

## Supplementary Oxygen Chart

Boost-NZ Study Number.....

Baby's Name:

Date of Birth:

NHI:

Date

Complete every hour. Complete each day the Radical oximeter is attached.

***Minimize % time at 96-100% if on oxygen/ IPPV/ CPAP, unless doctor/NNP asks otherwise.***

Time	FiO2	SpO2	IPPV or CPAP or nasal cannula?	Any problems or comments?
0100				
0200				
0300				
0400				
0500				
0600				
0700				
0800				
0900				
1000				
1100				
1200				
1300				
1400				
1500				
1600				
1700				
1800				
1900				
2000				
2100				
2200				
2300				
2400				

### **Oximeter instructions\***

1. When in air if the reading is 100% switch the upper alarm limit to -- (which is off). *Remember to switch it on again if the patient is in added oxygen again.*
2. **Set lower alarm limit between 80 and 86%, set upper alarm limit at 94%**
3. **When in added oxygen, minimize % time at 96-100% § . Aim for SpO2 88 - 92%.**
4. Do not "TITRATE" FiO2 (extreme ups and downs in the SpO2 are risky). Allow baby to fluctuate within the desired saturation parameters.
5. In sustained hyperoxia, make small adjustments of 2 – 5% in FiO2 and remain at the bedside until the situation is stabilized.
6. In sustained desaturation, assess the baby for central cyanosis, bradycardia, or poor perfusion before making ANY change. Desaturation without bradycardia is less significant than desaturation with bradycardia. Always stay with the infant until the saturations stabilize in an acceptable range.  
Make small increases in FiO2 of 2 – 5%, re-assessing the baby after each step. If there is poor improvement despite a large increase in FiO2, contact reg/NNP.
7. It is unnecessary to increase FiO2 when PaO2/ TcPO2 is below 50 mm Hg, if SpO2 is > 85%, blood pressure is normal and pH > 7.24. Fetal Hb is adapted to deliver oxygen to tissues at oxygen tensions well below 50 mm Hg. In utero, the healthy fetus has paO2 < 35 mm Hg.

\* Modified from a protocol developed at Cedars-Sinai Medical Center, Los Angeles. After its introduction, Grade 3 and 4 ROP fell from 12.5% to 2.5% and laser therapy for ROP fell from 4.5% to zero, in infants <1500 g. [Chow et al. Pediatrics 2003; 111; 239-45].

§ Minimizing time spent at 96 – 100% while in added oxygen reduced lung inflammation/ infection in the STOP-ROP Multicenter Study. [Pediatrics 2000; 105: 295-310]