

### § 718.305

diagnosis been made as therein described: *Provided, however,* That any diagnosis made under this paragraph shall accord with acceptable medical procedures.

#### **§ 718.305 Presumption of pneumoconiosis.**

(a) If a miner was employed for fifteen years or more in one or more underground coal mines, and if there is a chest X-ray submitted in connection with such miner's or his or her survivor's claim and it is interpreted as negative with respect to the requirements of § 718.304, and if other evidence demonstrates the existence of a totally disabling respiratory or pulmonary impairment, then there shall be a rebuttable presumption that such miner is totally disabled due to pneumoconiosis, that such miner's death was due to pneumoconiosis, or that at the time of death such miner was totally disabled by pneumoconiosis. In the case of a living miner's claim, a spouse's affidavit or testimony may not be used by itself to establish the applicability of the presumption. The Secretary shall not apply all or a portion of the requirement of this paragraph that the miner work in an underground mine where it is determined that conditions of the miner's employment in a coal mine were substantially similar to conditions in an underground mine. The presumption may be rebutted only by establishing that the miner does not, or did not have pneumoconiosis, or that his or her respiratory or pulmonary impairment did not arise out of, or in connection with, employment in a coal mine.

(b) In the case of a deceased miner, where there is no medical or other relevant evidence, affidavits of persons having knowledge of the miner's condition shall be considered to be sufficient to establish the existence of a totally disabling respiratory or pulmonary impairment for purposes of this section.

(c) The determination of the existence of a totally disabling respiratory or pulmonary impairment, for purposes of applying the presumption described in this section, shall be made in accordance with § 718.204.

(d) Where the cause of death or total disability did not arise in whole or in

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part out of dust exposure in the miner's coal mine employment or the evidence establishes that the miner does not or did not have pneumoconiosis, the presumption will be considered rebutted. However, in no case shall the presumption be considered rebutted on the basis of evidence demonstrating the existence of a totally disabling obstructive respiratory or pulmonary disease of unknown origin.

(e) This section is not applicable to any claim filed on or after January 1, 1982.

#### **§ 718.306 Presumption of entitlement applicable to certain death claims.**

(a) In the case of a miner who died on or before March 1, 1978, who was employed for 25 or more years in one or more coal mines prior to June 30, 1971, the eligible survivors of such miner whose claims have been filed prior to June 30, 1982, shall be entitled to the payment of benefits, unless it is established that at the time of death such miner was not partially or totally disabled due to pneumoconiosis. Eligible survivors shall, upon request, furnish such evidence as is available with respect to the health of the miner at the time of death, and the nature and duration of the miner's coal mine employment.

(b) For the purpose of this section, a miner will be considered to have been "partially disabled" if he or she had reduced ability to engage in work as defined in § 718.204(b).

(c) In order to rebut this presumption the evidence must demonstrate that the miner's ability to perform work as defined in § 718.204(b) was not reduced at the time of his or her death or that the miner did not have pneumoconiosis.

(d) None of the following items, by itself, shall be sufficient to rebut the presumption:

(1) Evidence that a deceased miner was employed in a coal mine at the time of death;

(2) Evidence pertaining to a deceased miner's level of earnings prior to death;

(3) A chest X-ray interpreted as negative for the existence of pneumoconiosis;

(4) A death certificate which makes no mention of pneumoconiosis.

APPENDIX A TO PART 718—STANDARDS FOR ADMINISTRATION AND INTERPRETATION OF CHEST ROENTGENOGRAMS (X-RAYS)

The following standards are established in accordance with sections 402(f)(1)(D) and 413(b) of the Act. They were developed in consultation with the National Institute for Occupational Safety and Health. These standards are promulgated for the guidance of physicians and medical technicians to insure that uniform procedures are used in administering and interpreting X-rays and that the best available medical evidence will be submitted in connection with a claim for black lung benefits. If it is established that one or more standards have not been met, the claims adjudicator may consider such fact in determining the evidentiary weight to be assigned to the physician's report of an X-ray.

(1) Every chest roentgenogram shall be a single postero-anterior projection at full inspiration on a 14 by 17 inch film. Additional chest films or views shall be obtained if they are necessary for clarification and classification. The film and cassette shall be capable of being positioned both vertically and horizontally so that the chest roentgenogram will include both apices and costophrenic angles. If a miner is too large to permit the above requirements, then a projection with minimum loss of costophrenic angle shall be made.

(2) Miners shall be disrobed from the waist up at the time the roentgenogram is given. The facility shall provide a dressing area and, for those miners who wish to use one, the facility shall provide a clean gown. Facilities shall be heated to a comfortable temperature.

(3) Roentgenograms shall be made only with a diagnostic X-ray machine having a rotating anode tube with a maximum of a 2 mm source (focal spot).

(4) Except as provided in paragraph (5), roentgenograms shall be made with units having generators which comply with the following: (a) the generators of existing roentgenographic units acquired by the examining facility prior to July 27, 1973, shall have a minimum rating of 200 mA at 100 kVp; (b) generators of units acquired subsequent to that date shall have a minimum rating of 300 mA at 125 kVp.

NOTE: A generator with a rating of 150 kVp is recommended.

(5) Roentgenograms made with battery-powered mobile or portable equipment shall be made with units having a minimum rating of 100 mA at 110 kVp at 500 Hz, or 200 mA at 110 kVp at 60 Hz.

(6) Capacitor discharge, and field emission units may be used.

(7) Roentgenograms shall be given only with equipment having a beam-limiting device which does not cause large unexposed boundaries. The use of such a device shall be discernible from an examination of the roentgenogram.

(8) To insure high quality chest roentgenograms:

(i) The maximum exposure time shall not exceed  $\frac{1}{20}$  of a second except that with single phase units with a rating less than 300 mA at 125 kVp and subjects with chest over 28 cm postero-anterior, the exposure may be increased to not more than  $\frac{1}{10}$  of a second;

(ii) The source or focal spot to film distance shall be at least 6 feet;

(iii) Only medium-speed film and medium-speed intensifying screens shall be used;

(iv) Film-screen contact shall be maintained and verified at 6-month or shorter intervals;

(v) Intensifying screens shall be inspected at least once a month and cleaned when necessary by the method recommended by the manufacturer;

(vi) All intensifying screens in a cassette shall be of the same type and made by the same manufacturer;

(vii) When using over 90 kV, a suitable grid or other means of reducing scattered radiation shall be used;

(viii) The geometry of the radiographic system shall insure that the central axis (ray) of the primary beam is perpendicular to the plane of the film surface and impinges on the center of the film.

(9) Radiographic processing:

(i) Either automatic or manual film processing is acceptable. A constant time-temperature technique shall be meticulously employed for manual processing.

(ii) If mineral or other impurities in the processing water introduce difficulty in obtaining a high-quality roentgenogram, a suitable filter or purification system shall be used.

(10) Before the miner is advised that the examination is concluded, the roentgenogram shall be processed and inspected and accepted for quality by the physician, or if the physician is not available, acceptance may be made by the radiologic technologist. In a case of a substandard roentgenogram, another shall be made immediately.

(11) An electric power supply shall be used which complies with the voltage, current, and regulation specified by the manufacturer of the machine.

(12) A densitometric test object may be required on each roentgenogram for an objective evaluation of film quality at the discretion of the Department of Labor.

(13) Each roentgenogram made under this Appendix shall be permanently and legibly

marked with the name and address of the facility at which it is made, the miner's DOL claim number, the date of the roentgenogram, and left and right side of film. No other identifying markings shall be recorded on the roentgenogram.

[65 FR 80045, Dec. 20, 2000]

APPENDIX B TO PART 718—STANDARDS FOR ADMINISTRATION AND INTERPRETATION OF PULMONARY FUNCTION TESTS. TABLES B1, B2, B3, B4, B5, B6.

The following standards are established in accordance with section 402(f)(1)(D) of the Act. They were developed in consultation with the National Institute for Occupational Safety and Health (NIOSH). These standards are promulgated for the guidance of physicians and medical technicians to insure that uniform procedures are used in administering and interpreting ventilatory function tests and that the best available medical evidence will be submitted in support of a claim for black lung benefits. If it is established that one or more standards have not been met, the claims adjudicator may consider such fact in determining the evidentiary weight to be given to the results of the ventilatory function tests.

(1) Instruments to be used for the administration of pulmonary function tests shall be approved by NIOSH and shall conform to the following criteria:

(i) The instrument shall be accurate within  $\pm 50$  ml or within  $\pm 3$  percent of reading, whichever is greater.

(ii) The instrument shall be capable of measuring vital capacity from 0 to 7 liters BTPS.

(iii) The instrument shall have a low inertia and offer low resistance to airflow such that the resistance to airflow at 12 liters per second must be less than 1.5 cm H<sub>2</sub>O/liter/sec.

(iv) The instrument or user of the instrument must have a means of correcting volumes to body temperature saturated with water vapor (BTPS) under conditions of varying ambient spirometer temperatures and barometric pressures.

(v) The instrument used shall provide a tracing of flow versus volume (flow-volume loop) which displays the entire maximum inspiration and the entire maximum forced expiration. The instrument shall, in addition, provide tracings of the volume versus time tracing (spirogram) derived electronically from the flow-volume loop. Tracings are necessary to determine whether maximum inspiratory and expiratory efforts have been obtained during the FVC maneuver. If maximum voluntary ventilation is measured, the tracing shall record the individual breaths volumes versus time.

(vi) The instrument shall be capable of accumulating volume for a minimum of 10 seconds after the onset of exhalation.

(vii) The instrument must be capable of being calibrated in the field with respect to the FEV<sub>1</sub>. The volume calibration shall be accomplished with a 3 L calibrating syringe and should agree to within 1 percent of a 3 L calibrating volume. The linearity of the instrument must be documented by a record of volume calibrations at three different flow rates of approximately 3 L/6 sec, 3 L/3 sec, and 3 L/sec.

(viii) For measuring maximum voluntary ventilation (MVV) the instrument shall have a response which is flat within  $\pm 10$  percent up to 4 Hz at flow rates up to 12 liters per second over the volume range.

(ix) The spirogram shall be recorded at a speed of at least 20 mm/sec and a volume excursion of at least 10mm/L. Calculation of the FEV<sub>1</sub> from the flow-volume loop is not acceptable. Original tracings shall be submitted.

(2) The administration of pulmonary function tests shall conform to the following criteria:

(i) Tests shall not be performed during or soon after an acute respiratory illness.

(ii) For the FEV<sub>1</sub> and FVC, use of a nose clip is required. The procedures shall be explained in simple terms to the patient who shall be instructed to loosen any tight clothing and stand in front of the apparatus. The subject may sit, or stand, but care should be taken on repeat testing that the same position be used. Particular attention shall be given to insure that the chin is slightly elevated with the neck slightly extended. The subject shall be instructed to expire completely, momentarily hold his breath, place the mouthpiece in his mouth and close the mouth firmly about the mouthpiece to ensure no air leak. The subject will then make a maximum inspiration from the instrument and when maximum inspiration has been attained, without interruption, blow as hard, fast and completely as possible for at least 7 seconds or until a plateau has been attained in the volume-time curve with no detectable change in the expired volume during the last 2 seconds of maximal expiratory effort. A minimum of three flow-volume loops and derived spirometric tracings shall be carried out. The patient shall be observed throughout the study for compliance with instructions. Inspiration and expiration shall be checked visually for reproducibility. The effort shall be judged unacceptable when the patient:

(A) Has not reached full inspiration preceding the forced expiration; or

(B) Has not used maximal effort during the entire forced expiration; or

(C) Has not continued the expiration for least 7 sec. or until an obvious plateau for at

least 2 sec. in the volume-time curve has occurred; or

(D) Has coughed or closed his glottis; or

(E) Has an obstructed mouthpiece or a leak around the mouthpiece (obstruction due to tongue being placed in front of mouthpiece, false teeth falling in front of mouthpiece, etc.); or

(F) Has an unsatisfactory start of expiration, one characterized by excessive hesitation (or false starts). Peak flow should be attained at the start of expiration and the volume-time tracing (spirogram) should have a smooth contour revealing gradually decreasing flow throughout expiration; or

(G) Has an excessive variability between the three acceptable curves. The variation between the two largest FEV1's of the three acceptable tracings should not exceed 5 percent of the largest FEV1 or 100 ml, whichever is greater. As individuals with obstructive disease or rapid decline in lung function will be less likely to achieve this degree of reproducibility, tests not meeting this criterion may still be submitted for consideration in support of a claim for black lung benefits. Failure to meet this standard should be clearly noted in the test report by the physician conducting or reviewing the test.

(iii) For the MVV, the subject shall be instructed before beginning the test that he or she will be asked to breathe as deeply and as rapidly as possible for approximately 15 seconds. The test shall be performed with the subject in the standing position, if possible. Care shall be taken on repeat testing that the same position be used. The subject shall breathe normally into the mouthpiece of the apparatus for 10 to 15 seconds to become accustomed to the system. The subject shall then be instructed to breathe as deeply and as rapidly as possible, and shall be continually encouraged during the remainder of the maneuver. Subject shall continue the maneuver for 15 seconds. At least 5 minutes of rest shall be allowed between maneuvers. At least three MVV's shall be carried out.

(But see §718.103(b).) During the maneuvers the patient shall be observed for compliance with instructions. The effort shall be judged unacceptable when the patient:

(A) Has not maintained consistent effort for at least 12 to 15 seconds; or

(B) Has coughed or closed his glottis; or

(C) Has an obstructed mouthpiece or a leak around the mouthpiece (obstruction due to tongue being placed in front of mouthpiece, false teeth falling in front of mouthpiece, etc.); or

(D) Has an excessive variability between the three acceptable curves. The variation between the two largest MVV's of the three satisfactory tracings shall not exceed 10 percent.

(iv) A calibration check shall be performed on the instrument each day before use, using a volume source of at least three liters, accurate to within  $\pm 1$  percent of full scale. The volume calibration shall be performed in accordance with the method described in paragraph (1)(vii) of this Appendix. Accuracy of the time measurement used in determining the FEV1 shall be checked using the manufacturer's stated procedure and shall be within  $\pm 3$  percent of actual. The procedure described in the Appendix shall be performed as well as any other procedures suggested by the manufacturer of the spirometer being used.

(v)(A) The first step in evaluating a spirogram for the FVC and FEV1 shall be to determine whether or not the patient has performed the test properly or as described in (2)(ii) of this Appendix. The largest recorded FVC and FEV1, corrected to BTPS, shall be used in the analysis.

(B) Only MVV maneuvers which demonstrate consistent effort for at least 12 seconds shall be considered acceptable. The largest accumulated volume for a 12 second period corrected to BTPS and multiplied by five or the largest accumulated volume for a 15 second period corrected to BTPS and multiplied by four is to be reported as the MVV.







PLIGHT	PREDICTOR EQUATIONS FOR FSWI										FEMALES										AGE (YEARS)										* EV% OF PREDICTED **														
	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91
51.2	1.01	1.02	1.03	1.04	1.05	1.06	1.07	1.08	1.09	1.10	1.11	1.12	1.13	1.14	1.15	1.16	1.17	1.18	1.19	1.20	1.21	1.22	1.23	1.24	1.25	1.26	1.27	1.28	1.29	1.30	1.31	1.32	1.33	1.34	1.35	1.36	1.37	1.38	1.39	1.40	1.41	1.42	1.43	1.44	1.45
51.6	1.05	1.06	1.07	1.08	1.09	1.10	1.11	1.12	1.13	1.14	1.15	1.16	1.17	1.18	1.19	1.20	1.21	1.22	1.23	1.24	1.25	1.26	1.27	1.28	1.29	1.30	1.31	1.32	1.33	1.34	1.35	1.36	1.37	1.38	1.39	1.40	1.41	1.42	1.43	1.44	1.45	1.46	1.47	1.48	1.49
52.0	1.09	1.10	1.11	1.12	1.13	1.14	1.15	1.16	1.17	1.18	1.19	1.20	1.21	1.22	1.23	1.24	1.25	1.26	1.27	1.28	1.29	1.30	1.31	1.32	1.33	1.34	1.35	1.36	1.37	1.38	1.39	1.40	1.41	1.42	1.43	1.44	1.45	1.46	1.47	1.48	1.49	1.50	1.51	1.52	1.53
52.4	1.13	1.14	1.15	1.16	1.17	1.18	1.19	1.20	1.21	1.22	1.23	1.24	1.25	1.26	1.27	1.28	1.29	1.30	1.31	1.32	1.33	1.34	1.35	1.36	1.37	1.38	1.39	1.40	1.41	1.42	1.43	1.44	1.45	1.46	1.47	1.48	1.49	1.50	1.51	1.52	1.53	1.54	1.55	1.56	1.57
52.8	1.17	1.18	1.19	1.20	1.21	1.22	1.23	1.24	1.25	1.26	1.27	1.28	1.29	1.30	1.31	1.32	1.33	1.34	1.35	1.36	1.37	1.38	1.39	1.40	1.41	1.42	1.43	1.44	1.45	1.46	1.47	1.48	1.49	1.50	1.51	1.52	1.53	1.54	1.55	1.56	1.57	1.58	1.59	1.60	1.61
53.2	1.21	1.22	1.23	1.24	1.25	1.26	1.27	1.28	1.29	1.30	1.31	1.32	1.33	1.34	1.35	1.36	1.37	1.38	1.39	1.40	1.41	1.42	1.43	1.44	1.45	1.46	1.47	1.48	1.49	1.50	1.51	1.52	1.53	1.54	1.55	1.56	1.57	1.58	1.59	1.60	1.61	1.62	1.63	1.64	1.65
53.6	1.25	1.26	1.27	1.28	1.29	1.30	1.31	1.32	1.33	1.34	1.35	1.36	1.37	1.38	1.39	1.40	1.41	1.42	1.43	1.44	1.45	1.46	1.47	1.48	1.49	1.50	1.51	1.52	1.53	1.54	1.55	1.56	1.57	1.58	1.59	1.60	1.61	1.62	1.63	1.64	1.65	1.66	1.67	1.68	1.69
54.0	1.29	1.30	1.31	1.32	1.33	1.34	1.35	1.36	1.37	1.38	1.39	1.40	1.41	1.42	1.43	1.44	1.45	1.46	1.47	1.48	1.49	1.50	1.51	1.52	1.53	1.54	1.55	1.56	1.57	1.58	1.59	1.60	1.61	1.62	1.63	1.64	1.65	1.66	1.67	1.68	1.69	1.70	1.71	1.72	1.73
54.4	1.33	1.34	1.35	1.36	1.37	1.38	1.39	1.40	1.41	1.42	1.43	1.44	1.45	1.46	1.47	1.48	1.49	1.50	1.51	1.52	1.53	1.54	1.55	1.56	1.57	1.58	1.59	1.60	1.61	1.62	1.63	1.64	1.65	1.66	1.67	1.68	1.69	1.70	1.71	1.72	1.73	1.74	1.75	1.76	1.77
54.8	1.37	1.38	1.39	1.40	1.41	1.42	1.43	1.44	1.45	1.46	1.47	1.48	1.49	1.50	1.51	1.52	1.53	1.54	1.55	1.56	1.57	1.58	1.59	1.60	1.61	1.62	1.63	1.64	1.65	1.66	1.67	1.68	1.69	1.70	1.71	1.72	1.73	1.74	1.75	1.76	1.77	1.78	1.79	1.80	1.81
55.2	1.41	1.42	1.43	1.44	1.45	1.46	1.47	1.48	1.49	1.50	1.51	1.52	1.53	1.54	1.55	1.56	1.57	1.58	1.59	1.60	1.61	1.62	1.63	1.64	1.65	1.66	1.67	1.68	1.69	1.70	1.71	1.72	1.73	1.74	1.75	1.76	1.77	1.78	1.79	1.80	1.81	1.82	1.83	1.84	1.85
55.6	1.45	1.46	1.47	1.48	1.49	1.50	1.51	1.52	1.53	1.54	1.55	1.56	1.57	1.58	1.59	1.60	1.61	1.62	1.63	1.64	1.65	1.66	1.67	1.68	1.69	1.70	1.71	1.72	1.73	1.74	1.75	1.76	1.77	1.78	1.79	1.80	1.81	1.82	1.83	1.84	1.85	1.86	1.87	1.88	1.89
56.0	1.49	1.50	1.51	1.52	1.53	1.54	1.55	1.56	1.57	1.58	1.59	1.60	1.61	1.62	1.63	1.64	1.65	1.66	1.67	1.68	1.69	1.70	1.71	1.72	1.73	1.74	1.75	1.76	1.77	1.78	1.79	1.80	1.81	1.82	1.83	1.84	1.85	1.86	1.87	1.88	1.89	1.90	1.91	1.92	1.93
56.4	1.53	1.54	1.55	1.56	1.57	1.58	1.59	1.60	1.61	1.62	1.63	1.64	1.65	1.66	1.67	1.68	1.69	1.70	1.71	1.72	1.73	1.74	1.75	1.76	1.77	1.78	1.79	1.80	1.81	1.82	1.83	1.84	1.85	1.86	1.87	1.88	1.89	1.90	1.91	1.92	1.93	1.94	1.95	1.96	1.97
56.8	1.57	1.58	1.59	1.60	1.61	1.62	1.63	1.64	1.65	1.66	1.67	1.68	1.69	1.70	1.71	1.72	1.73	1.74	1.75	1.76	1.77	1.78	1.79	1.80	1.81	1.82	1.83	1.84	1.85	1.86	1.87	1.88	1.89	1.90	1.91	1.92	1.93	1.94	1.95	1.96	1.97	1.98	1.99	2.00	2.01

PREDICTION EQUATIONS FOR FVC

MALES      AGE (YEARS)      \* 60% OF PREDICTED \*\*

HEIGHT	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46
58.1	2.52	2.27	2.23	2.24	2.25	2.26	2.27	2.28	2.29	2.30	2.31	2.32	2.33	2.34	2.35	2.36	2.37	2.38	2.39	2.40	2.41	2.42	2.43	2.44	2.45
58.4	2.25	2.30	2.35	2.18	2.14	2.13	2.21	2.09	2.07	2.15	2.04	2.02	2.04	1.93	1.97	1.95	1.93	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.98
59.4	2.28	2.33	2.38	2.22	2.20	2.18	2.17	2.15	2.13	2.11	2.10	2.08	2.06	2.00	2.01	1.99	1.97	1.94	1.92	1.94	1.92	1.90	1.89	1.87	1.85
60.6	2.31	2.36	2.41	2.26	2.24	2.22	2.20	2.19	2.17	2.15	2.12	2.11	2.10	2.08	2.07	2.03	2.01	2.00	1.98	1.96	1.94	1.93	1.91	1.89	1.87
61.0	2.34	2.39	2.44	2.30	2.28	2.26	2.24	2.23	2.21	2.19	2.17	2.16	2.14	2.12	2.10	2.09	2.07	2.05	2.03	2.02	2.00	1.98	1.96	1.95	1.93
61.4	2.37	2.42	2.47	2.33	2.32	2.30	2.28	2.26	2.25	2.23	2.21	2.20	2.18	2.16	2.14	2.13	2.11	2.09	2.07	2.06	2.04	2.02	2.00	1.99	1.97
61.8	2.40	2.45	2.50	2.37	2.36	2.34	2.32	2.30	2.29	2.27	2.25	2.23	2.22	2.20	2.18	2.16	2.15	2.13	2.11	2.10	2.08	2.06	2.04	2.03	2.01
62.6	2.43	2.48	2.53	2.41	2.40	2.38	2.36	2.34	2.33	2.31	2.29	2.27	2.26	2.24	2.22	2.20	2.19	2.17	2.15	2.13	2.11	2.10	2.08	2.06	2.05
63.0	2.46	2.51	2.56	2.44	2.43	2.41	2.39	2.37	2.36	2.34	2.32	2.30	2.29	2.27	2.25	2.24	2.22	2.20	2.18	2.16	2.14	2.12	2.10	2.09	2.07
63.4	2.49	2.54	2.59	2.47	2.46	2.44	2.42	2.40	2.39	2.37	2.35	2.33	2.31	2.29	2.27	2.26	2.24	2.22	2.20	2.18	2.16	2.14	2.12	2.10	2.09
63.8	2.52	2.57	2.62	2.50	2.49	2.47	2.45	2.43	2.41	2.39	2.37	2.35	2.33	2.31	2.29	2.28	2.26	2.24	2.22	2.20	2.18	2.16	2.14	2.12	2.10
64.2	2.55	2.60	2.65	2.53	2.52	2.50	2.48	2.46	2.44	2.42	2.40	2.38	2.36	2.34	2.32	2.30	2.28	2.26	2.24	2.22	2.20	2.18	2.16	2.14	2.12
64.6	2.58	2.63	2.68	2.56	2.55	2.53	2.51	2.49	2.47	2.45	2.43	2.41	2.39	2.37	2.35	2.33	2.31	2.29	2.27	2.25	2.23	2.21	2.19	2.17	2.15
64.8	2.61	2.66	2.71	2.65	2.63	2.61	2.59	2.57	2.55	2.53	2.51	2.49	2.47	2.45	2.43	2.41	2.39	2.37	2.35	2.33	2.31	2.29	2.27	2.25	2.23
65.0	2.64	2.69	2.74	2.68	2.66	2.64	2.62	2.60	2.58	2.56	2.54	2.52	2.50	2.48	2.46	2.44	2.42	2.40	2.38	2.36	2.34	2.32	2.30	2.28	2.26
65.4	2.67	2.72	2.77	2.71	2.69	2.67	2.65	2.63	2.61	2.59	2.57	2.55	2.53	2.51	2.49	2.47	2.45	2.43	2.41	2.39	2.37	2.35	2.33	2.31	2.29
65.8	2.70	2.75	2.80	2.74	2.72	2.70	2.68	2.66	2.64	2.62	2.60	2.58	2.56	2.54	2.52	2.50	2.48	2.46	2.44	2.42	2.40	2.38	2.36	2.34	2.32
66.1	2.73	2.78	2.83	2.80	2.79	2.77	2.75	2.73	2.71	2.69	2.67	2.65	2.63	2.61	2.59	2.57	2.55	2.53	2.51	2.49	2.47	2.45	2.43	2.41	2.39
66.5	2.76	2.81	2.86	2.84	2.82	2.80	2.78	2.76	2.74	2.72	2.70	2.68	2.66	2.64	2.62	2.60	2.58	2.56	2.54	2.52	2.50	2.48	2.46	2.44	2.42
66.9	2.79	2.84	2.89	2.88	2.86	2.84	2.82	2.80	2.78	2.76	2.74	2.72	2.70	2.68	2.66	2.64	2.62	2.60	2.58	2.56	2.54	2.52	2.50	2.48	2.46
67.3	2.82	2.87	2.92	2.92	2.90	2.88	2.87	2.85	2.83	2.82	2.80	2.78	2.76	2.74	2.72	2.70	2.68	2.66	2.64	2.62	2.60	2.58	2.56	2.54	2.52
67.7	2.85	2.90	2.95	2.96	2.94	2.92	2.91	2.89	2.87	2.85	2.84	2.82	2.80	2.78	2.76	2.74	2.72	2.70	2.68	2.66	2.64	2.62	2.60	2.58	2.56
68.1	2.88	2.93	2.98	3.00	2.98	2.96	2.95	2.93	2.91	2.89	2.88	2.86	2.84	2.82	2.80	2.78	2.76	2.74	2.72	2.70	2.68	2.66	2.64	2.62	2.60
68.5	2.91	2.96	3.01	3.04	3.02	3.00	2.98	2.97	2.95	2.93	2.91	2.89	2.88	2.86	2.84	2.82	2.80	2.78	2.76	2.74	2.72	2.70	2.68	2.66	2.64
68.9	2.94	2.99	3.04	3.08	3.06	3.04	3.02	3.00	2.98	2.96	2.94	2.92	2.90	2.88	2.86	2.84	2.82	2.80	2.78	2.76	2.74	2.72	2.70	2.68	2.66
69.3	2.97	3.02	3.07	3.11	3.10	3.08	3.06	3.04	3.02	3.00	2.98	2.96	2.94	2.92	2.90	2.88	2.86	2.84	2.82	2.80	2.78	2.76	2.74	2.72	2.70
69.7	3.00	3.05	3.10	3.15	3.14	3.12	3.10	3.08	3.07	3.05	3.03	3.01	3.00	2.98	2.96	2.94	2.92	2.90	2.88	2.86	2.84	2.82	2.80	2.78	2.76
70.1	3.03	3.08	3.13	3.19	3.18	3.16	3.14	3.12	3.11	3.09	3.07	3.05	3.03	3.01	2.99	2.97	2.95	2.93	2.91	2.89	2.87	2.85	2.83	2.81	2.79
70.5	3.06	3.11	3.16	3.23	3.21	3.20	3.18	3.16	3.14	3.13	3.11	3.09	3.07	3.05	3.03	3.01	2.99	2.97	2.95	2.93	2.91	2.89	2.87	2.85	2.83
70.9	3.09	3.14	3.19	3.27	3.25	3.24	3.22	3.20	3.18	3.17	3.15	3.13	3.11	3.09	3.07	3.05	3.03	3.01	2.99	2.97	2.95	2.93	2.91	2.89	2.87
71.3	3.12	3.17	3.22	3.31	3.29	3.27	3.26	3.24	3.22	3.21	3.19	3.17	3.15	3.14	3.12	3.10	3.08	3.07	3.05	3.03	3.01	2.99	2.97	2.95	2.93
71.7	3.15	3.20	3.25	3.35	3.33	3.32	3.30	3.28	3.26	3.24	3.23	3.21	3.19	3.17	3.16	3.14	3.12	3.10	3.09	3.07	3.05	3.03	3.01	2.99	2.97
72.1	3.18	3.23	3.28	3.39	3.37	3.36	3.34	3.32	3.30	3.28	3.26	3.24	3.22	3.20	3.18	3.16	3.14	3.12	3.10	3.09	3.07	3.05	3.03	3.01	2.99
72.5	3.21	3.26	3.31	3.43	3.41	3.39	3.37	3.35	3.33	3.32	3.30	3.28	3.26	3.24	3.22	3.20	3.18	3.17	3.15	3.13	3.11	3.10	3.08	3.06	3.04
72.9	3.24	3.29	3.34	3.47	3.45	3.43	3.41	3.40	3.38	3.36	3.34	3.32	3.30	3.28	3.26	3.24	3.22	3.20	3.19	3.17	3.15	3.13	3.12	3.10	3.08
73.3	3.27	3.32	3.37	3.50	3.49	3.47	3.45	3.43	3.42	3.40	3.38	3.37	3.35	3.33	3.31	3.30	3.28	3.26	3.24	3.23	3.21	3.19	3.17	3.15	3.14
73.7	3.30	3.35	3.40	3.54	3.53	3.51	3.49	3.47	3.46	3.44	3.42	3.40	3.39	3.37	3.35	3.33	3.32	3.30	3.28	3.27	3.25	3.23	3.21	3.20	3.18
74.1	3.33	3.38	3.43	3.58	3.57	3.55	3.53	3.51	3.50	3.48	3.46	3.44	3.43	3.41	3.39	3.37	3.36	3.34	3.32	3.30	3.29	3.27	3.25	3.23	3.22
74.5	3.36	3.41	3.46	3.62	3.60	3.59	3.57	3.55	3.53	3.52	3.50	3.48	3.46	3.45	3.43	3.41	3.39	3.38	3.36	3.34	3.33	3.31	3.29	3.27	3.26
74.9	3.39	3.44	3.49	3.66	3.64	3.63	3.61	3.59	3.57	3.56	3.54	3.52	3.50	3.49	3.47	3.45	3.43	3.42	3.40	3.38	3.36	3.34	3.33	3.31	3.30
75.3	3.42	3.47	3.52	3.70	3.68	3.67	3.65	3.63	3.61	3.60	3.58	3.56	3.54	3.52	3.50	3.48	3.46	3.45	3.43	3.41	3.39	3.37	3.35	3.33	3.32
75.7	3.45	3.50	3.55	3.74	3.72	3.70	3.68	3.66	3.64	3.62	3.60	3.58	3.56	3.54	3.52	3.50	3.48	3.46	3.44	3.42	3.40	3.38	3.36	3.34	3.33
76.1	3.48	3.53	3.58	3.78	3.76	3.74	3.73	3.71	3.69	3.67	3.65	3.63	3.61	3.59	3.57	3.55	3.53	3.51	3.49	3.47	3.45	3.43	3.41	3.39	3.37
76.5	3.51	3.56	3.61	3.82	3.80	3.78	3.76	3.75	3.73	3.71	3.69	3.67	3.65	3.63	3.61	3.59	3.57	3.55	3.53	3.51	3.49	3.47	3.45	3.43	3.41
76.9	3.54	3.59	3.64	3.86	3.84	3.82	3.80	3.79	3.77	3.75	3.73	3.72	3.70	3.68	3.66	3.64	3.63	3.61	3.59	3.57	3.55	3.53	3.51	3.49	3.47
77.3	3.57	3.62	3.67	3.89	3.88	3.86	3.84	3.82	3.81	3.79	3.77	3.76	3.74	3.72	3.70	3.68	3.66	3.64	3.63	3.62	3.60	3.58	3.56	3.55	3.53
77.7	3.60	3.65	3.70	3.93	3.92	3.90	3.88	3.86	3.85	3.83	3.81	3.79	3.78	3.76	3.74	3.72	3.71	3.69	3.67	3.66	3.64	3.62	3.60	3.59	3.57
78.1	3.63	3.68	3.73	3.97	3.96	3.94	3.92	3.90	3.89	3.87	3.85	3.83	3.82	3.80	3.78	3.76	3.75	3.73	3.71	3.69	3.68	3.66	3.64	3.62	3.61
78.5	3.66	3.71	3.76	4.01	4.00	3.98	3.96	3.94	3.93	3.91	3.89	3.87	3.86	3.84	3.82	3.80	3.78	3.77	3.75	3.73	3.72	3.70	3.68	3.66	3.65
78.9	3.69	3.74	3.79	4.05	4.03	4.01	3.99	3.97	3.96	3.94	3.92	3.90	3.88	3.86	3.84	3.82	3.80	3.78	3.77	3.75	3.73	3.72	3.70	3.68	3.66
79.3	3.72	3.77	3.82	4.09																					

\* 80% OF PREDICTED \*\*

HEIGHT (IN)	PREDICTION EQUATIONS FOR FWC										AGE (YEARS)	MALES										AGE (YEARS)	FEMALES									
	47	48	49	50	51	52	53	54	55	56		57	58	59	60	61	62	63	64	65	66		67	68	69	70	71					
59.1	1.76	1.74	1.72	1.70	1.69	1.67	1.65	1.63	1.62	1.60	1.58	1.57	1.55	1.53	1.51	1.50	1.48	1.46	1.44	1.43	1.41	1.39	1.37	1.36	1.34							
59.4	1.80	1.78	1.76	1.74	1.73	1.71	1.69	1.67	1.66	1.64	1.62	1.60	1.59	1.57	1.55	1.53	1.51	1.49	1.47	1.45	1.43	1.41	1.39	1.37	1.36	1.34						
59.7	1.84	1.82	1.80	1.78	1.77	1.75	1.73	1.72	1.70	1.68	1.66	1.64	1.63	1.61	1.59	1.57	1.55	1.53	1.51	1.49	1.47	1.45	1.43	1.41	1.39	1.37						
60.0	1.88	1.86	1.84	1.83	1.81	1.79	1.77	1.76	1.74	1.72	1.70	1.68	1.67	1.65	1.63	1.62	1.60	1.58	1.56	1.54	1.52	1.50	1.48	1.46	1.44	1.42						
60.3	1.92	1.90	1.88	1.86	1.85	1.83	1.81	1.80	1.78	1.76	1.75	1.73	1.71	1.69	1.67	1.65	1.63	1.62	1.60	1.58	1.56	1.54	1.52	1.50	1.48	1.46						
60.6	1.96	1.94	1.92	1.90	1.89	1.87	1.85	1.83	1.82	1.80	1.78	1.77	1.75	1.73	1.71	1.69	1.67	1.65	1.64	1.62	1.60	1.58	1.56	1.54	1.52	1.50						
60.9	2.00	1.98	1.96	1.94	1.92	1.90	1.89	1.87	1.85	1.83	1.82	1.80	1.78	1.77	1.75	1.73	1.71	1.69	1.68	1.66	1.64	1.62	1.60	1.58	1.56	1.54						
61.2	2.04	2.02	2.00	1.98	1.96	1.94	1.93	1.91	1.89	1.87	1.86	1.84	1.83	1.81	1.79	1.77	1.75	1.73	1.72	1.70	1.68	1.66	1.64	1.62	1.60	1.58						
61.5	2.08	2.06	2.04	2.02	2.00	1.98	1.96	1.95	1.93	1.91	1.89	1.88	1.86	1.84	1.82	1.80	1.78	1.76	1.74	1.72	1.70	1.68	1.66	1.64	1.62	1.60						
61.8	2.12	2.10	2.08	2.06	2.04	2.02	2.00	1.98	1.96	1.95	1.93	1.91	1.89	1.87	1.85	1.83	1.81	1.79	1.77	1.75	1.73	1.71	1.69	1.67	1.65	1.63						
62.1	2.16	2.14	2.12	2.10	2.08	2.06	2.04	2.02	2.00	1.98	1.96	1.95	1.93	1.91	1.89	1.87	1.85	1.83	1.81	1.79	1.77	1.75	1.73	1.71	1.69	1.67						
62.4	2.20	2.18	2.16	2.14	2.12	2.10	2.08	2.06	2.04	2.02	2.00	1.98	1.96	1.95	1.93	1.91	1.89	1.87	1.85	1.83	1.81	1.79	1.77	1.75	1.73	1.71						
62.7	2.24	2.22	2.20	2.18	2.16	2.14	2.12	2.10	2.08	2.06	2.04	2.02	2.00	1.98	1.96	1.95	1.93	1.91	1.89	1.87	1.85	1.83	1.81	1.79	1.77	1.75						
63.0	2.28	2.26	2.24	2.22	2.20	2.18	2.16	2.14	2.12	2.10	2.08	2.06	2.04	2.02	2.00	1.98	1.96	1.94	1.92	1.90	1.88	1.86	1.84	1.82	1.80	1.78						
63.3	2.32	2.30	2.28	2.26	2.24	2.22	2.20	2.18	2.16	2.14	2.12	2.10	2.08	2.06	2.04	2.02	2.00	1.98	1.96	1.94	1.92	1.90	1.88	1.86	1.84	1.82						
63.6	2.36	2.34	2.32	2.30	2.28	2.26	2.24	2.22	2.20	2.18	2.16	2.14	2.12	2.10	2.08	2.06	2.04	2.02	2.00	1.98	1.96	1.94	1.92	1.90	1.88	1.86						
63.9	2.40	2.38	2.36	2.34	2.32	2.30	2.28	2.26	2.24	2.22	2.20	2.18	2.16	2.14	2.12	2.10	2.08	2.06	2.04	2.02	2.00	1.98	1.96	1.94	1.92	1.90						
64.2	2.44	2.42	2.40	2.38	2.36	2.34	2.32	2.30	2.28	2.26	2.24	2.22	2.20	2.18	2.16	2.14	2.12	2.10	2.08	2.06	2.04	2.02	2.00	1.98	1.96	1.94						
64.5	2.48	2.46	2.44	2.42	2.40	2.38	2.36	2.34	2.32	2.30	2.28	2.26	2.24	2.22	2.20	2.18	2.16	2.14	2.12	2.10	2.08	2.06	2.04	2.02	2.00	1.98						
64.8	2.52	2.50	2.48	2.46	2.44	2.42	2.40	2.38	2.36	2.34	2.32	2.30	2.28	2.26	2.24	2.22	2.20	2.18	2.16	2.14	2.12	2.10	2.08	2.06	2.04	2.02						
65.1	2.56	2.54	2.52	2.50	2.48	2.46	2.44	2.42	2.40	2.38	2.36	2.34	2.32	2.30	2.28	2.26	2.24	2.22	2.20	2.18	2.16	2.14	2.12	2.10	2.08	2.06						
65.4	2.60	2.58	2.56	2.54	2.52	2.50	2.48	2.46	2.44	2.42	2.40	2.38	2.36	2.34	2.32	2.30	2.28	2.26	2.24	2.22	2.20	2.18	2.16	2.14	2.12	2.10						
65.7	2.64	2.62	2.60	2.58	2.56	2.54	2.52	2.50	2.48	2.46	2.44	2.42	2.40	2.38	2.36	2.34	2.32	2.30	2.28	2.26	2.24	2.22	2.20	2.18	2.16	2.14						
66.0	2.68	2.66	2.64	2.62	2.60	2.58	2.56	2.54	2.52	2.50	2.48	2.46	2.44	2.42	2.40	2.38	2.36	2.34	2.32	2.30	2.28	2.26	2.24	2.22	2.20	2.18						
66.3	2.72	2.70	2.68	2.66	2.64	2.62	2.60	2.58	2.56	2.54	2.52	2.50	2.48	2.46	2.44	2.42	2.40	2.38	2.36	2.34	2.32	2.30	2.28	2.26	2.24	2.22						
66.6	2.76	2.74	2.72	2.70	2.68	2.66	2.64	2.62	2.60	2.58	2.56	2.54	2.52	2.50	2.48	2.46	2.44	2.42	2.40	2.38	2.36	2.34	2.32	2.30	2.28	2.26						
66.9	2.80	2.78	2.76	2.74	2.72	2.70	2.68	2.66	2.64	2.62	2.60	2.58	2.56	2.54	2.52	2.50	2.48	2.46	2.44	2.42	2.40	2.38	2.36	2.34	2.32	2.30						
67.2	2.84	2.82	2.80	2.78	2.76	2.74	2.72	2.70	2.68	2.66	2.64	2.62	2.60	2.58	2.56	2.54	2.52	2.50	2.48	2.46	2.44	2.42	2.40	2.38	2.36	2.34						
67.5	2.88	2.86	2.84	2.82	2.80	2.78	2.76	2.74	2.72	2.70	2.68	2.66	2.64	2.62	2.60	2.58	2.56	2.54	2.52	2.50	2.48	2.46	2.44	2.42	2.40	2.38						
67.8	2.92	2.90	2.88	2.86	2.84	2.82	2.80	2.78	2.76	2.74	2.72	2.70	2.68	2.66	2.64	2.62	2.60	2.58	2.56	2.54	2.52	2.50	2.48	2.46	2.44	2.42						
68.1	2.96	2.94	2.92	2.90	2.88	2.86	2.84	2.82	2.80	2.78	2.76	2.74	2.72	2.70	2.68	2.66	2.64	2.62	2.60	2.58	2.56	2.54	2.52	2.50	2.48	2.46						
68.4	3.00	2.98	2.96	2.94	2.92	2.90	2.88	2.86	2.84	2.82	2.80	2.78	2.76	2.74	2.72	2.70	2.68	2.66	2.64	2.62	2.60	2.58	2.56	2.54	2.52	2.50						
68.7	3.04	3.02	3.00	2.98	2.96	2.94	2.92	2.90	2.88	2.86	2.84	2.82	2.80	2.78	2.76	2.74	2.72	2.70	2.68	2.66	2.64	2.62	2.60	2.58	2.56	2.54						
69.0	3.08	3.06	3.04	3.02	3.00	2.98	2.96	2.94	2.92	2.90	2.88	2.86	2.84	2.82	2.80	2.78	2.76	2.74	2.72	2.70	2.68	2.66	2.64	2.62	2.60	2.58						
69.3	3.12	3.10	3.08	3.06	3.04	3.02	3.00	2.98	2.96	2.94	2.92	2.90	2.88	2.86	2.84	2.82	2.80	2.78	2.76	2.74	2.72	2.70	2.68	2.66	2.64	2.62						
69.6	3.16	3.14	3.12	3.10	3.08	3.06	3.04	3.02	3.00	2.98	2.96	2.94	2.92	2.90	2.88	2.86	2.84	2.82	2.80	2.78	2.76	2.74	2.72	2.70	2.68	2.66						
69.9	3.20	3.18	3.16	3.14	3.12	3.10	3.08	3.06	3.04	3.02	3.00	2.98	2.96	2.94	2.92	2.90	2.88	2.86	2.84	2.82	2.80	2.78	2.76	2.74	2.72	2.70						
70.2	3.24	3.22	3.20	3.18	3.16	3.14	3.12	3.10	3.08	3.06	3.04	3.02	3.00	2.98	2.96	2.94	2.92	2.90	2.88	2.86	2.84	2.82	2.80	2.78	2.76	2.74						
70.5	3.28	3.26	3.24	3.22	3.20	3.18	3.16	3.14	3.12	3.10	3.08	3.06	3.04	3.02	3.00	2.98	2.96	2.94	2.92	2.90	2.88	2.86	2.84	2.82	2.80	2.78						
70.8	3.32	3.30	3.28	3.26	3.24	3.22	3.20	3.18	3.16	3.14	3.12	3.10	3.08	3.06	3.04	3.02	3.00	2.98	2.96	2.94	2.92	2.90	2.88	2.86	2.84	2.82						
71.1	3.36	3.34	3.32	3.30	3.28	3.26	3.24	3.22	3.20	3.18	3.16	3.14	3.12	3.10	3.08	3.06	3.04	3.02	3.00	2.98	2.96	2.94	2.92	2.90	2.88	2.86						
71.4	3.40	3.38	3.36	3.34	3.32	3.30	3.28	3.26	3.24	3.22	3.20	3.18	3.16	3.14	3.12	3.10	3.08	3.06	3.04	3.02	3.00	2.98	2.96	2.94	2.92	2.90						
71.7	3.44	3.42	3.40	3.38	3.36	3.34	3.32	3.30	3.28	3.26	3.24	3.22	3.20	3.18	3.16	3.14	3.12	3.10	3.08	3.06	3.04	3.02	3.00	2.98	2.96	2.94						
72.0	3.48	3.46	3.44	3.42	3.40	3.38	3.36	3.34	3.32	3.30	3.28	3.26	3.24	3.22	3.20	3.18	3.16	3.14	3.12	3.10	3.08	3.06	3.04	3.02	3.00	2.98						
72.3	3.52	3.50	3.48	3.46	3.44	3.42	3.40	3.38	3.36	3.34	3.32	3.30	3.28	3.26	3.24	3.22	3.20	3.18	3.16	3.14	3.12	3.10	3.08	3.06	3.04	3.02						
72.6	3.56	3.54	3.52	3.50	3.48	3.46	3.44	3.42	3.40	3.38	3.36	3.34	3.32	3.30	3.28	3.26	3.24	3.22	3.20	3.18	3.16	3.14	3.12	3.10	3.08	3.06						
72.9	3.60	3.58	3.56	3.54	3.52	3.50	3.48	3.46	3.44	3.42	3.40	3.38	3.36	3.34	3.32	3.30	3.28	3.26	3.24	3.22	3.20	3.18	3.16	3.14	3.12	3.10						
73.2	3.64	3.62	3.60	3.58	3.56	3.54	3.52	3.50	3.48	3.46	3.44	3.42	3.40	3.38	3.36	3.34	3.32															

FEMALES  
PREDICTION EQUATIONS FOR FVC

\* 0.0% UP PREDICTED \*\*

HEIGHT (IN)	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46
51.2	1.53	1.52	1.50	1.49	1.48	1.47	1.45	1.44	1.43	1.41	1.40	1.39	1.37	1.36	1.35	1.33	1.34	1.31	1.28	1.27	1.25	1.24	1.23	1.21	1.21
51.6	1.55	1.54	1.51	1.50	1.49	1.47	1.46	1.45	1.43	1.42	1.41	1.40	1.38	1.37	1.36	1.34	1.34	1.31	1.28	1.27	1.25	1.24	1.23	1.21	1.21
52.0	1.58	1.56	1.55	1.54	1.52	1.51	1.50	1.48	1.47	1.45	1.44	1.42	1.40	1.39	1.38	1.36	1.36	1.33	1.30	1.29	1.27	1.26	1.25	1.23	1.22
52.4	1.61	1.59	1.58	1.57	1.55	1.54	1.52	1.51	1.49	1.48	1.46	1.45	1.43	1.42	1.40	1.39	1.37	1.35	1.34	1.32	1.31	1.30	1.29	1.27	1.26
52.8	1.62	1.61	1.59	1.58	1.56	1.55	1.53	1.52	1.50	1.49	1.47	1.46	1.44	1.43	1.41	1.40	1.38	1.36	1.35	1.33	1.32	1.31	1.30	1.29	1.27
53.2	1.64	1.63	1.62	1.60	1.59	1.58	1.56	1.55	1.53	1.52	1.50	1.48	1.47	1.45	1.44	1.42	1.40	1.39	1.37	1.35	1.34	1.33	1.32	1.31	1.29
53.6	1.66	1.65	1.64	1.62	1.61	1.60	1.58	1.57	1.55	1.54	1.52	1.51	1.49	1.48	1.46	1.45	1.43	1.41	1.40	1.39	1.37	1.36	1.35	1.34	1.33
53.9	1.69	1.67	1.66	1.65	1.63	1.62	1.61	1.59	1.58	1.56	1.55	1.53	1.52	1.50	1.49	1.48	1.46	1.45	1.44	1.42	1.41	1.40	1.39	1.37	1.37
54.3	1.71	1.70	1.68	1.67	1.66	1.64	1.63	1.62	1.60	1.59	1.57	1.56	1.54	1.53	1.51	1.50	1.48	1.47	1.46	1.44	1.43	1.42	1.41	1.39	1.39
54.7	1.73	1.72	1.70	1.69	1.68	1.67	1.65	1.64	1.63	1.61	1.60	1.58	1.57	1.55	1.54	1.52	1.51	1.49	1.48	1.47	1.45	1.44	1.43	1.41	1.41
55.1	1.75	1.74	1.72	1.71	1.70	1.68	1.67	1.65	1.64	1.62	1.61	1.59	1.58	1.56	1.55	1.53	1.52	1.50	1.49	1.48	1.47	1.45	1.44	1.43	1.41
55.5	1.78	1.76	1.75	1.74	1.72	1.71	1.70	1.68	1.67	1.65	1.64	1.62	1.61	1.59	1.57	1.56	1.54	1.53	1.52	1.51	1.49	1.48	1.47	1.45	1.44
55.9	1.80	1.78	1.77	1.76	1.74	1.73	1.72	1.71	1.69	1.68	1.67	1.65	1.64	1.62	1.61	1.60	1.58	1.57	1.56	1.54	1.53	1.52	1.51	1.49	1.48
56.3	1.82	1.81	1.79	1.78	1.77	1.75	1.74	1.73	1.71	1.70	1.69	1.67	1.66	1.64	1.63	1.61	1.60	1.58	1.57	1.56	1.54	1.53	1.52	1.51	1.49
56.7	1.84	1.83	1.82	1.80	1.79	1.78	1.76	1.75	1.74	1.72	1.71	1.70	1.68	1.67	1.65	1.64	1.62	1.60	1.59	1.58	1.56	1.55	1.54	1.53	1.53
57.1	1.86	1.85	1.84	1.82	1.81	1.80	1.79	1.77	1.76	1.75	1.73	1.72	1.71	1.69	1.68	1.67	1.65	1.64	1.63	1.61	1.60	1.59	1.57	1.56	1.55
57.5	1.89	1.87	1.86	1.85	1.83	1.82	1.81	1.79	1.78	1.77	1.75	1.74	1.73	1.71	1.70	1.69	1.67	1.66	1.64	1.62	1.61	1.60	1.59	1.57	1.56
57.9	1.91	1.89	1.88	1.87	1.85	1.84	1.83	1.81	1.80	1.79	1.77	1.76	1.75	1.73	1.72	1.71	1.69	1.68	1.66	1.65	1.64	1.62	1.61	1.59	1.58
58.3	1.93	1.92	1.90	1.89	1.88	1.86	1.85	1.84	1.83	1.81	1.80	1.79	1.77	1.76	1.74	1.73	1.72	1.70	1.69	1.68	1.66	1.65	1.64	1.62	1.61
58.7	1.95	1.94	1.93	1.91	1.90	1.89	1.87	1.86	1.85	1.83	1.82	1.81	1.79	1.78	1.77	1.75	1.74	1.73	1.72	1.70	1.69	1.68	1.66	1.65	1.64
59.1	1.98	1.96	1.95	1.94	1.92	1.91	1.90	1.88	1.87	1.85	1.84	1.82	1.81	1.79	1.78	1.77	1.75	1.74	1.73	1.72	1.70	1.69	1.68	1.67	1.66
59.4	2.00	1.98	1.97	1.96	1.94	1.93	1.92	1.90	1.89	1.87	1.86	1.84	1.83	1.81	1.80	1.79	1.77	1.76	1.75	1.73	1.72	1.71	1.69	1.68	1.68
59.8	2.02	2.01	1.99	1.98	1.97	1.95	1.94	1.93	1.91	1.90	1.88	1.87	1.85	1.83	1.82	1.81	1.80	1.78	1.77	1.76	1.74	1.73	1.72	1.70	1.70
60.2	2.04	2.03	2.02	2.00	1.99	1.97	1.96	1.94	1.93	1.91	1.90	1.88	1.87	1.85	1.84	1.82	1.81	1.80	1.78	1.77	1.76	1.74	1.73	1.72	1.70
60.6	2.06	2.05	2.04	2.02	2.01	1.99	1.98	1.96	1.95	1.93	1.92	1.90	1.89	1.87	1.86	1.84	1.83	1.82	1.80	1.79	1.78	1.76	1.75	1.74	1.73
61.0	2.09	2.07	2.06	2.05	2.03	2.02	2.01	1.99	1.98	1.97	1.95	1.94	1.92	1.91	1.89	1.88	1.86	1.85	1.84	1.82	1.81	1.80	1.78	1.77	1.76
61.4	2.11	2.10	2.08	2.07	2.05	2.04	2.03	2.02	2.00	1.99	1.97	1.96	1.95	1.94	1.92	1.91	1.90	1.88	1.87	1.86	1.84	1.83	1.82	1.80	1.79
61.8	2.13	2.12	2.10	2.09	2.07	2.06	2.05	2.04	2.03	2.01	2.00	1.98	1.97	1.96	1.95	1.93	1.92	1.91	1.89	1.88	1.87	1.85	1.84	1.83	1.81
62.2	2.15	2.14	2.13	2.11	2.10	2.09	2.07	2.06	2.05	2.03	2.02	2.00	1.99	1.98	1.97	1.95	1.94	1.93	1.92	1.90	1.89	1.88	1.86	1.85	1.84
62.6	2.17	2.16	2.15	2.14	2.12	2.11	2.10	2.09	2.07	2.06	2.04	2.03	2.02	2.00	1.99	1.98	1.96	1.95	1.94	1.92	1.91	1.90	1.88	1.87	1.86
63.0	2.20	2.18	2.17	2.16	2.14	2.13	2.12	2.10	2.09	2.07	2.06	2.04	2.03	2.01	2.00	1.99	1.97	1.96	1.95	1.93	1.92	1.91	1.89	1.88	1.87
63.4	2.22	2.21	2.19	2.18	2.17	2.15	2.14	2.13	2.11	2.10	2.08	2.07	2.05	2.04	2.03	2.01	2.00	1.99	1.97	1.96	1.95	1.94	1.92	1.91	1.90
63.8	2.24	2.23	2.22	2.20	2.19	2.18	2.16	2.15	2.14	2.12	2.11	2.10	2.08	2.07	2.05	2.04	2.03	2.02	2.00	1.99	1.98	1.96	1.95	1.94	1.92
64.2	2.26	2.25	2.24	2.22	2.21	2.20	2.18	2.17	2.16	2.14	2.13	2.12	2.11	2.09	2.08	2.07	2.05	2.04	2.03	2.01	2.00	1.99	1.97	1.96	1.95
64.6	2.29	2.27	2.26	2.25	2.24	2.22	2.21	2.19	2.18	2.17	2.15	2.14	2.13	2.11	2.10	2.09	2.07	2.06	2.05	2.04	2.02	2.01	2.00	1.98	1.97
65.0	2.31	2.30	2.28	2.27	2.26	2.24	2.23	2.22	2.20	2.19	2.18	2.16	2.15	2.14	2.12	2.11	2.10	2.08	2.07	2.06	2.04	2.03	2.02	2.00	1.99
65.4	2.33	2.32	2.30	2.29	2.28	2.26	2.25	2.24	2.22	2.21	2.19	2.18	2.16	2.15	2.14	2.12	2.11	2.10	2.08	2.07	2.06	2.04	2.03	2.02	2.00
65.8	2.35	2.34	2.33	2.31	2.30	2.29	2.27	2.26	2.25	2.23	2.22	2.20	2.19	2.17	2.16	2.15	2.13	2.12	2.11	2.09	2.08	2.07	2.05	2.04	2.03
66.2	2.37	2.36	2.35	2.33	2.32	2.31	2.29	2.28	2.27	2.25	2.24	2.22	2.21	2.19	2.18	2.17	2.15	2.14	2.13	2.11	2.10	2.09	2.07	2.06	2.05
66.6	2.40	2.38	2.37	2.36	2.34	2.33	2.32	2.30	2.29	2.27	2.26	2.24	2.23	2.21	2.20	2.19	2.17	2.16	2.15	2.13	2.12	2.11	2.09	2.08	2.07
67.0	2.42	2.41	2.39	2.38	2.37	2.35	2.34	2.33	2.31	2.30	2.29	2.27	2.26	2.25	2.23	2.22	2.21	2.19	2.18	2.17	2.16	2.14	2.13	2.12	2.10
67.4	2.44	2.43	2.42	2.40	2.39	2.38	2.36	2.35	2.34	2.32	2.31	2.30	2.28	2.27	2.26	2.24	2.23	2.22	2.20	2.19	2.18	2.16	2.15	2.14	2.12
67.8	2.46	2.45	2.44	2.42	2.41	2.40	2.38	2.37	2.36	2.34	2.33	2.32	2.31	2.29	2.28	2.27	2.25	2.24	2.23	2.21	2.20	2.19	2.17	2.16	2.15
68.2	2.49	2.47	2.46	2.45	2.43	2.42	2.41	2.39	2.38	2.37	2.35	2.34	2.33	2.31	2.30	2.29	2.27	2.26	2.25	2.24	2.22	2.21	2.20	2.18	2.17
68.6	2.51	2.50	2.49	2.48	2.46	2.45	2.44	2.42	2.41	2.39	2.38	2.37	2.35	2.34	2.32	2.31	2.30	2.29	2.27	2.26	2.25	2.24	2.22	2.20	2.19
69.0	2.53	2.52	2.51	2.49	2.48	2.47	2.45	2.44	2.43	2.41	2.40	2.39	2.37	2.36	2.34	2.33	2.32	2.31	2.29	2.28	2.27	2.25	2.24	2.23	2.21
69.4	2.55	2.54	2.53	2.51	2.50	2.49	2.47	2.46	2.45	2.43	2.42	2.41	2.39	2.38	2.37	2.35	2.34	2.33	2.31	2.30	2.29	2.28	2.27	2.25	2.24
69.8	2.57	2.56	2.55	2.54	2.52	2.51	2.50	2.48	2.47	2.46	2.44	2.43	2.42	2.40	2.39	2.38	2.36	2.35	2.34	2.32	2.31	2.30	2.28	2.27	2.26
70.2	2.60	2.58	2.57	2.56	2.54	2.53	2.52	2.50	2.49	2.48	2.46	2.45	2.44	2.43	2.41	2.40	2.39	2.37	2.36	2.35	2.33	2.32	2.31	2.29	2.28
70.6	2.62	2.61	2.59	2.58	2.57	2.55	2.54	2.53	2.51	2.50	2.49	2.47	2.46	2.45	2.43	2.42	2.41	2.39	2.38	2.37	2.36	2.34	2.33	2.32	2.30
71.0	2.64	2																							





\* PERCENT OF PREDICTED \*\*

HEIGHT (CM)	AGE (YEARS)											
	47	48	49	50	51	52	53	54	55	56	57	58
59.1	56	55	54	53	52	51	50	49	48	47	46	45
59.4	57	56	55	54	53	52	51	50	49	48	47	46
59.7	58	57	56	55	54	53	52	51	50	49	48	47
60.2	60	59	58	57	56	55	54	53	52	51	50	49
60.6	61	60	59	58	57	56	55	54	53	52	51	50
61.0	62	61	60	59	58	57	56	55	54	53	52	51
61.4	63	62	61	60	59	58	57	56	55	54	53	52
61.8	65	64	63	62	61	60	59	58	57	56	55	54
62.2	66	65	64	63	62	61	60	59	58	57	56	55
62.6	67	66	65	64	63	62	61	60	59	58	57	56
63.0	68	67	66	65	64	63	62	61	60	59	58	57
63.4	70	69	68	67	66	65	64	63	62	61	60	59
63.8	71	70	69	68	67	66	65	64	63	62	61	60
64.2	72	71	70	69	68	67	66	65	64	63	62	61
64.6	73	72	71	70	69	68	67	66	65	64	63	62
65.0	75	74	73	72	71	70	69	68	67	66	65	64
65.4	76	75	74	73	72	71	70	69	68	67	66	65
65.8	77	76	75	74	73	72	71	70	69	68	67	66
66.2	78	77	76	75	74	73	72	71	70	69	68	67
66.6	80	79	78	77	76	75	74	73	72	71	70	69
67.0	81	80	79	78	77	76	75	74	73	72	71	70
67.4	82	81	80	79	78	77	76	75	74	73	72	71
67.8	83	82	81	80	79	78	77	76	75	74	73	72
68.2	85	84	83	82	81	80	79	78	77	76	75	74
68.6	86	85	84	83	82	81	80	79	78	77	76	75
69.0	87	86	85	84	83	82	81	80	79	78	77	76
69.4	88	87	86	85	84	83	82	81	80	79	78	77
69.8	90	89	88	87	86	85	84	83	82	81	80	79
70.2	91	90	89	88	87	86	85	84	83	82	81	80
70.6	92	91	90	89	88	87	86	85	84	83	82	81
71.0	93	92	91	90	89	88	87	86	85	84	83	82
71.4	95	94	93	92	91	90	89	88	87	86	85	84
71.8	96	95	94	93	92	91	90	89	88	87	86	85
72.2	97	96	95	94	93	92	91	90	89	88	87	86
72.6	98	97	96	95	94	93	92	91	90	89	88	87
73.0	100	99	98	97	96	95	94	93	92	91	90	89
73.4	101	100	99	98	97	96	95	94	93	92	91	90
73.8	102	101	100	99	98	97	96	95	94	93	92	91
74.2	103	102	101	100	99	98	97	96	95	94	93	92
74.6	105	104	103	102	101	100	99	98	97	96	95	94
75.0	107	106	105	104	103	102	101	100	99	98	97	96
75.4	109	108	107	106	105	104	103	102	101	100	99	98
75.8	108	107	106	105	104	103	102	101	100	99	98	97
76.2	110	109	108	107	106	105	104	103	102	101	100	99
76.6	111	110	109	108	107	106	105	104	103	102	101	100
77.0	112	111	110	109	108	107	106	105	104	103	102	101
77.4	113	112	111	110	109	108	107	106	105	104	103	102
77.8	115	114	113	112	111	110	109	108	107	106	105	104
78.2	117	116	115	114	113	112	111	110	109	108	107	106
78.6	118	117	116	115	114	113	112	111	110	109	108	107
79.0	119	118	117	116	115	114	113	112	111	110	109	108
79.4	120	119	118	117	116	115	114	113	112	111	110	109
79.8	122	121	120	119	118	117	116	115	114	113	112	111
80.2	123	122	121	120	119	118	117	116	115	114	113	112
80.6	124	123	122	121	120	119	118	117	116	115	114	113
81.0	125	124	123	122	121	120	119	118	117	116	115	114
81.4	127	126	125	124	123	122	121	120	119	118	117	116
81.8	128	127	126	125	124	123	122	121	120	119	118	117
82.2	129	128	127	126	125	124	123	122	121	120	119	118
82.6	131	130	129	128	127	126	125	124	123	122	121	120



APPENDIX C TO PART 718—BLOOD-GAS TABLES

The following tables set forth the values to be applied in determining whether total disability may be established in accordance with §§ 718.204(b)(2)(ii) and 718.305(a), (c). The values contained in the tables are indicative of impairment only. They do not establish a degree of disability except as provided in §§ 718.204(b)(2)(ii) and 718.305(a), (c) of this

subchapter, nor do they establish standards for determining normal alveolar gas exchange values for any particular individual. Tests shall not be performed during or soon after an acute respiratory or cardiac illness. A miner who meets the following medical specifications shall be found to be totally disabled, in the absence of rebutting evidence, if the values specified in one of the following tables are met:

HEIGHT (IN)	PREDICTION EQUATIONS FOR MA										PERCENTS AGE (YEARS)										* EUR UK PREDICTED **									
	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71					
51.0	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18						
51.2	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18						
51.4	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18						
51.6	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18						
51.8	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18						
52.0	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18						
52.2	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18						
52.4	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18						
52.6	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18						
52.8	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18						
53.0	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18						
53.2	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18						
53.4	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18						
53.6	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18						
53.8	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18						
54.0	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18						
54.2	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18						
54.4	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18						
54.6	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18						
54.8	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18						
55.0	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18						
55.2	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18						
55.4	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18						
55.6	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18						
55.8	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18						
56.0	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18						
56.2	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18						
56.4	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18						
56.6	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18						
56.8	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18						
57.0	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18						
57.2	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18						
57.4	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18						
57.6	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18						
57.8	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18						
58.0	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18						
58.2	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18						
58.4	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18						
58.6	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18						
58.8	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18						
59.0	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18						
59.2	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18						
59.4	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18						
59.6	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18						
59.8	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18						
60.0	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18						
60.2	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18						
60.4	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18						
60.6	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18						
60.8	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18						
61.0	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18						
61.2	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18						
61.4	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18						
61.6	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18						
61.8	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18						
62.0	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18						
62.2	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18						
62.4	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18						
62.6	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18						
62.8	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18						
63.0	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18						
63.2	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18						
63.4	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18						
63.6	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18						
63.8	41	40	3																											

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(1) For arterial blood-gas studies performed at test sites up to 2,999 feet above sea level:

Arterial PCO2 (mm Hg)	Arterial PO2 equal to or less than (mm Hg)
25 or below .....	75
26 .....	74
27 .....	73
28 .....	72
29 .....	71
30 .....	70
31 .....	69
32 .....	68
33 .....	67
34 .....	66
35 .....	65
36 .....	64
37 .....	63
38 .....	62
39 .....	61
40-49 .....	60
Above 50 .....	(1)

<sup>1</sup> Any value.

(2) For arterial blood-gas studies performed at test sites 3,000 to 5,999 feet above sea level:

Arterial PCO2 (mm Hg)	Arterial PO2 equal to or less than (mm Hg)
25 or below .....	70
26 .....	69
27 .....	68
28 .....	67
29 .....	66
30 .....	65
31 .....	64
32 .....	63
33 .....	62
34 .....	61
35 .....	60
36 .....	59
37 .....	58
38 .....	57
39 .....	56
40-49 .....	55
Above 50 .....	(2)

<sup>2</sup> Any value.

(3) For arterial blood-gas studies performed at test sites 6,000 feet or more above sea level:

Arterial PCO2 (mm Hg)	Arterial PO2 equal to or less than (mm Hg)
25 or below .....	65
26 .....	64
27 .....	63
28 .....	62
29 .....	61
30 .....	60
31 .....	59
32 .....	58
33 .....	57
34 .....	56
35 .....	55

Arterial PCO2 (mm Hg)	Arterial PO2 equal to or less than (mm Hg)
36 .....	54
37 .....	53
38 .....	52
39 .....	51
40-49 .....	50
Above 50 .....	(3)

<sup>3</sup> Any value.

[65 FR 80045, Dec. 20, 2000]

**PART 722—CRITERIA FOR DETERMINING WHETHER STATE WORKERS' COMPENSATION LAWS PROVIDE ADEQUATE COVERAGE FOR PNEUMOCONIOSIS AND LISTING OF APPROVED STATE LAWS**

Sec.

722.1 Purpose.

722.2 Definitions.

722.3 General criteria; inclusion in and removal from the Secretary's list.

722.4 The Secretary's list.

**AUTHORITY:** 5 U.S.C. 301, Reorganization Plan No. 6 of 1950, 15 FR 3174, 30 U.S.C. 901 *et seq.*, 921, 932, 936; 33 U.S.C. 901 *et seq.*, Secretary's Order 7-87, 52 FR 48466, Employment Standards Order No. 90-02.

**SOURCE:** 65 FR 80053, Dec. 20, 2000, unless otherwise noted.

**§ 722.1 Purpose.**

Section 421 of the Black Lung Benefits Act provides that a claim for benefits based on the total disability or death of a coal miner due to pneumoconiosis must be filed under a State workers' compensation law where such law provides adequate coverage for pneumoconiosis. A State workers' compensation law may be deemed to provide adequate coverage only when it is included on a list of such laws maintained by the Secretary. The purpose of this part is to set forth the procedures and criteria for inclusion on that list, and to provide that list.

**§ 722.2 Definitions.**

(a) The definitions and use of terms contained in subpart A of part 725 of this title shall be applicable to this part.

(b) For purposes of this part, the following definitions apply: