

## BLS 2113 – Table 1: Included Studies

\*Composite outcome score based on time to first compression, hand position, chest compression depth and rate and hands-off time

\*\*times to identification of cardiac arrest, time to the first compression, time to patient's address verification and the time to initiate instructions to the caller.

\*\*\*chest compression rate, depth, and the proportion of compressions without error, with correct hand position, adequate depth, and total release"

Study	Pub Year	Location	Category	Study Design	Sample	Primary Outcome
Tsunoyama 2017	2017	Japan	Advanced Dispatcher Training	Before/After	532	Bystander CPR Initiation
Park 2022	2022	Korea	Advanced Dispatcher Training	Before/after registry study	10,127	Survival to hospital discharge
Harjanto 2016	2016	Singapore	Advanced Dispatcher Training	Before/After; intervention	2,968	Survival to hospital admission, survival neurologically intact at 30 days
Choa 2008	2008	Korea	Animation vs. human Dispatcher	Randomized Mannikin Simulation	85	CPR Performance Checklist
Lerner 2019	2019	USA	Centralized Dispatch	Before/After	169	Not defined
Ro 2018	2018	Korea	Centralized Dispatch	Before/After; natural experiment	11,616	Bystander CPR Initiation
Lee 2014	2014	Korea	Metronome rates	Randomized Mannikin Simulation	78	Compression depth & rate
Park 2013	2013	Korea	Metronome sound	Randomized Mannikin Simulation	64	Compression depth & rate
Rasmussen 2017	2017	Belgium	Novel Protocol	Randomized Mannikin Simulation	125	Composite score*
Plodr 2016	2016	Czech	Novel Protocol	Before/After	326	Not defined; "Time from call to..." measurements**
Stipulante 2014	2014	Denmark	Novel Protocol (ALERT)	Before/After	223	Time from call to first compression
Birkun 2018	2018	Russia	Pre-recorded vs Live	Randomized Mannikin Simulation	109	Overall CPR Performance Score
Trethewey 2019	2019	UK	Terminology - simplified	Randomized Mannikin Simulation	330	Compression depth
Bray 2011	2011	Australia	Terminology - compression rate	Before/after registry study	3,122	Not defined; Bystander CPR Initiation, survival to hospital and hospital discharge
Riou 2018	2018	Australia	Terminology - language	Telephone record review	424	Caller agreement to perform CPR
Brown 2008	2008	USA	Terminology - put phone down	Randomized Mannikin Simulation	215	Compression quality***
Rodriguez 2014	2014	USA	Terminology - simplified	Randomized Mannikin Simulation (Paeds)	128	Compression depth
Mirza 2008	2008	USA	Terminology - simplified	Secondary data analysis from RCTs	332	Compression quality***
Leong 2021	2021	Singapore	Terminology - simplified	Telephone record review	1,296	Time from call to first compression
Eisenberg-Chavez 2013	2013	USA	Undress instructions	Randomized Mannikin Simulation	99	Time from call to first compression
Hwang 2020	2020	Korea	Verbal Encouragement	Randomized Mannikin Simulation	69	Not defined; Compression quality***

Lee 2021	2021	Korea	Video vs. Audio	Randomized Mannikin Simulation	131	Mean proportion of adequate hand positioning
Linderoth 2021	2021	Denmark	Video vs. Audio	Cohort Study	838	Change in dispatchers' emergency response
Lee 2020	2020	Korea	Video vs. Audio	Retrospective Cohort Registry study	1,720	Survival to hospital discharge
Lee 2011	2011	Korea	Video vs. Audio	Randomized Mannikin Simulation	138	Not defined; Compression quality***
Yang 2009	2009	Taiwan	Video vs. Audio	Randomized Mannikin Simulation	96	Compression quality***
Bolle 2009	2009	Norway	Video vs. Audio	Randomized Mannikin Simulation	180	Not defined; "time to" and compression quality
Johnsen 2008	2008	Norway	Video vs. Audio	Qualitative after simulated calls	6	N/A (Qualitative)
Peters 2022	2022	Belgium	Video vs. Audio (Paediatrics)	Randomized Mannikin Simulation	120	Overall CPR Performance Score
Kim 2021	2021	Korea	Video vs. Audio + drones	Exploratory sequential MMR	24	Not defined: Overall CPR Performance
Ong MEH 2022	2022	Singapore	DA-CPR Implementation	Randomized Clinical Trial	170,687	Survival to hospital discharge/30th day survival post-arrest