Additional file 4. Main Results Table.

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| **Author, year of publication; disaster description; country of study** | **Study design; time assessed since deployment/follow-up time** | **Population sample** Sample total (*n*) Gender split (w:m) Age range (years) Mean age (years)  Job role (*n*)  | **Disorder** **outcome** (*measure used*) | **Predictive factors** (*measure*) **Bold** = significant association | Quality score(%) |
| Adams et al., 2008 World Trade CentreUnited States(22) | Cross-sectional20months  | *n*=236189:47Undisclosed>50Social workers | Secondary trauma (CFS)Burnout (CFS) | AgeGenderEthnicity**Marital status**: not married associated with higher rates of burnout**History of trauma**: less associated with higher rates of burnout **History of life stressors**: less associated with higher rates of secondary trauma and burnout Having children | 86.67% |
| Alexander & Wells, 1991 Piper Alpha North Sea oil-rig disaster United Kingdom(69) | ProspectiveUndisclosed time pre-deployment to 3months post | *n*=48 8:63 Undisclosed  Undisclosed  Police: body handling on site, at mortuary, or both   | PTSD (IES) Anxiety and depression (HAD) | History of mental illness (HAD)Previous experience as a disaster relief worker**Personality traits** (EPI): neuroticism associated with higher rates of anxiety and depression | 68.80% |
| Alvarez & Hunt, 2005World Trade CentreUnited States(65) | Cross-sectional 6months Samples included deployed (*n*=82);control non-deployed (*n*=32)  | *n*=82 deployed handlers*n*=32 control group65:49 (control group included)Undisclosed 43 (control group included)Canine search and relief handlers | PTSD (*PSS-SR; PSS-I*)Anxiety (*BAI*)Depression (*BDI*)Psychological distress (*BSI*) | **History of mental illness** (*SCID-I/P*): associated with higher rates of PTSD, anxiety, depression, psychological distress **History of** **trauma** (*SCID-I/P*): associated with higher rates of PTSDand depressionPrevious experience and **success** as a canine search and relief handler (*interview*): associated with lower rates of depression**Emergency-work certification**: associated with lower rates of PTSD | 86.67% |
| Armagan et al., 2006TsunamiTurkey(23) | Cross-sectional1month | *n*=3316:17Undisclosed30Turkish Red Crescent disaster relief  | PTSD (*CAPS-1*) | Age**Gender**: women associated with higher rates of PTSDHistory of trauma**Experience of disaster relief work**: less associated with higher rates of PTSD | 93.33% |
| Bartone et al., 1989Gander aviation disasterUnited States(78) | Cross-sectional, 2 waves6months, 1year | *n*=1319:12222 to 5134Victim’s family assistance workers | PTSD (*HSC*)Psychological distress (*StS; BS*) | **Personality traits** (hardiness)(*KPH-M*): associated with lower rates of PTSD and psychologicaldistress | 86.67% |
| Ben-Ezra et al., 2008Bet-Yohshua train crashIsrael(25) | Cross-sectional24hours   | *n*=2313:1020.319-23Relief personnel | PTSD (*IES-R*)Depression (*CES-D*)Peritraumatic dissociation (*DES*) | Age GenderEducationMarital statusExperience as a disaster relief worker | 86.67% |
| Ben-Ezra et al., 2006Gas pipe explosionIsrael(60) | Cross-sectional36-48hours  | *n*=2516:918-2019.2Relief personnel | PTSD (*IES*)Peritraumatic dissociation (*DES*) | Gender | 80% |
| Ben-Ezra et al., 2005Hilton Hotel bombingIsrael(24) | Cross-sectional96hours  | *n*=262:2419 to 3421.9Relief personnel | PTSD (*IES*) Peritraumatic dissociation (*DES*) | AgeGenderMarital status **Experience as a disaster relief worker**: less associated with higher rates of PTSD and dissociation | 93.33% |
| Biggs et al., 2010World Trade CentreUnited States(48) | Cross-sectional2-3weeks | *n*=9022:68Undisclosed35.6Relief personnel | Depression (*ZSRDS*)Acute stress disorder (*undisclosed, validated*)Peritraumatic dissociation (*PDEQ*) | **Age**: younger associated with higher depression morbidityGender**Ethnicity**: non-White associated with higher depression morbidityEducationMarital status**History of trauma**: associated with higher acute stress disorder morbidityHaving children | 86.67% |
| Boscarino et al., 2004World Trade CentreUnited States(61) | Cross-sectional20months | *n*=236182:47<49 to 60+ | Secondary trauma (*CFS-R*)Burnout (*CFS-R*) | GenderEthnicityMarital statusHistory of trauma | 80% |
| Bowler et al., 2012World Trade CentreUnited States(43) | Cross-sectional, 2 waves2-3years, 5-6years | *n*=2,940413:2,527 | PTSD (*PCL*)Psychological distress (*KPDS; PDI*) | **Age**: older associated with higher PTSD morbidity **Gender**: women associated with higher PTSD morbidity and higher rates of psychological distressEthnicityIncome | 86.67% |
| Bowler et al., 2010World Trade CentreUnited States(49) | Cross-sectional2-3years | *n*=4,017582:3,43518 to 65+25 to 44 Police working as disaster workers | PTSD (*PCL*) | **Age**: for both sexes, older associated with higher PTSD morbidity **Gender**: women associated with higher PTSD morbidity **Ethnicity**: for men, Hispanic, Asian or multi-racial ethnicities, compared to White ethnicity, associated with higher PTSD morbidity **Education**: for women, < college degree associated with higher PTSD morbidity  | 100% |
| Brown et al., 2002Political violenceNorthern Ireland(80) | Cross-sectionalDuring event | *n*=30062:24835.8218 to 60Firefighters | Psychological distress (*GHQ*) | **Locus of control** (*LOC*): external locus of control associated with higher rates of psychological distress | 80% |
| Chang et al., 2008Chi-Chi earthquakeTaiwan(50) | Cross-sectional2-5months  | *n*=1930:19322 to 5733.7Firefighters as disaster workers and body handlers | PTSD (*IES*)Psychological morbidity (*CHQ*) | **Age**: being older associated with higher PTSD and psychological morbidity Marital status**Experience as a disaster relief worker**: >3 years associated with higher rates of PTSD and higher psychological morbidity **Coping style** (*WCQ*): confrontive coping, distancing, seeking social support, accepting responsibility,escape-avoidance,planned problem solving, positive reappraisal associated with lower psychological morbidity  | 86.67% |
| Chang et al., 2003Chi-Chi earthquakeTaiwan(7) | Cross-sectional5months  | *n*=840:8420 to 5627.6 ± 7.9Firefighters working as disaster workers in relief and body handling | PTSD (*IES*)Psychological morbidity (*CHQ*) | **Age**: older associated with higher rates of PTSD and psychological morbidity**Marital status**: married associated with higher psychiatric morbidity **Experience as a disaster relief worker**: >3 years associated with higher rates of PTSD and higher psychological morbidity **Coping style** (*WCQ*): distancing, escape-avoidance associated with higher rates of PTSD and positive reappraisal associated with lower rates of PTSD; confrontive coping associated with higher psychological morbidity | 93.33% |
| Creamer & Liddle, 2005World Trade CentreUnited States(26) | Cross-sectional 3-5months | *n*=8050:3027 to 7750Disaster mental health workers | Secondary traumatic stress (*IES*) | AgeGenderEducation Marital statusHistory of trauma(*LEC*) | 86.67% |
| Cukor et al., 2011World Trade CentreUnited States(66) | Cross-sectional10-34months | *n*=2,96092:2868Undisclosed45.2Utility workers working as non-relief disaster relief and recovery workers | PTSD (*CAPS; PCL*; *SCID; BSI; BDI-II*) | **Age**: associated with PTSD morbidity, direction undisclosed**Gender**: associated with PTSD morbidity, direction undisclosed**History of mental illness**: associated with higher PTSD morbidity **History of trauma**: associated with higher PTSD morbidity | 80% |
| Dobashi et al., 2014EarthquakeJapan(27) | Cross-sectional 1month | *n*=6056:59919 to 50+19-29Japan ground self-defence force | PTSD (*IES-R*)Psychological distress/morbidity (*KPDS*) | **Age**: younger associated with higher psychological morbidityGender | 93.33% |
| Dougall et al., 2000Aviation disasterUnited States(70) | Cross-sectional, 4 waves1-2, 6, 9, 12months  | *n*=108 38:7020 to 68 36 Volunteer healthcare workers; emergency medical technicians; radiologists; dental students; firefighters; USAir maintenance workers, flight attendants, administrative personnel | PTSD (*ITQ*)Psychological distress (*GSI*) | **History of trauma;** similar and **dissimilar** (*THQ*): associated with higher rates of PTSD and psychological distress | 93.33% |
| Dyregrov et al.,1996Tour bus crash Norway(71) | Cross-sectional, 2 waves1 to 13months  | *n*=43Voluntary: 3:21Professional: 7:25Voluntary: 24 to 56Professional: 23 to 61Voluntary: 37.3Professional: 37.1Voluntary helpers (*n*=24): Red Cross workers, voluntary fire brigadeProfessional helpers (*n*=32): police, fire relief personnel, health personnel | PTSD (*IES*)Psychological distress (*GHQ*) | **Experience as a disaster relief worker**: voluntary status with little experience associated with higher rates of PTSD-avoidance; professional status with much experience associated with lower rates of PTSD-avoidance**Voluntary or professional status**: at 1month, voluntary status associated with higher rates of PTSD; at 13months, voluntary status associated with higher PTSD-avoidance rates; at 13months, professional status associated with higher rates of psychological distress | 73.33% |
| Ehring et al., 2011Major earthquakeNorthern Pakistan (40) | Cross-sectional24months  | *n*=26743:224Undisclosed28.93Social organisers (n= 133); engineers and reconstruction workers (n= 80); coordinators and supervisors (*n*=46) | PTSD (*IES-R*)Depression and anxiety (*PADQ*)Somatic symptoms (*BSI1*)Burnout (*MBI*) | **Age**: younger associated with higher depression and anxiety morbidity **Gender**: women associated with higher PTSD morbidity, anxiety, depression, and higher rates of somatic symptoms and burnoutEthnicityEducationReligious group **History of trauma** (*PTS*): associated with higher PTSD morbidity, anxiety, depression, rates of burnout**Having children**: with children was associated with lower PTSD and depression morbidity | 86.67% |
| Epstein et al., 1998 Ramstein air disasterGermany(56) | Cross-sectional, 3 waves6, 12, 18months  | *n*=355125:22919 to 5931.9Military medical health care workers | PTSD (*SC-90-R; IES*) | **Age**: at 6, 12, 18months, being younger was associated with higher PTSD morbidity GenderEthnicity**Education**: at 6, 12, 18months, < bachelor’s degree associated with higher PTSD morbidity | 80% |
| Ersland et al., 1989“Alexander L. Kielland” oil rig disasterNorway (72) | Cross-sectional9months  | *n*=134Undisclosed 21 to 5433Professional disaster workers (*n*=24) including police (*n*=12), aircraft crew (*n*=8), vessel crew members (*n*=2), divers (*n*=1), unclassified (*n*=1); Non-professional disaster workers (*n*=101) including rig-workers (*n*=33), vessel crew (*n*=31), divers (*n*=13), nurses (*n*=10), catering (*n*=6), physicians (*n*=5), pilots (*n*=2), other (*n*=1);unclassified (*n*=9) | PTSD (*IES*) | **Experience as a disaster relief worker**: having never worked, or having worked few times only, associated with higher rates of PTSD | 80% |
| Evans et al., 2009World Trade CentreUnited States(67) | Cross-sectional17-27months | *n*=84241:801Undisclosed45.4Disaster relief workers | PTSD (*CAPS*) | **History of mental illness** (*SCI*): associated with higher PTSD morbidity**History of trauma** (*THQ*): associated with higher PTSD morbidity | 73.33% |
| Feder et al., 2016World Trade CentreUnited States(53) | Cross-sectional, 4 waves3, 6, 8, 12months | *n*=4,487Police: 274:1600;Non-responders: 357:2256UndisclosedPolice: 41.7; non-traditional responders: 46.2 Police (*n*=1874); Non-traditional responders (*n*=2613) | PTSD (*PCL-S*) | *Police : non-traditional responders***Age**: older associated with higher chronic PTSD morbidity **Gender**: women associated with higher worsening and chronic PTSD morbidity **Ethnicity**: Hispanic associated with higher improving and chronic PTSD morbidity; ‘other’ associated with higher worsening PTSD morbidity : Hispanic associated with higher improving, worsening, steeply worsening and chronic PTSD morbidity; ‘other’ associated with steeply worsening PTSD morbidity **Education**: : ≤ high school associated with higher improving, worsening, steeply worsening and chronic PTSD morbidity **Marital status**: : widowed, separated or divorced associated with higher chronic PTSD morbidity Income**History of mental illness** (depression, anxiety, or PTSD): associated with higher improving and worsening rates of PTSD morbidity : associated with higher improving, worsening, steeply worsening and chronic PTSD morbidity **History of trauma**: associated with higher worsening and chronic PTSD morbidity History (<1year) of life stressors Experience as a disaster relief worker | 93.33% |
| Fullerton et al., 2004Aviation disasterUnited States(28) | Cross-sectional, 3 waves2, 7, 13months  | *n*=20724:183Undisclosed36.5Disaster workers | PTSD (*DSM-IV PTSD Scale*)Depression (*ZSRDS*)Acute stress disorder (*undisclosed, validated*) | **Age**: younger associated with higher rates of acute stress disorderGenderEducation**Marital status**: unmarried associated with higher rates of acute stress disorder; at 13months, unmarried associated with higher rates of PTSD and depression**Experience as a disaster relief worker**: at 13months, associated with higher rates of PTSD | 93.33% |
| Grieger et al., 2003Virginia sniper attacksUnited States(29) | Cross-sectional2-3weeks | *n*=382210:172Undisclosed39 ± 10.9Hospital staff | PTSD (*ASDI*)Depression (*PHQ-9*)Alcohol disorder (*CAGE*) | Age**Gender**: women associated with higher rates of PTSDMarital statusHistory of substance abuse | 86.67% |
| Guo et al., 2004Chi Chi earthquake Taiwan(8) | Cross-sectional1month  | *n*=2520:252UndisclosedProfessional: 37.9 ± 8.7;Non-professional: 22.1 ± 1.2Professional disaster workers, firefighters (*n*=167); non-professional volunteers, soldiers (*n*=85) | PTSD (*DTS-C; SPAN-C*) | AgeGenderEducation Marital status**Voluntary** or professional status: volunteer status associated with higher PTSD-avoidance morbidity  | 73.33% |
| Hagh-Shenas et al., 2005Bam earthquakeIran(81) | Cross-sectional90days  | *n*=154UndisclosedUndisclosedStudent volunteers: 21.1 Firefighters: 34.2 Red crescent: 22.8Student volunteers (*n*=100); firefighters (*n*=36); red crescent (*n*=18) | PTSD (*ESHEL*)Anxiety sensitivity (*ASI*) Psychological distress (*GHQ-28*) | **Voluntary** or professional status: volunteer status associated with higher PTSD morbidity, higher rates of anxiety sensitivity, psychological distress  | 73.33% |
| Hodgkinson & Shepherd, 1994Piper Alpha North Sea oil-rig disaster; Clapham Rail crash Britain(44) | Cross-sectional, 2 waves4-9, 12months  | *n*=3939:026 to 6140.3Social workers | Psychological distress (*HSCL*; *PWS*) | AgeGenderMarital status**History (<1year) of life stressors**: (*SRRS*): associated with higher rates of psychological distress**Experience as a disaster relief worker**: more associated with higher rates of psychological distress on the HSCL Anxiety subscale **Personality traits** (hardiness) (*PHS*): low hardiness associated with higher rates of psychological distress  | 73.33% |
| Huang et al., 2013Wenchuan earthquakeChina(30) | Cross-sectional18months | *n*=9230:92318 to 28UndisclosedMilitary relief workers | PTSD (*CAPS*) | AgeEthnicityEducation Marital status**Personality traits** (*EPQ*): neuroticism and psychoticism associated with higher PTSD morbidity; extraversion associated with lower PTSD morbidity | 86.67% |
| Hytten & Hasle, 1989Hotel fire relief operationNorway(73) | Cross-sectional3days  | *n*=580:5822 to 5937.8Non-professional firefighters | PTSD (*IES*) | **Experience as a disaster relief worker**: less associated with higher rates of PTSD | 73.33% |
| Jayasinghe et al., 2008World Trade Centre United States(51) | Cross-sectionalUndisclosed | *n*=1,04049:981Undisclosed45.9Disaster relief workers | PTSD (*CAPS; PLC*) | **Age**: older associated with higher rates of PTSD **Marital status**: unmarried associated with higher rates of PTSD**History of mental illness**: associated with higher rates of PTSD**History of trauma** (*TEI*): associated with higher rates of PTSD | 73.33% |
| Liao et al., 2002Major earthquakeTaiwan(55) | Cross-sectional 2months  | *n*= 836 0:83628.32 ± 8.06UndisclosedDisaster workers | Psychological distress (*BSRS; GSI*) | **Age**: older associated with higher rates of psychological distress **History of life stressors** (<6): associated with higher rates of psychological distress**Experience as a disaster relief worker**: associated with higher rates of psychological distress**Personality traits** (*MPI*): moodiness, anxiety-proneness (strongest), conscientiousness, neuroticism associated with higher rates of psychological distress; activity, sociability, extroversion associated with lower rates of psychological distress | 80% |
| Lu et al., 2006SARS outbreakTaiwan(79) | Cross-sectionalDuring | *n*=135UndisclosedUndisclosed32Healthcare workers | Psychological morbidity (*C-GHQ*) | **Personality traits** (*EPQ*): neuroticism associated with higher psychological morbidity**Attachment style** (*PBI*): maternal attachment associated with lower psychological morbidity | 80% |
| Lundin & Bodegard, 1993Armenian earthquakeArmenia(64) | Cross-sectional, 3 wavesImmediately, 1month, 9months | *n*=50Undisclosed22 to 5530-49 | PTSD (*IES*)Psychological distress (*GHQ-9*) | EducationVoluntary or professional status | 73.33% |
| Marmar et al., 1999Interstate-880 Freeway CollapseUnited States(74) | Cross-sectional3.5years  | *n*=32234:288Undisclosed38.7Emergency medical personnel, road workers, maintenance, police, firefighters | PTSD (*IES-R; M-PTSD*)Psychological distress (*SC-90-R GSI; SC-90-R somatization subscale*) | **Experience as a disaster relief worker**: less associated with higher rates of PTSD and psychological distress**Personality traits** (adjustment, *HPI*): associated with higher rates of PTSD-avoidance and psychological distress**Locus of control** (*LOC*): external associated with higher rates of PTSD and psychological distress | 93.33% |
| Marmar et al., 1996Nimitz Freeway CollapseUnited States(76) | Cross-sectionalUndisclosed time  | *n*=15737:321 (control group included)21 to 6438.3Disaster relief workers: firefighters (*n*=61), police (*n*=114), paramedics (*n*=86), transportation workers (*n*=97) | Peritraumatic dissociation (*PDEQ-SV*) | **Age**: younger associated with higher rates of peritraumatic dissociation**Experience as a disaster relief worker**: less associated with higher rates of peritraumatic dissociation**Personality traits** (*HPI*): prudence, ambition, adjustment, identity and adaptive traits associated with lower rates of peritraumatic dissociation**Locus of control** (*LOC*): external associated with higher rates of peritraumatic dissociation | 86.67% |
| Maunder, 2004aSARS outbreakCanada(62) | Cross-sectional 2-3months  | *n*=1,5571,162:395Undisclosed40.2Healthcare workers | PTSD (*IES*) | **Having children**: associated with higher rates of PTSD**Attachment style** (*ECR-R*): insecure attachment associated with higher rates of PTSD | 80% |
| Maunder et al., 2006SARS outbreakCanada(63) | Cross-sectional 13-26months  | *n*=587505:82Undisclosed Undisclosed  | PTSD (*IES*) Psychological distress (*KPDS*)Burnout (*MBI*) | **Gender**: women associated with higher PTSD morbidity**Attachment style**: attachment anxiety associated with higher rates of psychological distress and higher PTSD morbidity; attachment avoidance associated with higher rates of psychological distress | 73.33% |
| McFarlane, 1989Extreme bushfireAustralia(57) | Cross-sectional, 4 waves4, 11, 29months  | *n*=315UndisclosedUndisclosed36.1Firefighters | PTSD (*IES; GHQ*) | **Age**: at 11 and 29months, younger associated with higher PTSD morbiditySocial class **History of mental illness**: at 4 and 29months associated with higher PTSD morbidity **History of life stressors**: at 4months life events associated with higher PTSD morbidity **Personality traits** (*EPI*): at 4, 11 and 29months, neuroticism associated with higher PTSD morbidity  | 93.33% |
| McFarlane, 1988Extreme bushfireAustralia(31) | Cross-sectional 3 waves4, 11, 29months | *n*=315UndisclosedUndisclosed35.1 ± 10.6Firefighters | PTSD (*IES; GHQ*)  | Age**History of mental illness**: associated with higher rates of persistent chronic, resolved chronic, recurrent chronic PTSD History of trauma,similar**History of life stressors**: associated with higher persistent chronic PTSD morbidity**Personality traits** (*EPI*): neuroticism associated with higher persistent chronic PTSD; avoidance associated with higher acute, persistent chronic, resolved chronic and, at 11months, delayed-onset trajectory of PTSD | 93.33% |
| McFarlane, 1987Extreme bushfireAustralia(45) | Cross-sectional4, 11, 29months | *n*=469UndisclosedUndisclosed35.1Firefighters | Psychological morbidity (*GHQ*) | AgeSocial class**History of trauma**,similar: associated with higher psychological morbidity **History of life stressors**: associated with higher psychological morbidity  | 86.67% |
| Misra et al., 2009London bombingUnited Kingdom(32) | Cross-sectional2months  | *n*=341109:232 Undisclosed40.2Ambulance service personnel | PTSD (*TSQ*)Stress (*5 adjustment disorder symptoms*) | AgeGenderHistory of trauma  | 80% |
| Musa & Hamid, 2008Armed conflict Darfur(41) | Cross-sectionalDuring | *n*=5323:3020 to 5531.6Aid workers | Secondary traumatic stress (*ProQOL*)Anxiety (*GHQ*)Depression (*GHQ*)Somatic symptoms (*GHQ*)Burnout (*ProQOL; RWBQ*) | **Age**: younger associated with high rates of secondary traumatic stress and burnout**Gender**: women associated with higher rates of burnout | 68.80% |
| North et al., 2002bOklahoma City bombingUnited States(68) | Cross-sectional34months  | *n*=1815:176Undisclosed38.5Firefighters | PTSD (*DIS*)Generalised anxiety disorder (*DIS*)Panic disorder (*DIS*)Depression (*DIS*)Alcohol use disorder (*DIS*)Drug use disorder (*DIS*) | **History of mental illness** (*DIS*): associated with higher PTSD, anxiety related disorder, depression, alcohol and drug use disorder morbidity; associated with higher morbidity of non-alcoholic disorders four-fold; history of PTSD associated with higher PTSD morbidity post-disaster | 93.33% |
| Pietrzak et al., 2014World Trade CentreUnited States(54) | Cross-sectional, 3 waves3, 6, 8years  | *n*=10,835Police: 592:3,443Non-traditional: 913:5,886Police: 41.2 Non-traditional: 45.3 UndisclosedPolice (*n*=4,035); Non-traditional responders (*n*=6,800) | PTSD (*PCL-S*) | *Police : non-traditional responders* **Age**:older associated with a higher severe chronic trajectory of PTSD : older associated with a higher severe chronic trajectory of PTSD and younger associated with a higher improving trajectory of PTSD**Gender**: women associated with a higher delayed-onset trajectory of PTSD : women associated with a higher severe and moderate chronic trajectory of PTSD, but also an improving trajectory**Ethnicity**:Hispanic associated with a higher severe chronic trajectory of PTSD : Hispanic associated with a higher severe chronic, delayed-onset, subsyndromal increasing, moderate chronic and improving trajectory of PTSD**Education**: lower education associated with a higher delayed-onset trajectory of PTSD : lower education associated with a higher severe chronic, delayed-onset, subsyndromal increasing, moderate chronic and improving trajectory of PTSD**Marital status**: : widowed, separated or divorced associated with a higher severe chronic and delayed onset trajectory of PTSD; married/cohabiting associated with a higher moderate chronic trajectory of PTSD**Income**: higher associated with a higher severe chronic and delayed onset trajectory of PTSD**History of mental illness** (depression, anxiety, PTSD): associated with a higher severe chronic, delayed-onset or improving trajectory of PTSD : associated with a higher severe chronic, delayed-onset, subsyndromal increasing, moderate chronic and an improving trajectory of PTSD **History of life stressors**: : associated with a higher severe chronic, delayed-onset, subsyndromal increasing, moderate chronic and an improving trajectory of PTSD | 100% |
| Pietrzak et al., 2012World Trade CentreUnited States(52) | Cross-sectional 0.8 to 7years, 4years (average) | *n*=8,466UndisclosedUndisclosedUndisclosedPolice | PTSD (*PCL-S*) | **Age**: older associated with higher PTSD morbidity**Gender**: women associated with higher PTSD morbidity**Ethnicity**: Hispanic and ‘Other’ associated with higher PTSD morbidity**Education**: < high school degree associated with higher PTSD morbidity**Marital status**: widowed, separated, divorced associated with higher PTSD morbidity**Income**: lower associated with higher PTSD morbidity**History of life stressors**: associated with higher PTSD morbidity  | 80% |
| Razik et al., 2013Terrorist attacksPakistan(33) | Cross-sectionalUndisclosed | *n*=1250:125Undisclosed27.87Emergency relief workers | PTSD (*IES-R*)Anxiety (*PA&D*)Depression (*PA&D*)Somatic symptoms (*BSI1*) | Age**Marital status**: unmarried associated with higher rates of depression and somatic symptoms**History of trauma** (*PTS*): associated with higher PTSD, anxiety, and depression morbidity, and higher rates of somatic symptoms | 73.33% |
| Sim & Chua, 2004SARS outbreakSingapore(46) | Cross-sectional 3months  | *n*=277 (nurses *n*=186; doctors *n*=91)Nurses: 185:1Doctors: 104:82UndisclosedNurses: 40.7Doctors: 35.2Nurses and doctors | PTSD (*IES-R*)Psychological morbidity (*GHQ-28*) | **Age**: younger associated with higher PTSD morbidity**Marital status**: married associated with higher PTSD morbidity | 73.33% |
| Spinhoven & Verschuur, 2006Bijlmermeer aviation disasterNetherlands(47) | Cross-sectional, 2 waves11, 13-28months  | *n*=1951150:1801Undisclosed45 Disaster workers (police, firefighters, accident and wreckage investigators) | Psychological distress (*GHQ*)Fatigue (*CIS*)Quality of life (*EQ-5D*) | **Age**: younger associated with higher rates of fatigue**Gender**: women associated with higher rates of fatigueEthnicityEducation**Reassured by physicians** (*RQ*): not reassured associated with higher rates of fatigue, persistent fatigue, psychological distress and lower quality of life  | 100% |
| Stellman et al., 2008World Trade CentreUnited States(42) | Cross-sectional10-61months  | *n*=10,1321,285:8,847Undisclosed42.1 ± 9.1Relief, recovery, clean-up, recovery workers | PTSD (*PCL*)Depression (*PHQ*)Panic disorder (*PHQ*) | **Age**: older associated with higher PTSD and depression morbidity**Gender**: women associated with higher depression and panic morbidity**Ethnicity**: Hispanic ethnicity associated with higher PTSD, depression, and panic morbidity**Education**: < high school associated with higher PTSD, depression, and panic morbidity**Marital status**:separated, divorced, widowedassociated with higher PTSD, depression, and panic morbidity | 86.67% |
| Thormar et al., 2013Earthquake Indonesia (34) | Cross-sectional, 3 waved6, 12, 18months  | *n*=506132:374Undisclosed< 30Red Cross volunteers | PTSD (*IES*)Anxiety (*HADS*)Depression (*HADS*) | **Age**: younger associated with higher rates of anxiety**Gender**: men associated with higher rates of depressionExperience as a disaster relief worker  | 86.67% |
| Tosone et al., 2011World Trade CentreUnited States(35) | Cross-sectional 6years  | *n*=481385:9760UndisclosedSocial workers in direct mental health practice | PTSD (*PCL*)Secondary traumatic stress (STS)Psychological distress (*Question*)Burnout (CFS/STS)Resilience (*CDRS*)  | AgeGenderEthnicityEducation Income **History of trauma** (*LEC*): associated with higher rates of resilience and secondary traumatic stress**Attachment style** (*AAQ*): avoidant and ambivalent attachment associated with lower rates of resilience and higher rates of secondary traumatic stress | 80% |
| Tucker et al., 2002Oklahoma City 1995 bombingUnited States(36) | Cross-sectional retrospective2yearsassessing 1year post-deployment symptoms | *n*=5116:3525 to 5634.7Body handlers | PTSD (*DIS*)Depression (*GI*) | AgeGenderHistory of traumaExperience as a disaster relief worker | 80% |
| Ursano et al., 1995 USS *Iowa* gun turret explosionPuerto Rico(37) | Cross-sectional, 3 waves1, 4, 13months  | *n*=54 5:4919 to 4829 Volunteer body handlers | PTSD (*IES; SC-90-R; 12 items)* Anxiety (*SC-90-R*)Depression (*ZDS; SC-90-R*)Somatic symptoms (*SC-90-R*)Hostility (*SC-90-R*) | Age**Ethnicity**: at 1month, white ethnicity associated with higher rates of somatic symptoms Education**Marital status**: at 1 and 4months, being single was associated with higher PTSD-avoidance morbidityExperience as adisaster relief worker | 80% |
| Van der Velden et al., 2012Haiti earthquake disasterNetherlands(77) | Prospective, undisclosed time pre-deployment to 3months post | *n*=514:47Undisclosed44.7 Police (*n*=11); Firefighters (*n*=35); Ambulance staff (4); Surgeon (n=1) | PTSD (*IES*)Anxiety (*SC-90-R*)Depression (*SC-90-R*) | Experience as adisaster relief worker | 86.67% |
| Van der Velden et al., 2008Enschede fireworks disasterNetherlands(38) | Cross-sectional, 2 waves2-3weeks, 18months  | *n*=6621:45Undisclosed38.2Ambulance personnel | PTSD (*IES*)Depression (*SC-90-R*)Hostility (*SC-90-R*) | AgeGender**Education**: associated with higher rates of depression, education level undisclosed | 86.67% |
| Wang et al., 2011Wechuan earthquakeChina(39) | Cross-sectional6months  | *n*=1,0560:1,05618 to 3221Military first responders | PTSD (*DTS-C*) | Age**Gender**: women associated with higher PTSD morbidityEducation (< college)Marital status**Childhood environment** (rural vs. urban / **siblings** / **parents separated**): single child associated with higher PTSD morbidity; parents separated associated with higher PTSD morbidity | 93.33% |
| Weiss et al., 1995Interstate-880 Freeway CollapseUnited States(75) | Cross-sectional Undisclosed  | *n*=15419:135Undisclosed38.5Emergency medical personnel, road workers, maintenance, police, firefighters | PTSD (*IES-R; M-PTSD*)Psychological distress (*S-90 GSI*) | **Experience as a disaster** **worker**: less associated with higher rates of PTSD and psychological distress**Personality traits** (adjustment) (*HPI, Adjustment subscale*): associated with lower rates of PTSD and psychological distress**Locus of control** (*LOC*): external associated with higher rates of PTSD and psychological distress  | 93.33% |
| Wu et al., 2009SARS outbreakChina(58) | Cross-sectional3years  | *n*=549412:137Undisclosed36-50Hospital employees | PTSD (*IES-R*) | **Age**: < 50 associated with higher rates of PTSDGenderEducation Marital statusIncome History of trauma | 86.67% |
| Zhen et al., 2012Wenchan earthquakeChina(59) | Cross-sectionalWithin 1year  | *n*=210210:023 to 40UndisclosedRed Cross Nurses | PTSD (*TSS-C*) | **Age**: younger associated with higher PTSD morbidityEducation Marital status**History of mental illness**: associated with higher PTSD morbidity**Experience as a disaster** **worker**: less associated with higher PTSD morbidity | 86.67% |