

Vital Signs Limits

Preface

There are two ways to approach vital sign limits. The first is to put in limits which are impossible and cannot be accepted, for instance a temperature of 80 degrees F or a pulse of 10. The second are limits which are possible but should be verified for accuracy before accepting.

Impossible: Unacceptable

Anything outside of the following ranges should not be accepted.

Reading	Lower Limit	Upper Limit
Pulse	30	200
Temp (Fahrenheit)	95	106
Respirations	10	60
Systolic BP	40	250
Diastolic BP	40	250
SPO2		100

Possible: Verify

Anything outside of the following ranges should be verified before allowing the user input to be allowed into the system.

Reading	Lower Limit	Upper Limit
Pulse	50	120
Temp (Fahrenheit)	98	103
Respirations	12	25
Systolic BP	90	170
Diastolic BP	50	120
SPO2	90	100

Please understand these are entirely my opinion as I am not aware of any publications on the subject and are based on my 20+ years of the practice of medicine. Remember we are talking about people entering their own data.

SPO2 cannot be greater than 100% so anything higher than that is an error. Any value below 89% has significant clinical impact and should be questioned. It is quite possible that patients may be having values as low as 60%; however, they would very likely not be at home answering these questions. I would suggest asking that any value below 90% be confirmed by the entering party but not rejected.