Looking after a clarinet and one's health

In this article I hope to offer some simple advice for those playing clarinet – on how to keep you and your clarinet healthy and to avoid infection by the ingestion of harmful germs some of which can cause fatal illness

The clarinet and mouthpiece are potential hosts waiting to be colonised by bugs if allowed to become such. Wherever possible do not allow others to play your clarinet unless they have an antibacterial swab or spray (I will use the term antibac from now) to use after they have done so. If someone carrying a virus transfers those germs to your reed, mouthpiece and clarinet then you will be at risk. Make sure that in the event of an infected person playing your clarinet that you use a mild solution such as Milton or an antibac liquid. Do wash your hands and clean teeth before and after playing – use the hottest water you can comfortably bear to wash hands in an antibacterial soap. (cold water is not as effective at killing germs).

In the first instance to avoid serious illness it is paramount to keep the clarinet dried out, clean and free of dust and debris.

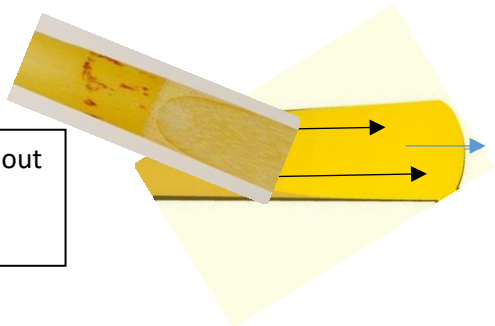
In particular it is important to keep detritus out of the mouthpiece so the need to clean the mouthpiece after use is of critical importance but never pull a swab through the mouthpiece. To clean the mouthpiece simply remove the reed and ligature and use an antibacterial spray directly into the mouthpiece opening and into the chamber. Wipe dry with a soft cloth then clean the reed and ligature. Use antibacterial wipes to clean any detritus off the reed and grime from the ligature.

Do not use an abrasive swab for the body of the clarinet – silk or micro pore is best. I personally do not like to pull a swab through the mouthpiece (as over time this can cause distortion of the mouthpiece opening and change the dimensions) but prefer to dampen some soft material in the antibac and carefully insert it into the mouthpiece using a twisting motion to get the material into the tone chamber (taking care not to scratch the bore or any part) via the bore end and after that wipe the internal "baffle " part of the mouthpiece the other end – that slope that leads into the tone chamber, separately being meticulous not to damage the "rails" the tip and sides of the mouthpiece. There really should not be any grime or detritus as (mentioned before) one should always clean one's teeth before playing and wash one's hands to ensure the clarinet is as germ free as possible.

If the reed is grimy from excessive handling, soak the reed and take a discarded reed and with a very sharp blade Stanley knife or similar, cut the tip off it in a clean motion leaving a straight edge – see diagram - or use any similar flat, firm object or piece of flexible plastic and "squeegee" any detritus grime from the pores of the reed in a pushing motion towards the tip of the reed then wipe with antibacterial wipe or spray. This will release dirt etc., from the pores of the reed. You will be horrified how much dirt is squeegeed out.

Never leave the clarinet out on a stand overnight. Always put it in its case and keep in a moderately warm environment but not in an excessively hot (or conversely) cold room. Cold air is the enemy of clarinets and is the biggest single cause of cracking. If you have yet to buy a clarinet do consider hard rubber (aka ebonite – not to be confused with ABS or plastic) alternatives to African Blackwood. (Blackwood is also known as Grenadilla, Mpingo or more commonly Ebony. Ridenour Clarinet Products UK LTD of which I am a director and the American company of the same name make excellent professional quality hard rubber clarinets that are more ecologically friendly than using wood.)

Fig. 1 Direction of squeegee motion.



Grime and detritus will be squeezed out of the pores – wipe the reed with an antibac wipe after

Detritus will be pushed towards the tip of the reed. Once all grime or detritus is removed clean the reed with antibac wipes or spray with antibac and wipe clean with a tissue and safely dispose of the tissue(s) after.

Alternatively there is a special box that can sanitise the reeds for you called "Reed-cure" made by *Silverstein works* in America that incorporates an ozone and ultra violet system to clinically clean the reeds once the box is closed and turned on – this is a far better method and kills all dangerous germs in a cycle of about 5 minutes.

Store reeds in a closed dry container such as a "Reed – cure" box and ensure that they are flat when stored so that they cannot warp. Alternatively there are excellent polymer reeds on the market and those made by *Silverstein* the *"Ambipoly*" reeds are a brand leader. Even Polymer reeds will harbour germs if not treated in a Reedcure or wiped with antibac.

Caring for the outside of the mouthpiece and clarinet.

It is not often that one needs to clean the outside of the clarinet but if dust and dirt build up in the holes and outside then that can cause germs to breed and cause unsightly clumps of detritus in holes that can eventually cause phenomena such as stuffy notes and poor intonation. I use a small computer vacuum cleaner to collect dust and detritus and then cotton buds soaked in surgical spirit to clean the holes. I clean the holes of my clarinet often. I am especially fussy about removing debris from the speaker or register key and the A and G sharp holes that are the most prone to collecting dirt and detritus. To do that one needs to dismantle the keys for those notes. The first side trill key (used for first line Eb or clarion Bb) is also a common culprit for harbouring detritus that can cause stuffiness, poor intonation and unattractive "gurgles" on notes because dust particles attract moisture. A little skill in learning to dismantle and reassemble the clarinet is worthwhile learning and there are a lot of online tutorials to show how to do this – but if unsure ask your teacher.

To clean the body of the clarinet I use a cloth lightly soaked in surgical spirit – but this can remove the dye from the clarinet (although African blackwood is called black – it is in fact usually a mottled dark brown and a dye is used to blacken it further. If using surgical spirit - be careful and test it on the inside of the bell first – then dry it off. If it takes off the dye then simply use warm mild - soapy water then with a damp non- soapy cloth wipe off the excess moisture and dry with kitchen towel. The keys themselves can be cleaned easily with a wipe from an artificial chamois leather or a soapy cloth then wipe off with a dry cloth – it is best not to use actual leather as this is quite abrasive and will in time wear the plating on your clarinet.

The bore of the clarinet

Some people advocate using bore oil to protect the bore of the clarinet however I think personally this is a futile exercise and can lead to water being directed into tone holes. Oiling the bore really does not penetrate more than a fraction of a micron or so of the bore (– if that) and does not offer protection from cracking. Wood will crack, especially hardwoods when the expansion on the outside of the clarinet is a different rate from that of the inside of the clarinet – this causes a lot of tension on weak or flawed grain in the wood and the clarinet will split at the most vulnerable weak spot.

Sealing the end grain is considered a good idea by some people and applying wax or silicon to the ends of tenons to prevent capillary absorption of moisture can be seen as a precaution but I am not entirely sure of its efficacy as there is little hard evidence it prevents cracking.

Cold, even more than heat is probably the root cause of most cracking and wide variations in temperature during a day combined with a lack of humidity will almost certainly cause a clarinet with flaws in the wood to crack if exposed to such conditions for an extended period.

Many of my clarinets have cracked even in ideal conditions, so there really is no logic to why wood cracks – my feeling is that wood is a living breathing substance and if it dries out and loses its natural elasticity it will become brittle and split. Air conditioning, central heating can dry air out and this can be critical to the elasticity of the wood. This is why I

advocate hard rubber clarinets so strongly especially for young players who are prone to becoming very distressed if their clarinet cracks and causes huge expense to be repaired.

Personally I find that if a clarinet cracks – and it is not a serious crack - it can improve the feel of the way the clarinet plays (because the tension in the wood has released and the clarinet can feel more free to blow), Conversely it can completely ruin the instrument and cause it to sound dull and “dead” without ring or interest in the sound.

If the crack is not fatal (one that goes totally through to the bore) they can be repaired with special adhesives or pinning with steel rods and then in my experience the clarinet rarely cracks again. In some rare cases where clarinets are stored in dry, cold places I have known instruments to split more than once – especially Bass clarinets.

I hope this short article has been helpful to you all and thanks for reading best wishes to you all - Leslie