Person—pH of arterial blood gas, level N[.NN]

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# Person—pH of arterial blood gas, level N[.NN]

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| Identifying and definitional attributes |
| Metadata item type: | Data Element |
| Short name: | pH of arterial blood gas |
| METEOR identifier: | 320831 |
| Registration status: | [Health!](https://meteor-uat.aihw.gov.au/RegistrationAuthority/14), Recorded 14/07/2006 |
| Definition: | The pH of a person’s arterial blood gases. |
| Data Element Concept: | [Person—pH of arterial blood gas](https://meteor-uat.aihw.gov.au/content/320656)  |
| Value Domain: | [pH level N[.NN]](https://meteor-uat.aihw.gov.au/content/320829) |

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| Value domain attributes |
| Representational attributes |
| Representation class: | Total |
| Data type: | Number |
| Format: | N[.NN] |
| Maximum character length: | 3 |
|   | **Value** | **Meaning** |
| Supplementary values: | 9.99  | Not recorded Not stated/inadequately described  |

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| Data element attributes  |
| Collection and usage attributes |
| Guide for use: | Any pH value of < 6.5 or > 8 is considered invalid.  |
| Source and reference attributes |
| Submitting organisation: | ANZICS Database Management Committee |
| Reference documents: | Knaus WA, Draper EA, Bergner M, Murphy DJ, Harrell FE. The APACHE III Prognostic System: Risk Prediction of Hospital Mortality for Critically Ill Hospitalized adults. Chest 1991;100:1619–1636 |
| Relational attributes |
| Implementation in Data Set Specifications: | [Intensive care DSS](https://meteor-uat.aihw.gov.au/content/316130)[Health!](https://meteor-uat.aihw.gov.au/RegistrationAuthority/14), Recorded 14/07/2006***DSS specific information:*** Blood samples are taken at intervals during the first 24 hours of a patient’s entry to an intensive care unit. Several measurements of the pH of a patient's arterial blood gas are taken in this time period.Used in the calculation of APACHE II and APACHE III scores.Code 9.99 if arterial pH is not recorded.APACHE II:For adults, the value to be recorded for use in the calculation of the APACHE II score is the one that achieves the highest score determined using the APACHE II score weights shown in the table below.

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|  APACHEII | High abnormal range |   | Low abnormal range |
| pH | ≥7.7 | 7.6-7.69 |   | 7.5-7.59 | 7.33-7.49 |   | 7.25-7.32 | 7.15-7.24 | <7.15 |
| Score | +4 | +3 | +2 | +1 | 0 | +1 | +2 | +3 | +4 |

APACHE IIIFor APACHE III scores, the highest scoring pH is selected in conjunction with the level of carbon dioxide in the same blood sample.

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|  APACHE III | PaCO2 |
| 2pH | <25 | 25-<30 | 30-<35 | 35-<40 | 40-<45 | 45-<50 | 50-<55 | 55-<60 | ≥60 |
| <7.15 | 12 | 4 |
| 7.15-<7.2 |
| 7.20-<7.25 | 9 | 6 | 3 | 2 |
| 7.25-<7.30 |
| 7.30-<7.35 | 0 | 1 |
| 7.35-<7.40 | 5 |
| 7.40-<7.45 |
| 7.45-<7.50 | 2 | 12 |
| 7.50-<7.55 | 3 | 12 |
| 7.55-<7.60 |
| 7.60-<7.65 | 0 |   |
| >7.65 |

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