Overview of MPS types and key respiratory manifestations⁴

| Туре | Eponym | Upper airway obstruction | Lower airway obstruction | Restrictive lung disease |
|-----------------|--------------------------------------|-----------------------------|-----------------------------|-----------------------------|
| I | A: Hurler B: Hurler-Scheie C: Scheie | +++ | +++ | +++ |
| II | Hunter | +++ | +++ | ++ |
| III | Sanfilippo (A-D) | minimal | minimal | minimal |
| IV | Morquio (A and B) | ++ | + | +++ |
| VI | Maroteaux-Lamy | +++ | +++ | ++ |
| VII | Sly | +++ | +++ | ++ |
| ΙX ^a | Natowicz | | | |

Adapted from Muhlebach, Paediatr Respir Rev, 2011.

[&]quot;MPS IX has been reported in a single patient who presented with severe joint abnormalities and ENT manifestations.