

2021 RSNA COVID-19 Detection Challenge
Dataset Description

Imaging Modality	X-ray
Annotation Pattern	Exam/image level into 4 categories: <ul style="list-style-type: none"> • Negative • Typical for COVID-19 • Indeterminate for COVID-19 • Atypical for COVID-19 2D ROI bounding box per image for airspace opacities only
Annotation methodology and structure	Manual annotations Annotation software - md.ai Annotation output <ul style="list-style-type: none"> • Spreadsheet (text) • Bounding boxes as Json from md.ai
Structure nomenclature and standards	<ul style="list-style-type: none"> • MIDRC • TCIA (requires peer-reviewed publication) • UMLS for BIMCV dataset
Data use agreement/licensing	Non-commercial purpose
Imaging file and structure set format	DICOM - metadata/tags (based on individual task) <ul style="list-style-type: none"> • RICORD portion used DICOM Anonymizer
Image Characteristics	Resolution <ul style="list-style-type: none"> • Full resolution (exact resolution is not specified for RICORD) • High resolution for BIMCV Pre-processing <ul style="list-style-type: none"> • None noted, but not stated Burned-in PHI <ul style="list-style-type: none"> • Data was anonymized by both contributing organizations
Timing (in case of serial imaging)	This is specified in RICORD data tags, but not addressed otherwise
Labeler demographics	<ul style="list-style-type: none"> • 9 thoracic and 13 non-thoracic • 19 practicing radiologists, 3 senior residents • Extract individual • Agreement/disagreement - given for practice cases, otherwise no apparent overlap • Scope of annotation - multi-institutional
Responsibilities quality, safety, privacy	Predominantly covered by submitting institutions
Monetization	Non-commercial license

Reference	Lakhani P, et al. The 2021 SIIM-FISABIO-RSNA Machine Learning COVID-19 Challenge: Annotation and Standard Exam Classification of COVID-19 Chest Radiographs. https://osf.io/532ek/
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