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A request to wear non-woven masks

Japan University Health Association
Japanese National University Council of Health Administration Facilities

While the COVID-19 epidemic is still going, university started the second semester. It is expected that the opportunity for contact between students and/or between students and faculty members will increase, so the thorough infectious disease measures are more important.

Wearing mask has been shown to be highly effective in preventing infection, also it is pointed out that there is a difference in the effectiveness of preventing infection, depends on the mask materials. (Figures 1 and 2)

The non-woven masks, which have been considered the most effective in preventing infection among the commonly used masks, were in serious shortage early in the spread of the COVID-19 epidemic, and many people have worn cloth masks and urethane masks instead. Currently, the shortage of non-woven masks has resolved and sufficient quantities are supplied to the market.

However, many students are still wearing urethane masks, because it is considered they are cheaper than non-woven masks and can be washed and used repeatedly. Spreading infection is concerned if people use urethane masks because they are not effective enough in preventing infection.

Now, the spread of mutant viruses which have highly infectious is becoming a problem, so it is very important to strongly encourage the use of non-woven masks which are more effective in prevention infection.

Therefore, students should wear non-woven masks instead of urethane masks in order to thoroughly prevent infection at universities and to resolve the COVID-19 epidemic in society as a whole.

Figure 1

It is shown that non-woven masks are more effective than cloth masks in preventing infection.

○マスクの効果

東京大学医科学研究所のデータを基に内閣官房作成

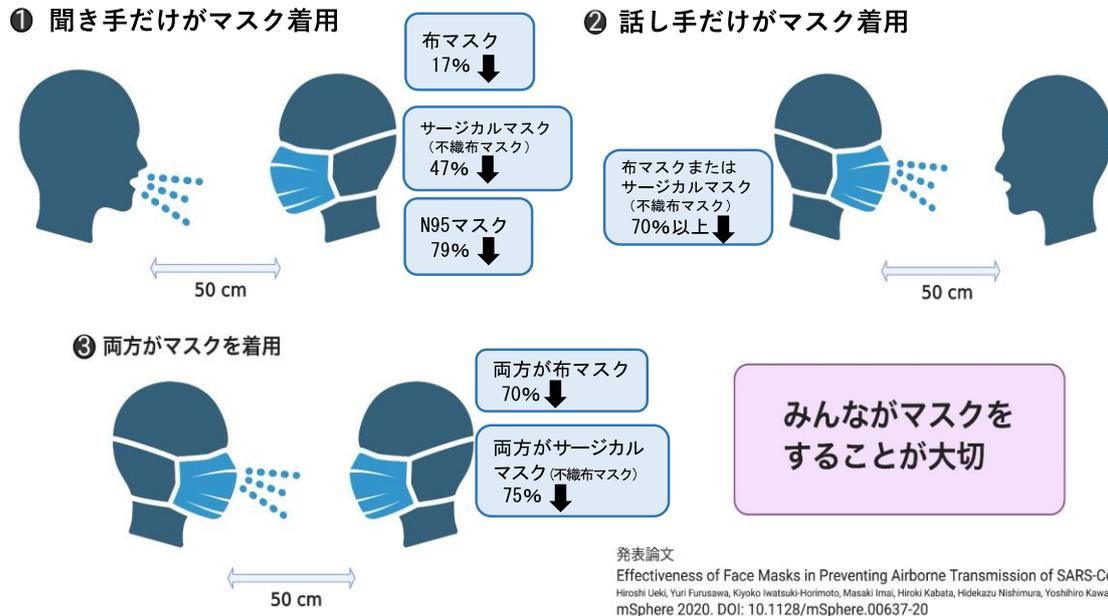


Figure 2

It is shown that wearing non-woven masks can prevent the droplets better than when wearing cloth and urethane masks.

対策方法	なし	マスク			フェイスシールド	マウスシールド	
	吐き出し飛沫量	100%	20%	18-34%	50%*2	80%	90%*2
	吸い込み飛沫量	100%	30%	55-65%*2	60-70%*2	小さな飛沫に対しては効果なし (エアロゾルは防げない)	

(2) 国立大学法人豊橋技術科学大学*2 <http://www.tut.ac.jp/docs/201015kisyakaiken.pdf>

(2) 坪倉誠 (理化学研究所 神戸大学/教授)「室内環境におけるウイルス飛沫感染の予測とその対策」(2020年8月24日記者勉強会資料)<https://www.r-ccs.riken.jp/fugaku/history/corona/projects/tsubokura/>