



Contents

October 2020 Volume 26 Supplement 2

Editorial

- i1** Global burden of injuries: it is time to understand the data in order to intervene *P J Garcia*



Original research

- i3** The global burden of falls: global, regional and national estimates of morbidity and mortality from the Global Burden of Disease Study



2017 S L James, L R Lucchesi, C Bisignano, C D Castle, Z V Dingels, J T Fox, E B Hamilton, N J Henry, K J Krohn, Z Liu, D McCracken, M R Nixon, N L S Roberts, D O Sylte, J C Adsuar, A Arora, A M Briggs, D Collado-Mateo, C Cooper, L Dandona, R Dandona, C L Ellingsen, S-M Fereshtehnejad, T K Gill, J A Haagsma, D Hendrie, M Jürisson, G A Kumar, A D Lopez, T Miazgowski, T R Miller, GK Mini, E M Mirakshimov, E Mohamadi, P R Olivares, F Rahim, L S Riera, S Villafaina, Y Yano, S I Hay, S S Lim, A H Mokdad, M Naghavi, C J L Murray

- i12** Burden of injury along the development spectrum: associations between the Socio-demographic Index and disability-adjusted life year estimates from the Global Burden of Disease Study 2017 *J A Haagsma, S L James, C D Castle, Z V Dingels,*



J T Fox, E B Hamilton, Z Liu, L R Lucchesi, N L S Roberts, D O Sylte, O M Adebayo, A Ahmadi, M B Ahmed, M T E Aichour, F Alahdab, S A Alghnam, S M Aljunid, R M Al-Raddadi, U Alsharif, K Altirkawi, M Anjomshoa, C A T Antonio, S C Y Appiah, O Aremu, A Arora, H Asayesh, R Assadi, A Awasthi, B P Ayala Quintanilla, S Balalla, A Banstola, S L Barker-Collo, T W Bärnighausen, S Bazargan-Hejazi, N Bedi, M Behzadifar, M Behzadifar, C Benjet, D A Bennett, I M Bensenor, S Bhaumik, Z A Bhutta, A Bijani, G Borges, R Borschmann, D Bose, S Boufous, A Brazinova, J C Campuzano Rincon, R Cárdenas, J J Carrero, F Carvalho, C A Castañeda-Orjuela, F Catalá-López, J-Y J Choi, D J Christopher, C S Crowe, K Dalal, A Daryani, D V Davitov, L Degenhardt, D De Leo, J-W De Neve, K Deribe, G A Dessie, G A deVeber, S D Dharmaratne, L P Doan, K A Dolan, T R Driscoll, M Dubey, Z El-Khatib, C L Ellingsen, M El Sayed Zaki, A Y Endries, S Eskandarieh, A Faro, S-M Fereshtehnejad, E Fernandes, I Filip, F Fischer, R C Franklin, T Fukumoto, K E Gezae, T K Gill, A C Goulart, A Grada, Y Guo, R Gupta, H Haghighparast Bidgoli, A Haj-Mirzaian, A Haj-Mirzaian, R R Hamadeh, S Hamidi, J M Haro, H Hassankhani, H Y Hassen, R Havmoeller, D Hendrie, A Henok, M Hajar, M K Hole, E Homaie Rad, N Hossain, S Hostiuc, G Hu, E U Igumbor, O S Ilesanmi, S S N Irvani, S M S Islam, R Q Ivers, K H Jacobsen, N Jahanmehri, M Jakovljevic, A U Jayatilake, R P Jha, J B Jonas, Z Jorjoran Shushitari, J J Jozwiak, M Jürisson, A Kabir, R Kalani, A Kasaieian, A G Kelbore, A P Kengne, Y S Khader, M A Khafaie, N Khalid, E A Khan, A T Khoja, A A Kiadalliri, Y-E Kim, D Kim, A Kisa, A Koyanagi, B Kuate Defo, B Kucuk Bicer, M Kumar, R Laloo, H Lam, F H Lami, V C Lansingh, J L Leasher, S Li, S Linn, R Lunevicius, F R Machado, H Magdy Abd El Razek, M Magdy Abd El Razek, N B Mahotra, M Majdan, A Majeed, R Malekzadeh, M A Malik, D C Malta, A-L Manda, M A Mansournia, B B Massenburg, P K Maulik, H A A Meheretu, M M Mehndiratta, A Melese, W Mendoza, M M Mengesha, T J Meretoja, A Meretoja, T Mestrovic, T Miazgowski, T R Miller, GK Mini, E M Mirakshimov, B Moazen, N Mohammad Gholi Mezerji, R Mohammadibakhsh, S Mohammed, M Molokhia, L Monasta, S Mondello, P A Montero-Zamora, Y Moodley, M Moosazadeh, G Moradi, M Moradi-Lakeh, L Morawska, I M Velásquez, S D Morrison, M M Moschos, S M Mousavi, S Murthy, K I Musa, G Naik, F Najafi, V Nangia, B R Nascimento, D E Ndwandwe, I Nego, T H Nguyen, S H Nguyen, L H Nguyen, H L T Nguyen, D N A Ningrum, Y L Nirayo, R Ofori-Asenso, F A Ogbo, I-H Oh, O Oladimeji, A T Olagunju, T O Olagunju, P R Olivares, H M Orpana, S S Ostavnov, M P A, S Pakhale, E-K Park, G C Patton, K Pesudovs, M R Phillips, S Polinder, S Prakash, A Radfar, A Rafay, A Rafiei, S Rahimi, V Rahimi-Movaghar, M A Rahman, R K Rai, K Ramezanzadeh, S Rawaf, D L Rawaf, A M N Renzaho, S Resnikoff, S Rezaeian, L Roeber, L Ronfani, G Roshandel, Y D Sabde, B Saddik, P Salamati, Y Salimi, I Salz, A M Samy, J Sanabria, L Sanchez Riera, M M Santric Milicevic, M Satpathy, M Sawhney, S M Sawyer, S Saxena, M Saylan, I J C Schneider, D C Schwebel, S Seedat, S G Sepanlou, M A Shaikh, M Shams-Beyranvand, M Shamsizadeh, M Sharif-Alhoseini, A Sheikh, J Shen, M Shigematsu, R Shiri, I Shue, J P Silva, J A Singh, D N Sinha, A M Soares Filho, J B Soriano, S Soshnikov, I N Soyiri, V I Starodubov, D J Stein, M A Stokes, Ma B Sufiyan, J E Sunshine, B L Sykes, R Tabarés-Seisdedos, K M Tabb, A Tehrani-Banihashemi, G A Tessema, J S Thakur, K B Tran, B X Tran, L Tudor Car, O A Uthman, B S C Uzochukwu, P R Valdez, E Varavikova, A M N Vasconcelos, N Venketasubramanian, F S Violante, V Vlassov, Y Waheed, Y-P Wang, T Wijeratne, A S Winkler, P Yadav, Y Yano, M A Yenesew, P Yip, E Yisma, N Yonemoto, M Z Younis, C Yu, S Zafar, Z Zaidi, S B Zaman, M Zamani, Y Zhao, S Zodpey, S I Hay, A D Lopez, A H Mokdad, T Vos

Receive regular table of contents by email.

Register using this QR code.



This article has been chosen by the Editor to be of special interest or importance and is freely available online.



This article has been made freely available online under the BMJ Journals open access scheme.

See <http://authors.bmj.com/open-access/>



This journal is a member of and subscribes to the principles of the Committee on Publication Ethics

www.publicationethics.org/



- i27** Epidemiology of facial fractures: incidence, prevalence and years lived with disability estimates from the Global Burden of Disease 2017 study *R Lalloo, L R Lucchesi, C Bisignano, C D Castle, Z V Dingels, J T Fox, E B Hamilton, Z Liu, N L S Roberts, D O Sylte, F Alahdab, V Alipour, U Alsharif, J Arabloo, M Bagherzadeh, M Banach, A Bijani, C S Crowe, A Daryani, H P Do, L P Doan, F Fischer, G G Gebremeskel, J A Haagsma, A Haj-Mirzaian, A Haj-Mirzaian, S Hamidi, C L Hoang, S S N Irvani, A Kasaeian, Y S Khader, R Khalilov, A T Khoja, A A Kiadaliri, M Majdan, N Manafi, A Manafi, B B Massenburg, A Mohammadian-Hafshejani, S D Morrison, T H Nguyen, S H Nguyen, C T Nguyen, T O Olagunju, N Ostavnov, S Polinder, N Rabiee, M Rabiee, K Ramezanzadeh, K Ranganathan, A Rezapour, S Safari, A M Samy, L Sanchez Riera, M A Shaikh, B X Tran, P Vahedi, A Vahedian-Azimi, Z-J Zhang, D M Pigott, S I Hay, A H Mokdad, S L James*
- i36** Epidemiology of injuries from fire, heat and hot substances: global, regional and national morbidity and mortality estimates from the Global Burden of Disease 2017 study *S L James, L R Lucchesi, C Bisignano, C D Castle, Z V Dingels, J T Fox, E B Hamilton, N J Henry, D McCracken, N L S Roberts, D O Sylte, A Ahmadi, M B Ahmed, F Alahdab, V Alipour, Z Andualem, C A T Antonio, J Arabloo, A D Badiye, M Bagherzadeh, A Banstola, T W Bärnighausen, A Barzegar, M Bayati, S Bhaumik, A Bijani, G Bukhman, F Carvalho, C S Crowe, K Dalal, A Daryani, M D Nasab, H T Do, H P Do, A Y Endries, E Fernandes, I Filip, F Fischer, T Fukumoto, K B B Gebremedhin, G G Gebremeskel, S A Gilani, J A Haagsma, S Hamidi, S Hostiuc, M Househ, E U Igumbor, O S Ilesanmi, S S N Irvani, A U Jayatilleke, A Kahsay, N Kapoor, A Kasaeian, Y S Khader, I A Khalil, E A Khan, M Khazae-Pool, Y Kokubo, A D Lopez, M Madadin, M Majdan, V Maled, R Malekzadeh, N Manafi, A Manafi, S Mangalam, B B Massenburg, H G Meles, R G Menezes, T J Meretoja, B Miazgowski, T R Miller, A Mohammadian-Hafshejani, R Mohammadpourhodki, S D Morrison, I Negoi, T H Nguyen, S H Nguyen, C T Nguyen, M R Nixon, A T Olagunju, T O Olagunju, J R Padubidri, S Polinder, N Rabiee, M Rabiee, A Radfar, V Rahimi-Movaghar, S Rawaf, D L Rawaf, A Rezapour, J Rickard, E M Roro, N Roy, R Safari-Faramani, P Salamati, A M Samy, M Satpathy, M Sawhney, D C Schwebel, S Senthilkumaran, S G Sepanlou, M Shigematsu, A Soheili, M A Stokes, H R Tohidinik, B X Tran, P R Valdez, T Wijeratne, E Yisma, Z Zaidi, M Zamani, Z-J Zhang, S I Hay, A H Mokdad*
- i46** Morbidity and mortality from road injuries: results from the Global Burden of Disease Study 2017 *S L James, L R Lucchesi, C Bisignano, C D Castle, Z V Dingels, J T Fox, E B Hamilton, Z Liu, D McCracken, M R Nixon, D O Sylte, N L S Roberts, O M Adebayo, T Aghamolaei, S A Alghnam, S M Aljunid, A Almasi-Hashiani, A Badawi, M Behzadifar, M Behzadifar, E T Bekru, D A Bennett, J R Chapman, K Deribe, B Duko Adema, Y Fatahi, B K Gelaw, E A Getahun, D Hendrie, A Henok, H de Hidru, M Hosseinzadeh, G Hu, M A Jahani, M Jakovljevic, F Jalilian, N Joseph, M Karami, A G Kelbore, M N Khan, Y J Kim, P A Koul, C La Vecchia, S Linn, R Majdzadeh, M M Mehndiratta, P T N Memiah, M M Mengesha, H E Merie, T R Miller, M Mirzaei-Alavijeh, A Mohammad Darwesh, N Mohammad Gholi Mezerji, R Mohammadibakhsh, Y Moodley, M Moradi-Lakeh, K I Musa, B R Nascimento, R Nikbakhsh, P S Nyasulu, A Omar Bali, O E Onwujekwe, S Pati, R Pourmirza Kalhori, F Salehi, S Shahabi, S A Shallo, M Shamsizadeh, Z Sharafi, S R Shukla, M R Sobhiyeh, J B Soriano, B L Sykes, R Tabarés-Seisdedos, D B B Tadesse, Y M Tefera, A Tehrani-Banikhashemi, B Tlou, R Topor-Madry, T Wiangkeham, M Yaseri, S Yaya, M A Yenesew, M Z Younis, A Ziapour, S Zodepy, D M Pigott, R C Reiner Jr, S I Hay, A D Lopez, A H Mokdad*
- i57** Burden of injuries in Nepal, 1990–2017: findings from the Global Burden of Disease Study 2017 *P R Pant, A Banstola, S Bhatta, J A Mytton, D Acharya, S Bhattarai, C Bisignano, C D Castle, G Prasad Dhungana, Z V Dingels, J T Fox, P Kumar Hamal, Z Liu, N Bahadur Mahotra, D Paudel, K Narayan Pokhrel, C Lal Ranabhat, N L S Roberts, D O Sylte, S L James*
- i67** Falls in older aged adults in 22 European countries: incidence, mortality and burden of disease from 1990 to 2017 *J A Haagsma, B F Olij, M Majdan, E F van Beeck, T Vos, C D Castle, Z V Dingels, J T Fox, E B Hamilton, Z Liu, N L S Roberts, D O Sylte, O Aremu, T W Bärnighausen, A M Borzi, A M Briggs, J J Carrero, C Cooper, Z El-Khatib, C L Ellingsen, S-M Fereshtehnejad, I Filip, F Fischer, J M Haro, J B Jonas, A A Kiadaliri, A Koyanagi, R Lunevicius, T J Meretoja, S Mohammed, A Pathak, A Radfar, S Rawaf, D L Rawaf, L S Riera, I Shiue, T J Vasankari, S L James, S Polinder*
- i75** Burden of injuries in Vietnam: emerging trends from a decade of economic achievement *Q A Nguyen, T H Nguyen, J Beardsley, C D Castle, A K Dang, Z V Dingels, J T Fox, C L Hoang, S Lewycka, Z Liu, A H Mokdad, N T T Nguyen, S H Nguyen, H Q Pham, N L S Roberts, D O Sylte, B X Tran, K B Tran, G T Vu, S L James, T H Nguyen*

- 183** The burden of unintentional drowning: global, regional and national estimates of mortality from the Global Burden of Disease 2017 Study R C Franklin, A E Peden, E B Hamilton, C Bisignano, C D Castle, Z V Dingsels, S I Hay, Z Liu, A H Mokdad, N L S Roberts, D O Sylte, T Vos, G G Abady, A E Abosetugn, R Ahmed, F Alahdab, C L Andrei, C A T Antonio, J Arabloo, A A K Arba, A D Badiye, S M Bakkannavar, M Banach, P C Banik, A Banstola, S L Barker-Collo, A Barzegar, M Bayati, P Bhardwaj, S Bhaumik, Z A Bhutta, A Bijani, A Bolor, F Carvalho, M A K Chowdhury, D-T Chu, S M Colquhoun, H Dagne, B Dagnew, L Dandona, R Dandona, A Daryani, S D Dharmaratne, Z S Dibi Foroooshani, H T Do, T R Driscoll, A W Eagan, Z El-Khatib, E Fernandes, I Filip, F Fischer, B Gebremichael, G Gupta, J A Haagsma, S Hassan, D Hendrie, C L Hoang, M K Hole, R Holla, S Hostiuc, M Househ, O S Ilesanmi, L R Inbaraj, S S N Irvani, M M Islam, R Q Ivers, A U Jayatilake, F Joukar, R Kalhor, T Kanchan, N Kapoor, A Kasaeian, M Khan, E A Khan, J Khubchandani, K Krishan, G A Kumar, P Lauriola, A D Lopez, M Madadin, M Majdan, V Maled, N Manafi, A Manafi, M McKee, H G Meles, R G Menezes, T J Meretoja, T R Miller, P Mithra, A Mohammadian-Hafshejani, R Mohammadpourhodki, F Mohebi, M Molokhia, G Mustafa, I Nego, C T Nguyen, H L T Nguyen, A T Olagunju, T O Olagunju, J R Padubidri, K Pakshir, A Pathak, S Polinder, D R A Pribadi, N Rabiee, A Radfar, S M Rana, J Rickard, S Safari, P Salamat, A M Samy, A R Sarker, D C Schwebel, S Senthilkumaran, F Shaahmadi, M A Shaikh, J I Shin, P K Singh, A Soheili, M A Stokes, H A R Suleria, I U Tarigan, M-H Temsah, B E Tesfay, P R Valdez, Y Veisani, P Ye, N Yonemoto, C Yu, H Yusefzadeh, S B Zaman, Z-J Zhang, S L James
- 196** Global injury morbidity and mortality from 1990 to 2017: results from the Global Burden of Disease Study 2017 S L James, C D Castle, Z V Dingsels, J T Fox, E B Hamilton, Z Liu, N L S Roberts, D O Sylte, N J Henry, K E LeGrand, A Abdelalim, A Abdoli, I Abdollahpour, R S Abdulkader, A Abedi, A E Abosetugn, A I Abushouk, O M Adebayo, M Agudelo-Botero, T Ahmad, R Ahmed, M B Ahmed, M T Eddine Aichour, F Alahdab, G M Alamene, F M Alanezi, A Alebel, N M Alema, S A Alghnam, S Al-Hajji, B A Ali, S Ali, M Alikhani, C Alinia, V Alipour, A M Aljunid, A Almasi-Hashiani, N A Almasri, K Altirkawi, Y S Abdeldayem Amer, S Amini, A M Loreche Amit, C L Andrei, A Ansari-Moghaddam, C A T Antonio, S C Yaw Appiah, J Arabloo, M Arab-Zozani, Z Arefi, O Aremu, F Ariani, A Arora, M Asaad, B Asghari, N Awoke, B P Ayala Quimanilla, G Ayano, M A Ayanore, S Azari, G Azarian, A Badawi, A D Badiye, E Bagli, A A Baig, M Bairwa, A Bakhtiari, A Balachandran, M Banach, S K Banerjee, P C Banik, A Banstola, S L Barker-Collo, T W Bärnighausen, L H Barrero, A Barzegar, M Bayati, B A Baye, N Bedi, M Behzadifar, T T Bekuma, H Belete, C Benjet, D A Bennett, I M Bensenor, K Berhe, P Bhardwaj, A G Bhat, K Bhattacharyya, S Bibi, A Bijani, M S Bin Sayeed, G Borges, A M Borzi, S Boufous, A Brazinova, N I Briko, S S Budhathoki, J Car, R Cárdenas, F Carvalho, J M Castaldelli-Maia, C A Castañeda-Orjuela, G Castelpietra, F Catalá-López, E Cerin, J S Chandan, W F Chanie, S K Chattu, V K Chattu, I Chatziralli, N Chaudhary, D Y Cho, M A Kabir Chowdhury, D-T Chu, S M Colquhoun, M-M Constantin, V M Costa, G Damiani, A Daryani, C A Dávila-Cervantes, F M Demeke, A B Demis, G T Demoz, D G Demsie, A Derakhshani, K Deribe, R Desai, M D Nasab, D D da Silva, Z S Dibi Foroooshani, K E Doyle, T R Driscoll, E Dubljanin, B D Adema, A W Eagan, A Eftekhar, E Ehsani-Chimeh, M E Sayed Zaki, D A Eleminch, S I El-Jaafary, Z El-Khatib, C L Ellingsen, M H Emamian, D A Endalew, S Eskandarieh, P S Faris, A Faro, F Farzadfar, Y Fatahi, W Fekadu, T Y Ferede, S-M Fereshnehjad, E Fernandes, P Ferrara, G T Feyissa, I Filip, F Fischer, M O Folayan, M Foroutan, J M Francis, R C Franklin, T Fukumoto, B S Geberemariam, A K Gebre, K B Gebremedhin, G G Gebremeskel, B Gebremichael, G A Gedefaw, B Geta, M Ghafourifard, F Ghamari, A Ghashghaee, A Gholamian, T K Gill, A C Goulart, A Grada, M Grivna, M I Mohialdeen Gubari, R A Guimarães, Y Guo, G Gupta, J A Haagsma, N Hafezi-Nejad, H H Bidgoli, B J Hall, R R Hamadeh, S Hamidi, J M Haro, M M Hasan, A Hasanzadeh, S Hassanipour, H Hassanikhani, H Y Hassen, R Havmoeller, K Hayat, D Hendrie, F Heydarpour, M Hajar, H C Ho, C L Hoang, M K Hole, R Holla, N Hossain, M Hosseinzadeh, S Hostiuc, G Hu, S E Ibitoye, O S Ilesanmi, I Ilic, M D Ilic, L R Inbaraj, E Indriasih, S S Naghibi Irvani, S M Shariful Islam, M M Islam, R Q Ivers, K H Jacobsen, M A Jahani, N Jahanmehr, M Jakovljevic, F Jalilian, S Jayaraman, A U Jayatilake, R P Jha, Y O John-Akinola, J B Jonas, N Joseph, F Joukar, J J Jozwiak, S B Jungari, M Jürisson, A Kabir, R Kadel, A Kahsay, L R Kalanekesh, R Kalhor, T A Kamil, T Kanchan, N Kapoor, M Karami, A Kasaeian, H G Kassaye, T Kavetsky, H K Kebede, P N Keiyoro, A G Kelbore, B Kelkey, Y S Khader, M A Khafaie, N Khalid, I A Khalil, R Khalilov, M Khammarnia, E A Khan, M Khan, T Khanna, H Khazaie, F K Shadmani, R Khundkar, D N Kiirithio, Y-E Kim, D Kim, Y J Kim, A Kisa, S Kisa, H Komaki, S K M Kondlahalli, V A Korshunov, A Koyanagi, M U G Kraemer, K Krishan, B K Bicer, N Kugbey, V Kumar, N Kumar, G A Kumar, M Kumar, G Kumaresh, O P Kurmi, O Kuti, C L Vecchia, F H Lami, P Lamichhane, J J Lang, V C Lansingh, D O Laryea, S Lasrado, A Latifi, P Lauriola, J L Leasher, S W Huey Lee, T L Lenjebo, M Levi, S Li, S Linn, X Liu, A D Lopez, P A Lotufo, R Lunevicius, R A Lyons, M Madadin, M M A El Razeke, N B Mahotra, M Majdan, A Majeed, J N Malagon-Rojas, V Maled, R Malekzadeh, D C Maita, N Manafi, A Manafi, A-L Manda, N Manjunatha, F Mansour-Ghanaei, B Mansouri, M A Mansournia, J C Maravilla, L M March, A J Mason-Jones, S Z Masoumi, B B Massenburg, P K Maulik, G G Meles, A Melese, Z A Melketsedik, P T N Memiah, W Mendoza, R G Menezes, M B Mengesha, M M Mengesha, T J Meretoja, A Meretoja, H E Merie, T Mestrovic, B Miazgowski, T Miazgowski, T R Miller, G K Mini, A Mirica, E M Mirakhorimov, M Mirzaei-Alavijeh, P Mithra, B Moazen, M Moghadaszadeh, E Mohamadi, Y Mohammad, K A Mohammad, A M Darvesh, N M Gholi Mezerji, A Mohammadian-Hafshejani, M Mohammadoo-Khorasani, R Mohammadpourhodki, S Mohammed, J A Mohammed, F Mohebi, M Molokhia, L Monasta, Y Moodley, M Moosazadeh, M Moradi, G Moradi, M Moradi-Lakeh, F Moradpour, L Morawska, I M Velásquez, N Morisaki, S D Morrison, T B Mossie, A G Muluneh, S Murthy, K I Musa, G Mustafa, A F Nabhan, A J Nagarajan, G Naik, M D Naimzada, F Najafi,

V Nangia, B R Nascimento, M Naserbakht, V Nayak, D E Ndwanwe, I Negoï, J W Ngunjiri, C T Nguyen, H L Thi Nguyen, R Nikbakhtsh, D N Anggraini Ningrum, C A Nnaji, P S Nyasulu, F A Ogbo, O B Oghenetega, I-H Oh, E W Okunga, A T Olagunju, T O Olagunju, A O Bali, O E Onwujekwe, K O Asante, H M Orpana, E Ota, N Ostavnov, S S Ostavnov, M P A, J R Padubidri, S Pakhale, K Pakshir, S Panda-Jonas, E-K Parke, S K Patel, A Pathak, S Pati, G C Patton, K Paulos, A E Peden, V C Filipino Pepito, J Pereira, H Q Pham, M R Phillips, M Pinheiro, R V Polibin, S Polinder, H Poustchi, S Prakash, D R Angga Priyadi, P Puri, Z Q Syed, M Rabiee, N Rabiee, A Radfar, A Rafay, A Rafiee, A Rafiei, F Rahim, S Rahimi, V Rahimi-Movaghar, M A Rahman, A Rajabpour-Sanati, F Rajati, I Rakovac, K Ranganathan, S J Rao, V Rashedi, P Rastogi, P Rath, S Rawaf, L Rawal, R Rawassizadeh, V Renjith, A M N Renzaho, S Resnikoff, A Rezapour, A I Ribeiro, J Rickard, C M Rios González, L Ronfani, G Roshandel, A M Saad, Y D Sabde, S Sabour, B Saddik, S Safari, R Safari-Faramani, H Safarpour, M Safdarian, S M Sajadi, P Salamat, F Salehi, S S Zahabi, M R Rashad Salem, H Salem, O Salman, I Salz, A M Samy, J Sanabria, L S Riera, M M Santric Milicevic, A R Sarke, A Sarveazad, B Sathian, M Sawhney, S M Sawyer, S Saxena, M Sayyah, D C Schwebel, S Seedat, S Senthilkumaran, S G Sepanlou, S Seyedmousavi, F Sha, F Shaahmadi, S Shahabi, M A Shaikh, M Shams-Beyranvand, M Shamsizadeh, M Sharif-Alhoseini, H Sharifi, A Sheikh, M Shigematsu, J I Shin, R Shiri, S Siabani, I D Sigfusdottir, P K Singh, J A Singh, D N Sinha, C-G Smarandache, E U R Smith, A Soheili, B Soleymani, A R Soltanian, J B Soriano, M B Sorrie, I N Soyiri, D J Stein, M A Stokes, M B Sufiyan, H A Rasul Suleria, B L Sykes, R Tabarés-Seisdedos, K M Tabb, B W Taddele, D B Tadesse, A T Tamiru, I U Tarigan, Y M Tefera, A Tehrani-Banihashemi, M G Tekle, G H Tekulu, A K Tesema, B E Tesfay, R Thapar, A B Tilahun, K G Tlaye, H R Tohidinik, R Topor-Madry, B X Tran, K B Tran, J P Tripathy, A C Tsai, L T Car, S Ullah, I Ullah, M Umar, B Unnikrishnan, E Upadhyay, O A Uthman, P R Valdez, T J Vasankari, N Venketasubramanian, F S Violante, V Vlassov, Y Waheed, G T Weldesamuel, A Werdecker, T Wiangkeham, H F Wolde, D H Woldeyes, D Z Wondafrash, T G Wondmeneh, A B Wondmeneh, A-M Wu, R Yadav, A Yadollahpour, Y Yano, S Yaya, V Yazdi-Feyzabadi, P Yip, E Yisma, N Yonemoto, S-J Yoon, Y Youm, M Z Younis, Z Yousefi, Y Yu, C Yu, H Yusefzadeh, T Z Moghadam, Z Zaidi, S B Zaman, M Zamani, M Zamanian, H Zandian, A Zarei, F Zare, Z-J Zhang, Y Zhang, S Zodepy, L Dandona, R Dandona, L Degenhardt, S D Dharmaratne, S I Hay, A H Mokdad, R C Reiner Jr, B Sartorius, T Vos

115 Global trends of hand and wrist trauma: a systematic analysis of fracture and digit amputation using the Global Burden of Disease 2017 Study



C S Crowe, B B Massenburg, S D Morrison, J Chang, J B Friedrich, G G Abady, F Alahdab, V Alipour, J Arabloo, M Asaad, M Banach, A Bijani, A M Borzi, N I Briko, C D Castle, D Y Cho, M T Chung, A Daryani, G T Demoz, Z V Dingels, H T Do, F Fischer, J T Fox, T Fukumoto, A K Gebre, B Gebremichael, J A Haagsma, A Haj-Mirzaian, D W Handiso, S I Hay, C L Hoang, S S N Irvani, J J Jozwiak, R Kalhor, A Kasaieian, Y S Khader, R Khalilov, E A Khan, R Khundkar, S Kisa, A Kisa, Z Liu, M Majdan, N Manafi, A Manafi, A-L Manda, T J Meretoja, T R Miller, A Mohammadian-Hafshejani, R Mohammadpourhodki, M A Mohseni Bandpey, A H Mokdad, M D Naimzada, D E Ndwanwe, C T Nguyen, H L T Nguyen, A T Olagunju, T O Olagunju, H Q Pham, D R A Priyadi, N Rabiee, K Ramezanzadeh, K Ranganathan, N L S Roberts, L Roever, S Safari, A M Samy, L Sanchez Riera, S Shahabi, C-G Smarandache, D O Sylte, B E Tesfay, B X Tran, I Ullah, P Vahedi, A Vahedian-Azimi, T Vos, D H Woldeyes, A B Wondmeneh, Z-J Zhang, S L James

125 Estimating global injuries morbidity and mortality: methods and data used in the Global Burden of Disease 2017 study



S L James, C D Castle, Z V Dingels, J T Fox, E B Hamilton, Z Liu, N L S Roberts, D O Sylte, G J Bertolacci, M Cunningham, N J Henry, K E LeGrand, A Abdelalim, I Abdollahpour, R S Abdulkader, A Abedi, K H Abegaz, A E Abosetugn, A I Abushouk, O M Adebayo, J C Adsuar, S M Advani, M Agudelo-Botero, T Ahmad, M B Ahmed, R Ahmed, M T Eddine Aichour, F Alahdab, F M Alanezi, N M Alema, B W Alemu, S A Alghnam, B A Ali, S Ali, C Alinia, V Alipour, S M Aljunid, A Almasi-Hashiani, N A Almasri, K Altirkawi, Y S Abdeldayem Amer, C L Andrei, A Ansari-Moghaddam, C A T Antonio, D Anvari, S C Yaw Appiah, J Arabloo, M Arab-Zozani, Z Arefi, O Aremu, F Ariani, A Arora, M Asaad, B P Ayala Quimantilla, G Ayano, M A Ayanore, G Azarian, A Badawi, A D Badiye, A A Baig, M Bairwa, A Bakhtiari, A Balachandran, M Banach, S K Banerjee, P C Banik, A Banstola, S L Barker-Collo, T W Bärnighausen, A Barzegar, M Bayati, S Bazargan-Hejazi, N Bedi, M Behzadifar, H Belete, D A Bennett, I M Bensenor, K Berhe, A S Bhagavathula, P Bhardwaj, A G Bhat, K Bhattacharyya, Z A Bhutta, S Bibi, A Bijani, A Bloor, G Borges, R Borschmann, A M Borzi, S Boufous, D Braithwaite, N I Briko, T Brugha, S S Budhathoki, J Car, R Cárdenas, F Carvalho, J M Castaldelli-Maia, C A Castañeda-Orjuela, G Castelpietra, F Catalá-López, E Cerin, J S Chandan, J R Chapman, V K Chattu, S K Chattu, I Chatziralli, N Chaudhary, D Y Cho, J-Y J Choi, M A Kabir Chowdhury, D J Christopher, D-T Chu, F M Cicuttini, J M Coelho, V M Costa, S M A Dahlawi, A Daryani, C A Dávila-Cervantes, D D Leo, F M Demeke, G T Demoz, D G Demisie, K Deribe, R Desai, M D Nasab, D D da Silva, Z S Dikaji Forooshani, H T Do, K E Doyle, T R Driscoll, E Dublinian, B D Adema, A W Eagan, D A Elemineh, S I El-Jaafari, Z El-Khatib, C L Ellingsen, M E S Zaki, S Eskandarieh, O Eyawo, P S Faris, A Faro, F Farzadfar, S-M Fereshtehnejad, E Fernandes, P Ferrara, F Fischer, M O Folayan, A A Fomenkov, M Foroutan, J M Francis, R C Franklin, T Fukumoto, B S Geberemariam, H Gebremariam, K B Gebremedhin, L G Gebremeskel, G G Gebremeskel, B Gebremichael, G A Gedefaw, B Geta, A B Getenet, M Ghafourifard, F Ghamari, R G Gheshlagh, A Gholamian, S A Gilani, T K Gill, A H Goudarzian, A C Goulart, A Grada, M Grivna, R A Guimarães, Y Guo, G Gupta, J A Haagsma, B J Hall, R R Hamadeh, S Hamidi, D W Handiso, J M Haro, A Hasanadeh, S Hassan, S Hassanipour, H Hassankhani, H Y Hassen, R Havmoeller, D Hendrie, F Heydarpour, M Hfijar, H C Ho, C L Hoang, M K Hole, R Holla, N Hossain, M Hosseinzadeh, S Hostiuc, G Hu, S E Ibitoye,

O S Ilesanmi, L R Inbaraj, S S Naghibi Irvani, M Mofizul Islam, S M Shariful Islam, R Q Ivers, M A Jahani, M Jakovljevic, F Jalilian, S Jayaraman, A U Jayatilleke, R P Jha, Y O John-Akinola, J B Jonas, K M Jones, N Joseph, F Joukar, J J Jozwiak, S B Jungari, M Jürisson, A Kabir, A Kahsay, L R Kalanekesh, R Kalhor, T A Kamil, T Kanchan, N Kapoor, M Karami, A Kasaeian, H G Kassaye, T Kavetsky, G A Kayode, P N Keiyoro, A G Kelbore, Y S Khader, M A Khafaie, N Khalid, I A Khalil, R Khalilov, M Khan, E A Khan, J Khan, T Khanna, S Khazaie, H Khazaie, R Khundkar, D N Kiirithio, Y-E Kim, Y J Kim, D Kim, S Kisa, A Kisa, H Komaki, S K M Kondlahalli, A Koolivand, V A Korshunov, A Koyanagi, M U G Kraemer, K Krishan, B K Defo, B K Bicer, N Kugbey, N Kumar, M Kumar, V Kumar, N Kumar, G Kumares, F H Lami, V C Lansingh, S Lasrado, A Latifi, P Lauriola, C L Vecchia, J L Leasher, S W Huey Lee, S Li, X Liu, A D Lopez, P A Loufo, R A Lyons, D B Machado, M Madadin, M M Abd El Razeq, N B Mahotra, M Majdan, A Majeed, V Maled, D C Malta, N Manafi, A Manafi, A-L Manda, N Manjunatha, F Mansour-Ghanaei, M A Mansournia, J C Maravilla, A J Mason-Jones, S Z Masoumi, B B Massenburg, P K Maulik, M M Mehndiratta, Z A Melkisedik, P T N Memiah, W Mendoza, R G Menezes, M M Mengesha, T J Meretoja, A Meretoja, H E Merie, T Mestrovic, B Miazgowski, T Miazgowski, T R Miller, G K Mini, A Mirica, E M Mirakhimov, M Mirzaei-Alavijeh, P Mithra, B Moazen, M Moghadaszadeh, E Mohamadi, Y Mohammad, A M Darwesh, A Mohammadian-Hafshejani, R Mohammadpourhodki, S Mohammed, J A Mohammed, F Mohebi, M A Mohseni Bandpei, M Molokhia, L Monasta, Y Moodley, M Moradi, G Moradi, M Moradi-Lakeh, R Moradzadeh, L Morawska, I M Velásquez, S D Morrison, T B Mossie, A G Muluneh, K I Musa, G Mustafa, M Naderi, A J Nagarajan, G Naik, M D Naimzada, F Najafi, V Nangia, B R Nascimento, M Naserbakht, V Nayak, J Nazari, D E Ndwandwe, I Nego, J W Ngunjiri, T H Nguyen, C T Nguyen, D N Nguyen, H L Thi Nguyen, R Nikbakht, D N Anggraini Ningrum, C A Nnaji, R Ofori-Asenso, F A Ogbo, O B Oghenetege, I-H Oh, A T Olagunju, T O Olagunju, A O Bali, O E Onwujekwe, H M Orpana, E Ota, N Ostavnov, S S Ostavnov, M P A, J R Padubidri, S Pakhale, K Pakshir, S Panda-Jonas, E-K Park, S K Patel, A Pathak, S Pati, K Paulos, A E Peden, V C Filipino Pepito, J Pereira, M R Phillips, R V Polibin, S Polinder, F Pourmalek, A Pourshams, H Poustchi, S Prakash, D R Angga Prihadi, P Puri, Z Q Syed, N Rabiee, M Rabiee, A Radfar, A Rafay, A Rafiee, A Rafiei, F Rahim, S Rahimi, M A Rahman, A Rajabpour-Sanati, F Rajati, I Rakovac, S J Rao, V Rashedi, P Rastogi, P Rathi, S Rawaf, L Rawal, R Rawassizadeh, V Renjith, S Resnikoff, A Rezapour, A I Ribeiro, J Rickard, C M Rios González, L Roeber, L Ronfani, G Roshandel, B Saddik, H Safarpour, M Safdarian, S Mohammad Sajadi, P Salamati, M R Rashad Salem, H Salem, I Salz, A M Samy, J Sanabria, L S Riera, M M Santric Milicevic, A R Sarker, A Sarveazad, B Sathian, M Sawhney, M Sayyah, D C Schwebel, S Seedat, S Senthilkumaran, S Seyedmousavi, F Sha, F Shaahmadi, S Shahabi, M A Shaikh, M Shams-Beyranvand, A Sheikh, M Shigematsu, J I Shin, R Shiri, S Siabani, I D Sigfusdottir, J A Singh, P K Singh, D N Sinha, A Soheili, J B Soriano, M B Sorrie, I N Soyiri, M A Stokes, M B Sufiyan, B L Sykes, R Tabarés-Seisdedos, K M Tabb, B W Taddele, Y M Tefera, A Tehrani-Banihashemi, G H Tekulu, A K Tesema Tesema, B E Tesfay, R Thapar, M V Titova, K G Tlaye, H R Tohidinik, R Topor-Madry, K B Tran, B X Tran, J P Tripathy, A C Tsai, A Tsatsakis, L T Car, I Ullah, S Ullah, B Unnikrishnan, E Upadhyay, O A Uthman, P R Valdez, T J Vasankari, Y Veisani, N Venketasubramanian, F S Violante, V Vlassov, Y Waheed, Y-P Wang, T Wiangkeham, H F Wolde, D H Woldeyes, T G Wondmeneh, A B Wondmeneh, A-M Wu, G M A Wyper, R Yadav, A Yadollahpour, Y Yano, S Yaya, V Yazdi-Feyzabadi, P Ye, P Yip, E Yisma, N Yonemoto, S-J Yoon, Y Youm, M Z Younis, Z Yousefi, C Yu, Y Yu, T Z Moghadam, Z Zaidi, S B Zaman, M Zamani, H Zandian, F Zarei, Z-J Zhang, Y Zhang, A Ziapour, S Zodpey, R Dandona, S D Dharmaratne, S I Hay, A H Mokdad, D M Pigott, R C Reiner, T Vos

- i154**  Unintentional injuries in Mexico, 1990–2017: findings from the Global Burden of Disease Study 2017 M Híjar, R Pérez-Núñez, E Hidalgo-Solórzano, B Hernández Prado, R Valdez-Santiago, E B Hamilton, S L James, G J Bertolacci, M Cunningham, Z V Dingels, J T Fox, Z Liu, N L S Roberts, D O Sylte, M Agudelo-Botero, G Borges, L Cahuana-Hurtado, I R Campos-Nonato, R Cárdenas, C A Dávila-Cervantes, E Denova-Gutiérrez, D Díaz, V C Lansingh, G Martínez, P A Montero-Zamora, E Serván-Mori, R Lozano

Miscellaneous

- i162** Correction: *Unintentional injuries in Mexico, 1990–2017: findings from the Global Burden of Disease Study 2017*
- i163** Correction: *Morbidity and mortality from road injuries: results from the global Burden of Disease Study 2017*
- i164** Correction: *Burden of injury along the development spectrum: associations between the Socio-demographic Index and disability-adjusted life year estimates from the Global Burden of Disease Study 2017*
- i165** Correction: *Global injury morbidity and mortality from 1990 to 2017: results from the Global Burden of Disease Study 2017*
- i166** Correction: *The burden of unintentional drowning: Global, regional and national estimates of mortality from the Global Burden of Disease 2017 Study*