

## Maximum inspiratory and expiratory pressures

Overview :

The maximum inspiratory pressure is the highest atmospheric pressure developed during inspiration against an occluded airway. The maximum expiratory pressure is the highest pressure developed during expiration against an occluded airway.

Maximal Inspiratory Pressure (cm H<sub>2</sub>O)

predicted maximal inspiratory pressure, in cm of water for males 20 - 80 years old =

$$= 143 - (0.55 * (\text{age in years}))$$

predicted maximal inspiratory pressure, in cm of water for males 20 - 54 years old =

$$= 129 - (0.13 * (\text{age in years}))$$

predicted maximal inspiratory pressure, in cm of water for males 44 - 80 years old =

$$= 120 - (0.25 * (\text{age in years}))$$

predicted maximal inspiratory pressure, in cm of water for females 20 - 86 years old =

$$= 104 - (0.51 * (\text{age in years}))$$

predicted maximal inspiratory pressure, in cm of water for females 20 - 54 years old =

$$= 100 - (0.39 * (\text{age in years}))$$

predicted maximal inspiratory pressure, in cm of water for females 55 - 86 years old =

$$= 122 - (0.79 * (\text{age in years}))$$

Maximal Expiratory Pressure (cm H<sub>2</sub>O)

predicted maximal expiratory pressure, in cm of water for males 20 - 80 years old =

$$= 268 - (1.03 * (\text{age in years}))$$

predicted maximal expiratory pressure, in cm of water for males 20 - 54 years old =

$$= 229 + (0.08 * (\text{age in years}))$$

predicted maximal expiratory pressure, in cm of water for males 54 - 80 years old =

$$= 353 - (2.33 * (\text{age in years}))$$

predicted maximal expiratory pressure, in cm of water for females 20 - 86 years old =

$$= 170 - (0.53 * (\text{age in years}))$$

predicted maximal expiratory pressure, in cm of water for females 20 - 54 years old =

$$= 158 - (0.18 * (\text{age in years}))$$

predicted maximal expiratory pressure, in cm of water for females 55 - 86 years old =

$$= 210 - (1.14 * (\text{age in years}))$$

maximal inspiratory pressure

maximal expiratory pressure

poor effort

decreased

decreased

fatigue

decreased

decreased

neuromuscular disease

decreased

decreased

increased lung volume

decreased

normal

decreased lung volume

normal

decreased

References:

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