Background: National and international asthma guidelines categorise the severity of asthma attacks into mild, moderate and severe/life threatening episodes with guidance on clinical signs and objective measurements identified for each. In those who experience a particularly severe asthma attack there is a penultimate event which, if not recognised, will result in death. The name for this attack varies and requires clarity and definition to enable the frequency of defined attacks to be measured, against which future interventions can be trialled to reduce these and asthma deaths.

Aims: To gain an international clinical consensus definition for this penultimate attack and agree an appropriate name.

Methods: An eDelphi survey was conducted with international experts in the fields of both paediatric and adult respiratory, intensive care and emergency medicine. A series of structured questionnaire was used to reach consensus on a name for the event, clinical features, objective measurements and other features. Consensus was defined in advance as ≥ 70% agreement.

Results: 104 participants from 25 countries completed all three rounds of the Delphi. Near fatal asthma was the preferred name for this event (66%). Participants reached consensus on the following definition: A near fatal asthma attack occurs in a person who is exhausted, with severe dyspnoea, unable to speak with a silent chest. Respiratory arrest is considered imminent and invasive ventilation will likely be required. They will be responding poorly to emergency asthma therapies. This is associated with hypoxaemia, hypercarbia and a falling pH.

Conclusions: The eDelphi procedure resulted in a comprehensive definition of a near fatal asthma attack which will be used in future work to determine eligibility criteria for studies of near fatal asthma and devise treatment pathways.

Funding: This work is funded by the University of Edinburgh College of Medicine and Veterinary Medicine PhD Studentship (AUKCAR PhD/15/01)