messy. Key 'spiral cellar' into the general search box for extensive coverage of these facilities of which I, for one, have one.

**Using professional storage**

Much the easiest option in some ways, particularly if you have a large quantity of young wine, is to have it stored by professionals, either under the auspices of the merchant(s) you bought it from or directly with one of the specialists in wine warehousing. This can cost a as much as a bottle of village burgundy *per year* per 'case' (the standard box containing dozen bottles) and should ensure that the wine is stored in ideal conditions, but it rules out the spontaneity of picking bottles at random from your wine collection. Some of these also offer advice on when to drink your wines.

See UK professional wine storage survey

(2005) and Professional wine storage

(2003) for detailed comparisons of leading options in the UK and elsewhere. Recently Octavian have announced that they are investing in improved temperature and humidity controls at their operation in Corsham and will be adding another facility closer to London for professional use.

**Getting serious about collecting wine**

Wine sometimes gets to otherwise sane people. They are smitten with the desire to exchange large sums of money for a collection of bottles that will mature over their lifetime. They scramble for smart or rare wines offered en primeur, as futures, paying for it (from a respectable merchant, please) long before it's delivered. They may also fill gaps in their collections by buying older wines at auction, notably from Christie's or Sotheby's. I find it inimical to buy wine solely as an investment. And in any case wine prices go down as well as up. But, like all forms of collecting, it can bring a great deal of pleasure (and costs much less than collecting, say, works of art). Reasonably good record-keeping such as that offered by online cellar management systems is needed to ensure that wines don't languish past their drink-by dates. And some wine collectors need to be reminded every so often that wine is for drinking!