

A Look Back at **Kindling's First Year**

The Kindling Mission

Our mission is to connect fire safety knowledge with local and global humanitarian and development efforts aimed at reducing the unequal impact of fire on people, property and livelihoods in vulnerable communities around the world



Fire undermines urban development and humanitarian assistance

Kindling exists to help tackle fire safety inequalities—the unequal distribution of fire risk and fire consequences between groups of people in society and geographic areas (e.g. neighborhoods, cities, countries).

December 2019

factory fire in Delhi, India killed 43 people and injured at least 56 people

February 2019

fire in Old Dhaka left at least 80 people dead and 50 others injured in the historic area with widespread informal commercial activities

March 2021

fire in Susan's Bay informal settlement in Freetown, Sierra Leone displaced over 7,000 people and injured 409 people

March 2021

fire at the Rohingya refugee camps in Cox's Bazar, Bangladesh displaced over 45,000 people, caused at least 11 fatalities and 560 injuries

95%

of fire deaths occur in low- and middle-income countries

COVER PHOTO: Fire at Favela Moinho in Sao Paulo, Brazil on December 22, 2011 Photo Credit: Paulo Pampolin. THIS PAGE: Fire on March 11, 2017 in Imizamo Yethu informal settlement in Cape Town, South Africa killed 4 people and displaced over 9,700 people Photo credit: Aletta Harrison/GroundUp

A word from Kindling's founder

Dear Friends,

The statistics and stories of fires affecting vulnerable communities around the world are heartbreaking; from 27 school children dying in a fire in Liberia to over 45,000 people losing their shelters in the largest refugee camp in the world. Fire is not a problem that is going away.

But despite fire's massive impacts, fire safety often slips through the cracks of humanitarian assistance, disaster risk reduction and urban development, and those with the most power and influence to tackle the problem often don't even acknowledge it exists.

I founded Kindling to work in and between these sectors, to link fire safety knowledge and expertise with people who need it most. While we've learned how challenging it is to launch a startup during a pandemic, our first year has given us incredible hope for a safer and more connected future. Our work is drawing critical attention to these global fire problems and attracting strong partners from academia, non-governmental organizations, governmental organizations, and funding agencies.

Our approach is driven by curiosity and a passion for understanding diverse contexts and defining problems, rather than blindly applying pre-ordained solutions. In our ongoing exploratory phase, we are building interdisciplinary teams to map how fire risks emerge in complex settings, to explore how fire safety can be institutionalized and to reimagine fire safety education and training.

Together, we have started not only an organization but a movement. We look forward to creating more spaces for exchange and connection, especially across international borders over the coming year, and to getting out from behind our desks to work directly with affected communities to save lives, property, and livelihoods.

Sincerely,

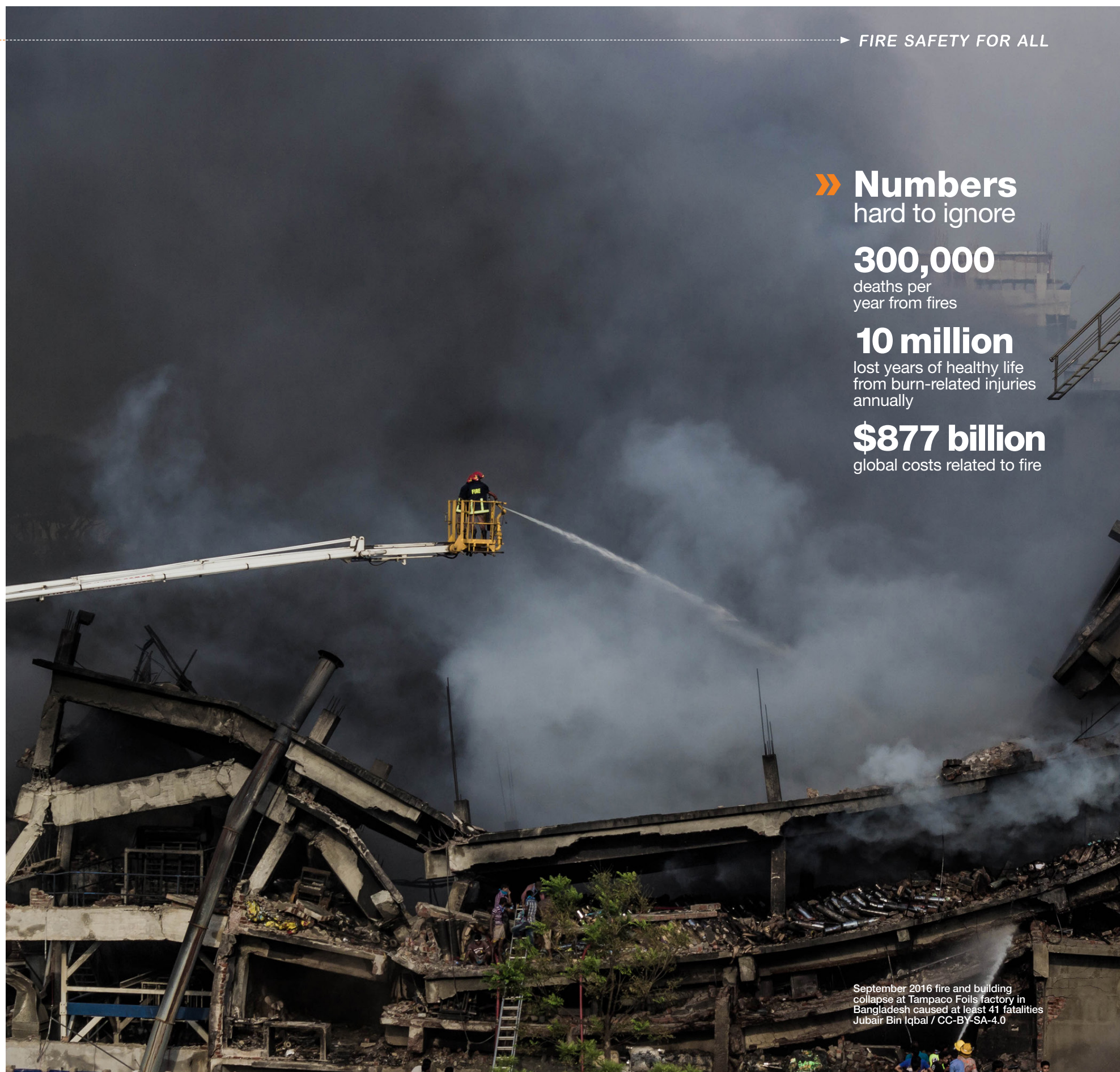
Danielle Antonellis
Founder and Executive Director

» **Numbers**
hard to ignore

300,000
deaths per
year from fires

10 million
lost years of healthy life
from burn-related injuries
annually

\$877 billion
global costs related to fire



A fire in Korail informal settlement in Dhaka, Bangladesh displaced at least 4,000 families on March 16, 2016. According to the fire services, 15-20% of the settlement was damaged
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Our guiding principles

IMPACT-DRIVEN

Prioritize higher impact activities for the most vulnerable

EXPLORATIVE

Be open to new perspectives and new ways of doing things; aim high and embrace the learnings and opportunities in failure

OPEN

Share knowledge and resources as openly as possible to support others in contributing towards our mission

AGILE

Be opportunistic and be willing to change course as new information, opportunities, and barriers emerge

COLLABORATIVE

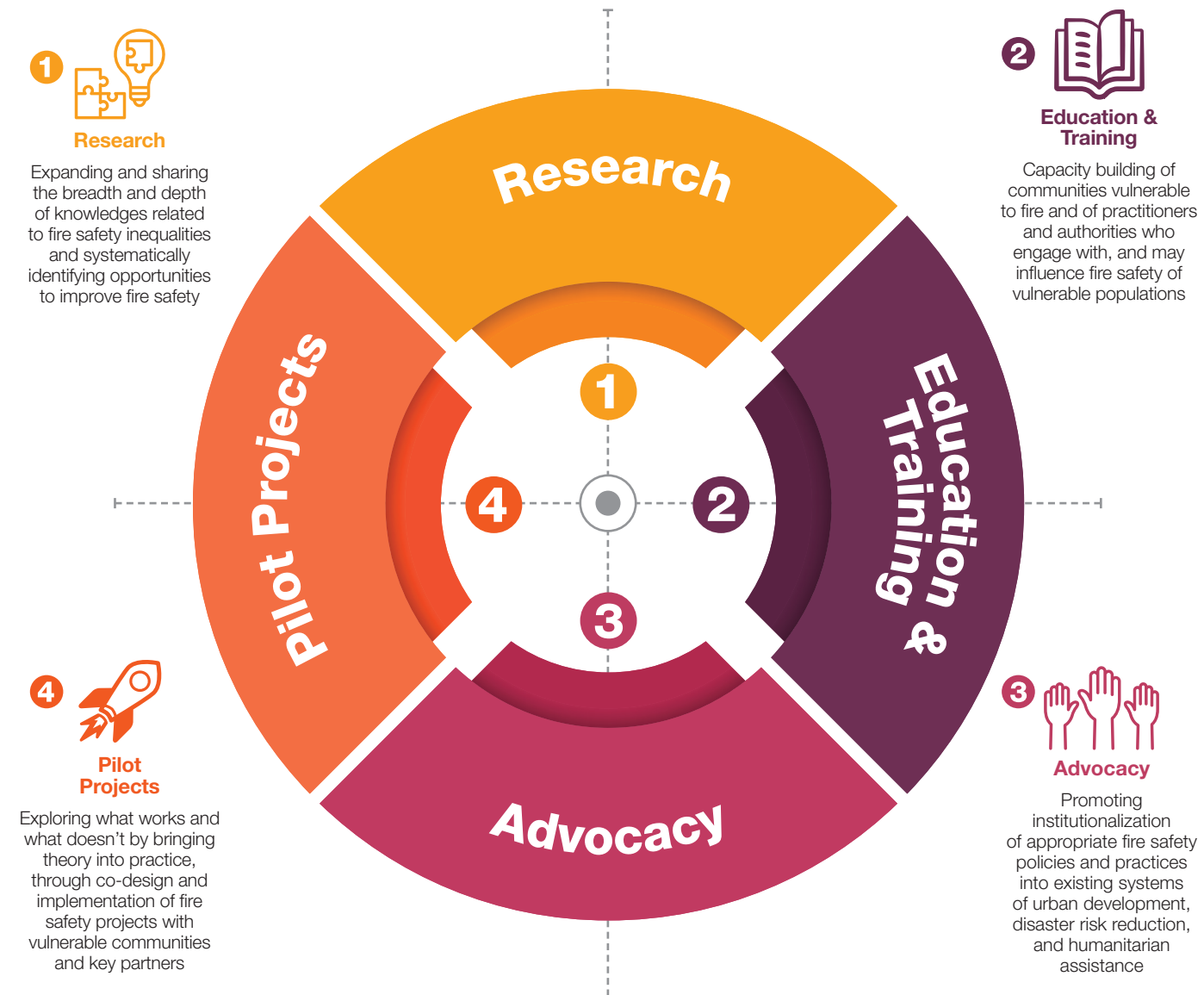
Strive to include diverse points of views, especially those of communities vulnerable to fire; strive for not only buy-in, but co-development

HOLISTIC

Strive to take a 360-degree approach in the development of problem definitions and solutions as fire is a complex societal issue

Our four pillars

Despite the consequences of fire being largely borne by low- and middle-income countries, especially in rapidly developing cities, fire safety systems (policies, infrastructure, institutions, public education, etc.) are severely lacking and not fit for purpose in many cities. The same could be said for much of the humanitarian sector. There is a dire need and opportunity to expand and strengthen capacities, not only for fire response, but for the design, management, and use of the built environment and in relation to education and economic activities, both formal and informal. Kindling aims to promote fire safety development by supporting institutions, partner organizations and communities through research, advocacy, education & training, and pilot projects.



Over 1,000 people displaced from Khayelitsha informal settlement fire in Cape Town, South Africa on October 21, 2018 Photo credit: Vincent Lali/ GroundUp CC-BY-SA-4.0

Kindling Project Partnerships

Comparative study of fire risk emergence in informal settlements in Dhaka & Cape Town

Fires are a common occurrence for the 1 billion people living in informal settlements around the world. The consequences of these fires can be catastrophic—including lost lives, physical injuries, destroyed property and livelihoods, leading to socio-economic development being undermined and exacerbation of poverty and marginalization of already vulnerable groups. There is growing recognition that these fires are not just technical and physical challenges; these fires are fundamentally social, political, and economic problems. Fire risk is context specific and is part of a dynamic, complex system with fluid urban boundaries and a multitude of stakeholders. However, attempts to address the issue have generally taken a technical or piecemeal approach. This project aims to contribute to ongoing

work by practitioners and researchers to build a holistic, socio-technical understanding of urban fire risk and safety in informal settlement contexts. It does this to highlight the necessity of understanding the complexity of fire risk emergence to develop appropriate fire safety measures and the importance of promoting the emergence of local fire safety practices to ultimately save lives, protect livelihoods and expand wellbeing. It does this via a case study analysis of informal settlements fire risk in two cities, Dhaka, Bangladesh and Cape Town, South Africa, based on data from a literature review and interviews with city level stakeholders. It aims to consider fire risk and fire safety through a systems lens, and to identify challenges and opportunities for systemic fire safety improvements..

This project is led by Kindling in partnership with Stellenbosch University and the National Fire Protection Association



This project is supported by the Royal Academy of Engineering and the Lloyd's Register Foundation under the Safer Complex Systems—Call for Case Studies—Stage 1B (Research) scheme



State of Fire Safety in Humanitarian Settlements

Uncontrolled fires regularly undermine humanitarian assistance, leading to significant devastation to displaced populations, the environment, budgets and programming. Fire safety is a matter of protection and accountability to affected populations. But fire safety has fallen through the cracks of the Cluster Approach humanitarians rely on—it is so cross-cutting that it is everyone's (and therefore no-one's) responsibility. The resources and approaches that currently exist are either too vague, too lax, too context-specific or too specific to the Global North. Evidence gathering and coordination between agencies, clusters, affected communities and local governments is urgently needed, including expert-informed, scalable guidance

and tools that are specific to the humanitarian sector. And while fire specific guidance and tools are important, integration of fire safety into existing humanitarian policies and practices is even more important. Fire safety needs to be institutionalized into the ways things are done across the sector. With the support of the Global Shelter Cluster, and funding from USAID-BHA and FCDO, we are now carrying out a baseline review on the current state of fire safety in humanitarian shelter and settlements. An important part of this project is engaging with humanitarian practitioners and researchers about their past experiences, knowledges, practices, and perspectives relating to fire and fire safety

This project is led by Kindling in partnership with Manchester Metropolitan University and the Global Shelter Cluster



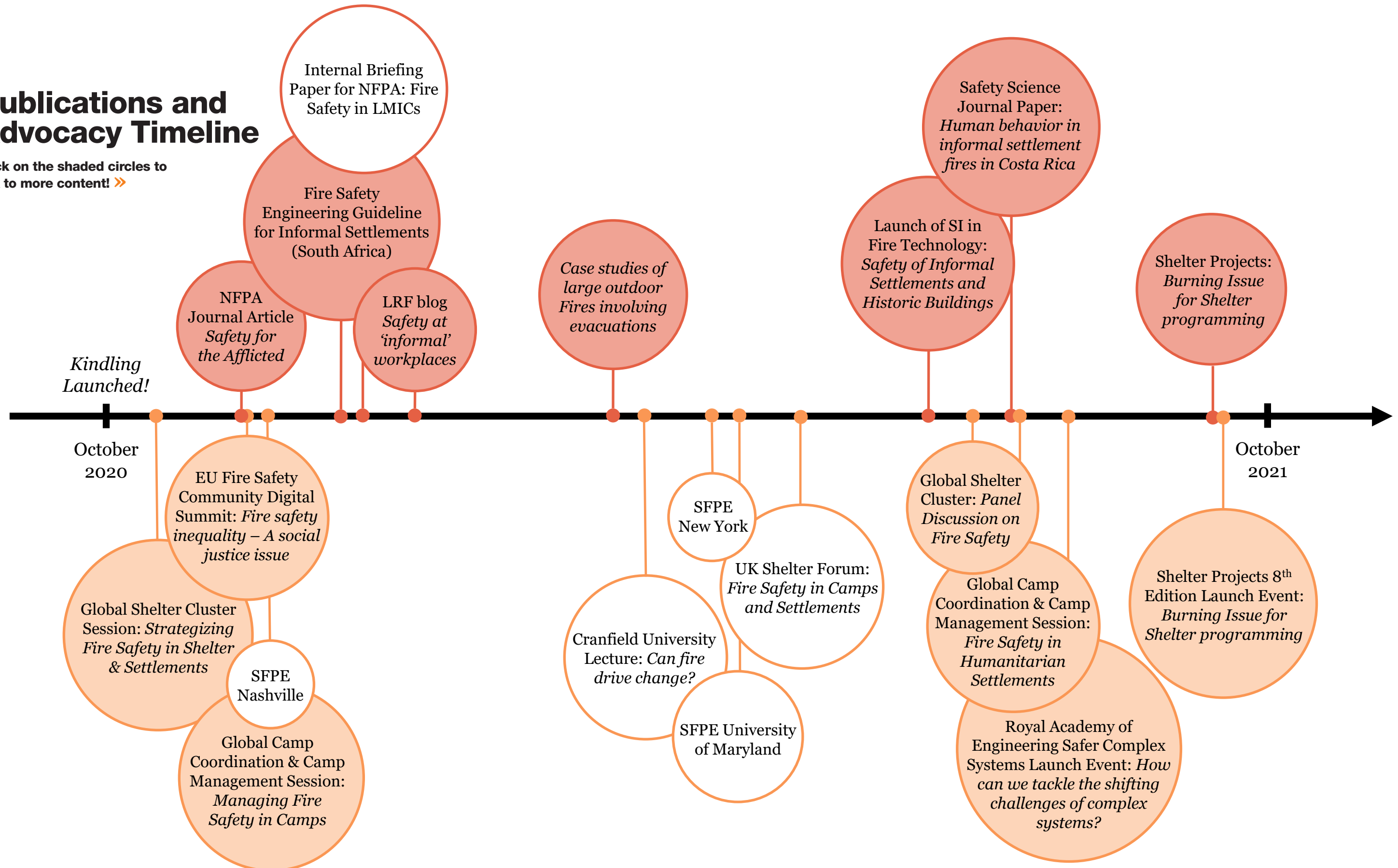
This project is supported by USAID-Bureau of Humanitarian Assistance and the UK Foreign, Commonwealth, and Development Office



Daily life of residents living in Sujat Nagar informal settlement in Dhaka, Bangladesh on October 11, 2016© Dominic Chavez/World BankCC BY-NC-ND 2.0

Publications and Advocacy Timeline

Click on the shaded circles to link to more content! >>



Our Growing Team

Our interdisciplinary team of researchers and practitioners have extensive experience in engineering, planning, and social and physical sciences in diverse geographies and sectors, such as the architecture/engineering/construction industry, international development, humanitarian sector, disaster risk reduction, and public safety. Our team represents 13 countries by nationality and base location. As our organization grows, we aim to become increasingly diverse in backgrounds, experiences, geographies, disciplines, and more.

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Anthony Hamins



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Doug Sternberg



Sedudzinam Buertey



Dan Arthur



Melissa Spiegel

Other Highlights

Fire Safety in Informal Markets in Nigeria, supporting AfroFire with desktop research and survey design for April 2021 field work in Onitsha Market, the largest market in West Africa

'Fire Safety for Humanitarian Settlements' Ready to Go mobile training guide for DisasterReady.org, in collaboration with Cornerstone Foundation and Arup

Fire Safety E-Learning Modules for Factory Workers in collaboration with Labor Solutions

Simulating Evacuation of Humanitarian Settlements in collaboration with RMIT University

Fire Safety in Low- and Middle-Income Countries, internal briefing paper commissioned by the National Fire Protection Association

Fire safety training videos and brochures, supporting Stellenbosch University with developing educational materials for local municipalities and non-governmental organizations

Research into the importance of context for international fire safety collaboration and sharing of knowledge and practices

► **Kindling is now an IRS 501(c)(3) tax exempt organization!**

Fire safety is a right.

Not a privilege.

Kindling Collaborators



ARUP



Labor**Solutions**



Fire safety for all.

Kindling.

Rohingya refugee children walking in Unchiprang camp in Cox's Bazar Bangladesh
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