Grandad built our house

A book about construction safety by children from all over Ireland.
This project is part of the Authority’s awareness raising campaign aimed at reducing death, injuries and ill-health amongst those working in construction. The book is the culmination of work between primary school children, artists and writers around the high risk world of construction work. The role of the arts in promoting health and safety at work is not often considered but this project is about amplifying the voices of children and recognising the role they have to play in influencing behavioural change amongst their own families and in the wider working community.

Construction work is high risk work and there are more than 120,000 people employed in this sector, a number which is growing year on year. A total of 39 people have been killed in construction work in the past five years, and many more thousands injured. Every serious injury or fatality at work is a tragedy in itself and catastrophic for families left to cope with severe disability, illness or the stark finality of death.

The stories and conversations of children recorded in this book tell of family, of working together and of home building. They also tell a cautionary tale of taking risks, of accidents and the effects of injury on their loved ones. The recorded conversations and photographed ‘constructs’ were produced by children aged between five and twelve, from all over Ireland who answered the call to enter a HSA art/story-writing competition around safety and health in construction. From more than 6,500 entries, 89 children won the opportunity to collaborate with artists and writers, to develop their ideas and publish this book.

We are ever grateful to our partners in Kilkenny Education Centre and the other 20 full-time Education Centres for helping us get the competition into every primary school in the country. We thank Kids’ Own Publishing Partnership, whose artists and writers captured the children’s searing honesty and unique insight into the world of construction work and represent it so faithfully in this book. I am pleased to say that copies of the book will be available in every primary school and library in the country.

“Out of the mouths of babes oft times come gems” (Lewis Carroll)

Martin O’Halloran, CEO, Health and Safety Authority
Competition winners

Midlands

Athlone Education Centre
Kaja Wontorczyk, Senior Infants, Scoil Phádraig, Rathconrath, Mullingar, Co. Westmeath
Jude Harrnett, 1st Class, Scoil Phádraig, Rathconrath, Mullingar, Co. Westmeath
Ada Isdell, 3rd Class, St. Cremin’s National School, Multifarnham, Mullingar, Co. Westmeath
Elizabeth Walsh, 5th Class, St. Feichin’s National School, Fore, Castlepollard, Co. Westmeath

Kaja Wontorczyk, Senior Infants, Scoil Phádraig, Rathconrath, Mullingar, Co. Westmeath

North West

Sligo Education Centre
Kate Walsh, Junior Infants, St. Patrick’s National School, Calry, Co. Sligo
Ivan Egerongbe, 2nd Class, Carbury National School, The Mall, Sligo
Alina Moran, 3rd Class, St. Joseph’s National School, Culleens, Co. Sligo
Rory Carr, 5th Class, Coolbock National School, Coolbock, Riverstown, Co. Sligo

Clare Education Centre
Netania Cosmos, Junior Infants, Scoil Chríost Rí, Cloughleigh, Ennis, Co. Clare
Evan Ó Cualaín, 2nd Class, Gaelscoil Mhíchíl Ciosóg, Ennis, Co. Clare
Jaymee Carrig, 3rd Class, St. Senan’s National School, Shannon, Co. Clare
Ciara Hayes, 6th Class, Rineen National School, Rineen, Miltown Malbay, Co. Clare

Clare Education Centre

North East

Navan Education Centre
Ella Taylor, Senior Infants, Scoil Muire na nGael, Dundalk, Co. Louth
Freya Casemore, 4th Class, Scoil Mhuire, Moynalty, Kells, Co. Meath
Daisy O’Brien, 5th Class, Kells Parochial National School, Kells, Co. Meath
Phoebe Nicholson, 6th Class, Kells Parochial National School, Kells, Co. Meath

Laois Education Centre
Aoife Daly, Senior Infants, St. Joseph’s Girls National School, Davitt Road, Mountmellick, Co. Laois
Charlie Foot, Junior Infants, St. Paul’s National School, St. Paul’s Rectory, Mountmellick, Co. Laois
Darragh Hoyne, 1st Class, Scoil Chroínín Naofo, Dromakeenan, Roscrea, Co. Tipperary
Joseph Conroy, 4th Class, Castlecuffe National School, Clonaslee, Co. Laois
Aisling Carroll, 6th Class, Wolfhill National School, Athy, Co. Kildare

Laois Education Centre

Donegal Education Centre
Jack Geraghty, 6th Class, Kilbarron National School, Ballyshannon, Co. Donegal
Catherine Campbell, 3rd Class, Edeninfagh National School, Glenties, Co. Donegal
Caoimhe McCallig, 3rd Class, Edeninfagh National School, Glenties, Co. Donegal
Kelly Quinn, 3rd Class, Edeninfagh National School, Glenties, Co. Donegal
Marie Hunter, 3rd Class, Edeninfagh National School, Glenties, Co. Donegal
Cora Ward, 1st Class, St. Mary’s National School, Malin Head, Co. Donegal
Calum Cassidy, Junior Infants, Killaghtee National School, Dunkineely, Co. Donegal

Carrick-on-Shannon Education Centre
Sophie Cox, Junior Infants, Ballagh National School, Ballagh, Kilrooskey, Co. Roscommon
Kateri Gilna, 2nd Class, Aughnagarron National School, Aughnagarron, Granard, Co. Longford
Gearóid Bourke O’Shea, 4th Class, St. Joseph’s National School, Leitrim Village, Co. Leitrim
Cian O’Reilly, 6th Class, St. Bernard’s Mixed National School, Abbeylara, Granard, Co. Longford

Galway Education Centre
Isabelle Day, 1st Class, Inishbofin National School, Inishbofin, Co. Galway
Nollaig O’Halloran, 5th Class, Inishbofin National School, Inishbofin, Co. Galway

Galway Education Centre

Drumcondra Education Centre
Adas Liskauskas, 6th Class, St. Francis of Assisi National School, Belmayne, Balgriffin, Dublin 13
Scott Bennis, 1st Class, North Dublin National School Project, Ballymun Road, Dublin 9.
Billy Gillespie, 4th Class, St. Patrick’s Boys’ National School, Millbourne Avenue, Drumcondra, Dublin 9
Eimear Walsh, Junior Infants, Naíscoil Íde, All Saints’ Drive, Raheny, Dublin 5.

Thank
Monaghan Education Centre
Garbhán McGoldrick, 2nd Class, Scoil Mhuire, Swanlinbar, Co. Cavan
Conor McQuaid, Senior Infants, St. Joseph’s National School, Knockatallon, Co. Monaghan
Conor Sherlock, 3rd Class, St. Michael’s National School, Rackwallace, Co. Monaghan
Christopher Dunn, 5th Class, Drumcorrin National School, Drum Village, Co. Monaghan

East

Dublin West Education Centre
Dimitrios Daly, 4th Class, Scoil Colm, Crumlin, Dublin 12
Peter Adeyeye, 6th Class, Inchicore National School, Dublin 10
Carl Meehan, 4th Class, Scoil Colm, Crumlin, Dublin 12
Jessica O’Loughlin, 5th Class, Inchicore National School, Dublin 10

Blackrock Education Centre
Caoimhe Brennan, 6th Class, Edmondstown National School, Rathfarnham, Dublin 14
Aoibhín Downey, 2nd Class, St. Laurence National School, Kindletown, Greystones, Co. Wicklow
Amélie Palud Lenahan, 2nd Class, St. Laurence National School, Kindletown, Greystones, Co. Wicklow

Kildare Education Centre
Amber Hogan, 6th Class, Scoil Chaoimhín Naofa, Glendalough, Co. Wicklow
Dan Harney Bradley, 6th Class, Scoil Chaoimhín Naofa, Glendalough, Co. Wicklow
Jason Casey, 6th Class, Allen National School, Kilmeague, Naas, Co. Kildare

South West

The Education Centre Tralee
Ellie Curtin, Senior Infants, Loughfouder National School, Tralee, Co. Kerry
Maeve Horan, 1st Class, Scoil Naomh Eirc, Kilmoyley, Tralee, Co. Kerry
Ciara Lane, 3rd Class, Knockaclarig, Brosna, Tralee, Co. Kerry
Sarah Lawlor, 6th Class, Ardfert Central National School, Ardfert, Tralee, Co. Kerry

Limerick Education Centre
John Bergin Roche, Senior Infants, Meenkilly National School, Meenkilly, Abbeyfeale, Co. Limerick
Drew Looby, 2nd Class, Shronell National School, Lattin, Co. Tipperary
Patryk Melnik, 4th Class, Shronell National School, Lattin, Co. Tipperary
Séan Ryan, Doon Convent Primary School, Doon, Co. Limerick

Cork Education Support Centre
Chloe Walsh, Junior Infants, St. Joseph’s National School, Riverstwon, Glanmire, Co. Cork
Louise Moloney, 1st Class, St. Joseph’s National School, Charleville, Co. Cork
Dawid Burkiewicz, 1st Class, Scoil Eoin, Ballincollig, Co. Cork
Amerdesh Ezhilalan, 4th Class, Scoil Eoin, Ballincollig, Co. Cork

West Cork Education Centre
Sive Buckley, 2nd Class, The Model School, Dunmanway, Co. Cork
Robert Kingston, 3rd Class, The Model School, Dunmanway, Co. Cork
Lily Harley, 6th Class, Our Lady of Mercy National School, Bantry, Co. Cork
Hannah O’ Donoghue, 5th Class, Our Lady of Mercy National School, Bantry, Co. Cork

South East

Kilkenny Education Centre
Marko Majernik, 3rd Class, Holy Family Boys’ National School, O’ Brien Road, Askea, Co. Carlow
Larry Phelan, 1st Class, St. Patrick’s De La Salle, Boys National School, Cootes Lane, Kilkenny
Ryan Burke, 1st Class, St. Patrick’s De La Salle, Boys National School, Cootes Lane, Kilkenny
Ava Banville, 1st Class, Shanbogh National School, Rosbercon, New Ross, Co. Wexford
Eleanor Ni Dhúill, Junior Infants, Gaelscoil Bhride, Thurles, Co. Tipperary

Waterford Teachers Centre
Katie Cooney, 6th Class, Rathgormack National School, Rathgormack, Carrick-on-Suir, Co. Waterford
Anna Coughlan, 6th Class, Portlaw National School, Connolly Road, Portlaw, Co. Waterford
Méin Nic Craith, 4th Class, Scoil Gharbháin, Clais na Lachan, Dún na Mainistreach, Dún Garbhán, Co. Port Lárige
Adam Murray, 4th Class, Rathgormack National School, Rathgormack, Carrick-on-Suir, Co. Waterford

Wexford Education Centre
Aíne O’Gorman, 6th Class, St. Mary’s National School, Coolfancy, Tinfoley, Co. Wicklow
Ailbhe Fortune, 2nd Class, Our Lady of Lourdes National School, Hospital Hill, Buncloy, Co. Wexford
Dawid Kmiecik, 4th Class, Our Lady of Lourdes National School, Hospital Hill, Buncloy, Co. Wexford
Eve Donohoe, 3rd Class, St. Anne’s National School, Duncormick, Co. Wexford
This book is the culmination of a creative process that involved children from all over Ireland.

Over 6,500 children responded to the national competition on safety in construction, organised by the Health and Safety Authority, in partnership with Kilkenny Education Centre and the Association of Teacher Education Centres in Ireland. A total of 89 winning children were invited to participate in workshops led by Kids’ Own Publishing Partnership in six Education Centres around the country: Sligo, Athlone, Limerick, Kilkenny, Dublin West and Navan.

At the workshops, the children worked through a creative process with artists Sharon Kelly and Orla Kenny, and writer Jo Holmwood. The aim of this was to creatively explore the themes of construction safety through a range of team-based activities, such as 3D building and group discussion, as well as individual drawing, and talking to the writer about their own experiences of family members working in construction and the effects of accidents and injuries. They also share their thoughts on how to make construction safer for adult workers and warn other children of the dangers.

The result of the children’s efforts and creative energy at these workshops is this beautiful publication, which is published by Kids’ Own and which seeks to highlight the power of the child’s voice as an influencer of adult behaviour.

The children’s knowledge and experience of the building environment highlights that this core part of our industry in Ireland is one that children are frequently exposed to, be that through the landscape around them or family members who work in construction. With this book we hope to convey a strong message of safety through the creative voices of children.
Acknowledgements

The Health and Safety Authority is most grateful to Paul Fields, Director at the Kilkenny Education Centre who partnered with us in the project and whose own vision of education and its possibilities for children has led to several successful and valued collaborations over recent years. We thank Mary Clarke and all the staff of the Kilkenny Education Centre for their enthusiasm and seamless co-ordination.

We thank the Association of Teacher Education Centres, each of which took the time and effort to promote the project across primary schools in Ireland and who took the lead role in judging the 6,500 entries at a regional level.

We thank the following Education Centres for hosting our workshops and welcoming children and their families to participate in and witness great days of learning, collaboration and fun: Sligo Education Centre and Director Mary Hough; Limerick Education Centre and Director Dr. Joe O’Connell; Athlone Education Centre and Director Dr. Frank Walsh; Kilkenny Education Centre and Director Paul Fields; Dublin West Education Centre and Director Gerard McHugh; and Navan Education Centre and Director Bernadette McHugh.

Lastly, we were delighted to work with Kids’ Own Publishing Partnership who worked with the children and published their work. The children had a unique opportunity to work with Kids’ Own artists Sharon Kelly, Orla Kenny and writer Jo Holmwood. Their listening, quiet guidance and encouragement brought out the innate creativity, artistic and story-telling capacity of the children. Their views are represented truthfully and thoughtfully here and the book is testament to the power of children to influence positive change in our workplaces and society.

Joanne Harmon
Education Manager
Health and Safety Authority
Midlands

Trench boxes are for when you’re doing foundations and it goes below two metres, in case the foundations fall in on you. And there’s the transformer. You plug all your electrical tools into it. If you go over 220 volts, you’ll get electrocuted. You put all your equipment into it. It’s like a little box that you plug in and then it puts it down to 110 volts so you don’t get electrocuted. I don’t think some people would know about it. My dad, he builds the houses and all. I do be down with him. It’s class. You have to be aware of all the machinery and all: Diggers, dumpers, tele-porters (the yoke that’s like a tractor but they have the arm on them). They’re for putting things up high, cranes, cement trucks. You have to set up your scaffolding right. 5 planks wide, and with a handrail. You need the scaffolding to build up high. I’ve seen on some sites they don’t have handrails and if children go up on them they would just fall off.

Joe

“You have to set up your scaffolding right. 5 planks wide, and with a handrail”
Construction site safety....You need ear protection for using a drill and a helmet and steel cap boots and safety goggles for when you’re using a drill because bits could go in your eye. **You also need your safe pass card. You have to be trained to do the building.** There cannot be children around the machinery. **Darragh**

Children might stand there and there might be someone driving and they have to be out of the way because they mightn’t see them and they could get really hurt. Boots can keep you steady on the top of a building. I have this brother called Christopher and he’s building a house and he’s making the kitchen. **Isabelle**
A dumper, a digger - it’s called the rubber duck because whenever the crane is in a sort of shape, it looks like the beak of a duck and the wheels are rubber. **Nollaig**

The diggers are metal underneath. They turn around on top. The wheels could be facing this way and the digger could be facing this way. The bucket of the digger went into my dad’s head. And all you could see was like bone. He was okay. His brain didn’t get hit. And it was so bad he needed to get a big plaster. **Calum**

“The bucket of the digger went into my dad’s head”
My daddy goes to a work site in a tractor and gets stones and sand. And he has a digger for digging stuff. I know somebody who builds boats. He uses spanners and saws. **Calum**

There was a boy on a ladder and he went through a hole in the fence. Don’t go into a building site by yourself because it’s dangerous with machinery and ladders. You could hurt yourself by falling off things. Machinery could run you over. **Alina**

My uncle is a plasterer. My dad knows a lot about building and he has a lot of tools. He likes fixing things and doing things. He knows someone who fell off a ladder. **Carpenters use table saws. They have a big blade and it has a button you press and it spins around.** **James**

My grandad is a crane operator. He lives in Lithuania. **To get up into the crane he has to climb up a big ladder. Cranes are very useful.** He’d wear a high-viz jacket and a helmet. If you fell you could hit your head. **Cian**
You need to wear protective gear, like protective vests, so that bricks and things don’t fall on you and hurt you. **Gearóid**

The high-viz jacket is so people can see you. The hard hat is in case anything is falling and the steel toecap boots are for if anything falls on your toes. My grandad was the safety advisor in the ESB. When they’re fixing wires or putting up wires, it would be dangerous because they’re working with electricity and the pylons are really big and it could be very high. They might overheat and start a fire. **Rory**
Drills are dangerous because they can be sharp and they can damage parts of your body. **Ivan**

My dad and my grandad do up houses. Grandad does up cottages. They use spanners and hammers and nails. A **rockhammer is for digging holes.** Scaffolding is for standing on so you can reach up high. The crane is to lift things up and put them down. **Cora**

My dad works in Belmullet. It’s kind of like building. **You heat up the radiators with gas and to make the gas go away you burn it. If a spark came down it could burn you.** He has to wear a helmet, steel toe boots, gloves and glasses. If it’s hot you have to wear sun cream. He gets up at 7 o’clock and starts at 8 and finishes at 5 or 6. **They were carrying pipes one time and the pipes hit a person.** There’s a machine that keeps on turning and there’s cement in it. If the cement came out it could dry on you. **Kathy**

I had two grandads and one of them - grandad Paddy - had an accident. **His leg got caught in some machinery and it got cut off.** My grandad Tom and my uncle John build houses for sale. Grandad Tom is a carpenter as well. There is a wrecking ball smashing down an old building. If you were working with electricity, trying to fix the wires, you might get electrocuted. You have to be a fully trained electrician. The building site is not a playground. If children want to play with the wrecking ball, they might get hit by it and die. **Aaron**

“His leg got caught in some machinery and it got cut off.”
A building site has to have a ‘Danger!’ sign and signs that say things like, ‘Wear hard hats’, ‘Children must not play on this site,’ and ‘All visitors must report to the site office’. Kevin, Dylan & James
All the machines when they’re moving are dangerous. Sometimes they’re very high machines and you could get run over. My dad built a house. He works as a builder. He drives big machines. **Kateri**

A digger is all orange. My daddy’s friend was driving a digger. **He was lifting one of those big black buckets - it was full of stone. It fell on my dad’s foot and the cut is still there.** **Sophie**

The wrecking ball is dangerous because it might kill you. It’s a big circle and it looks like a crane. It’s made from steel and it’s used for breaking things. **Kate**

Where I live in Ballyshannon there are 6 wind turbines, which have just gone up. When they’re going up I see men on them. They shouldn’t go too close to the edge. They’d need helmets. **Jack**

I drew a big crane. They’re so big they can reach up to the sky. That’s the long thing. They can put anything on it. Always when you climb a ladder you have to wear a helmet. **Violet**

“All visitors must report to the site office”
North East

Sometimes if you’re on something high there are bars so you can’t fall off. There are no bars like that on a crane. My grandad used to be a builder. When he was younger he jumped over a fence and a nail went in his foot. **If you’re on a roof the heavier you are the more unsafe it is because the roof is very thin - you could fall through it.**  

Billy

My dad and my uncle are builders. I’ve never worked with them but I’ve seen them working from the door. My dad built my uncle’s house. I went there when they were doing the slabbing - putting stuff on the walls. They do plumbing at times too. I see them doing stairs, floors and tiling. Dad does electrical stuff and makes gates. He puts blocks together and puts in windows. **The main danger with electrical work is shocking yourself.**  

Conor S.

“He jumped over a fence and a nail went in his foot.”
Grandad was an architect. He lives in England. It’s not that safe to use machinery when you’re tired. You have to be careful of phone lines. Enter at your own risk! Freya
My uncle was a crane driver and my dad drives a cement lorry. He delivers cement and sometimes he helps people put it out. He has to be careful he doesn’t get cement in his eye. It would sting badly. He has to make sure he doesn’t stand on it when it dries cause he’d get stuck. He has to make sure he doesn’t put too much on the lorry and overload it. He can only pour a bit out at a time. There’s this big thing on the back. Somebody fills it up and he drives it and delivers it. Christopher

Dad used to work on a building site. He knew how to work the crane. It is quite dangerous because you could hurt yourself and other people. And you could hit buildings and there could be people in them. Some of his friends got hurt a lot. One guy got his fingers slammed. He had rings on. He had to go to the hospital. I’ve seen building sites when new houses were being built. Kids go in to see what’s there - stuff to play with. They could fall over or could have stood on a nail. We live in Kells and the streets are very narrow. If someone walked by... children could hit into ladders or buckets could fall on them. Daisy

“He has to be careful he doesn’t get cement in his eye. It would sting badly.”
My daddy’s a tiler. He fits in floors and he uses plaster. The tile cutter has a big sharp blade. He could cut his finger off. You pull it back and the blade pulls down and the blade just cuts it. He wears knee pads. Garbhán
I know that building is very dangerous and a lot of building work happens at a height. It’s dangerous being under a building as well because things could fall and you could slip. If you’re doing a roof, like slates, it can be dangerous if it’s raining. It would be dangerous on a scaffolding if the wood was rotten. Ladders can slip if they’re not secure on the bottom. Phoebe

“Ladders can slip if they’re not secure on the bottom.”
My uncle used to use a crane. I helped my uncle to build a roof. I think I was six. We used wood, screws, a hammer. My uncle’s stepson was there. He was helping to build the roof as well. It took about three days to build. It was only a one-floor house so we went up the ladder. When you’re finished with something like a hammer – sometimes people just throw their tools down. You need to be careful in case you hurt someone.

Adas

“I helped my uncle to build a roof. I think I was six.”
Dad used to make stuff out of stone: bird baths and sculptures. There are a lot of them around the house. He uses tools, like a hammer. Conor McQ.
East

The man driving the crane needs to be careful that nothing heavy falls on anything. Signs... *If they don’t put the signs up children could wander in and they might get badly hurt.* Something could fall on them. **Jude**

You knock down the old house to build the new house. A wrecking ball is metal. You just pull the thing back and the ball goes back and forward and it knocks the building down. If you were walking past, pieces of the building could fall. *If the wrecking ball breaks it could hit someone.* The crane carries poles for the big building. On the end of the wire there’s a metal thing that’s pointy and if it breaks it could hurt people. **Dimitrios**

You hear a lot of stories from different people, like about children climbing over walls to get a ball and stuff happening to them. When we were building my house down in Kerry there were a lot of holes and they filled up with rain and we were jumping over them, which probably wasn’t a good idea. If you fell you could break a leg. And if there are piles of stones and you’re jumping off them you could graze your arm. My sister grazed all up her arm. We were mostly kept away from the building site when the diggers were there. **Caomhe**

“If you fell you could break a leg.”
My dad’s a groundworker. He lays the bricks for making the houses and he digs trenches for the underground power lines and fits the roofs. When the houses are done and there’s just a few things left to do, it’s called snagging. He does that. *If he hits any water pipes when he’s digging trenches it could loosen the scaffolding. He fell off a roof once.* He was building with my grandad and my grandad told him to get up. He wasn’t hurt too bad. It was just a single storey house. He has to tell the guys if they’re not wearing helmets or high-viz jackets they’re not allowed on the site. Patrick

“If they’re not wearing helmets or high-viz jackets they’re not allowed on the site.”
Builders have to help each other, like holding the ladder so that they don’t fall down. I’m not allowed to go up a ladder. My daddy cuts moss down from my house – from the back of the house. He uses his hedge clippers. It’s like a scissors but a really big one. It could chop your finger off. There’s a hook on the crane. It could stick into somebody’s eye. The crane has lights on it so that you can see people. Aoibhín

Dad fixes windows and does roofing sometimes, putting on slates. He uses scaffolding. He fell off a ladder one time. He got stitches in his back. He has a van with tools and a ladder... every tool you can think of. I’m not into building. I don’t do manual labour. The most dangerous tool might be the saw or the pickaxe. If you pick it up you can slit your hand. Normally they’re for cutting trees. Jason

My uncle is a builder. They were having lunch one day and his dad was drinking tea. They didn’t have a proper place to have lunch so they were eating in the car. His dad put the tea on the dashboard and it fell on his leg and burned his leg. Dan
Safety is number one. A safe workplace can also be fun. When you’re lifting stones and stuff, you need to be careful of people around. Peter

My uncle - my mum’s brother - he lived in Turkey. He renovates houses and then he sells them on. He does most of the renovation himself and the site he lives on, he helps around there as well. Recently he was building steps up into the woods and there were columns and a balcony and a patio. My dad works for a building supply company. He’s in charge of one of the branches.

Jessica
My dad does stained glass. **He needs lots of machines. Glass cutters and that. Well, it’s more of a grinder because it has a blade in the middle and you run the glass through it.** Then you have the other one that you run down the glass. It’s more of a blade and you just tap the glass and it breaks. I thought his workshop was weird when I was small. But now it’s cool. We’d be just helping getting the lead and the putty for him. You’d only need a bit of sand to make a little window. **He puts it in a thing like a furnace. It’s kind of dangerous because you could burn or cut yourself. It’s very hot.** The hottest it can get is 120 degrees and the lowest is 60 degrees. If we’re going near glass or anything he gives us gloves so we can’t hurt ourselves.

He likes fishing a lot as well. **Carl**

I drew people who were busy doing work, making a big house. There’s a digger. **The workers need to check that everything is good, that they are doing good work.** There is a line and it says **Do not enter.** **Kaja**

My grandad was an architect. He doesn’t do much anymore. He designed a Pitch & Putt course in Collinstown and other local buildings. **The architect goes on site to keep things safe and make sure that everything is going according to plan, and to make sure that they’re using the right materials.** They have the drawings and the blueprints. They would tell the builders exactly what they want and have a very detailed plan of what should be done. **Elizabeth**
My uncle, he does electrical work. He owns an exhibition company and they have a team who go in and make the stage for TV programmes like ‘The Voice’ and ‘The Lotto’ and festivals. He fits the stage and the lighting and the wires - they supply all that stuff. They have to be careful of fires, with all the wires and stuff. They have to cover them up. In one festival there was so much wind they had to take stuff down because it was falling down. It was a wood structure. That could be quite dangerous. **Amber**

I drew a picture of men putting tiles on the roof. They have to use the ladder. One guy doesn’t know that he’s cementing the ladder by mistake. He’s meant to be cementing the bricks together. The project manager tells the builders what to do. **If the scaffolding is leaning to the side, the builders aren’t safe.** It could be leaning because the truck bumped into it by accident. If the bricks are too heavy, they could snap the scaffolding and fall onto the truck. **Amélie**
A building accident could happen twice a year. Like, falling off scaffolding, bricks falling on your head, a crane with a rope that snapped. One time my dad dropped a 10 tonne brick on his foot and he had crutches for 2 years. John

“One time my dad dropped a 10 tonne brick on his foot and he had crutches for 2 years.”
My dad’s a farmer. We built a shed and he built it himself. I might hand him stuff like tools he needed. And if he ever wanted anything I’d get it for him. He was lifting heavy things like pillars and galvanise. That’s just the type of metal. It’s just steel. It’s for the roof. He’d be cutting things with an angle grinder. It’s a blade that spins around and cuts metal. He wears goggles and gloves and steel toe boots. It’s sheds that he builds. My neighbour’s a builder, a carpenter. He makes stuff out of timber. He uses goggles and gloves and stuff. You have to get the proper measures. You secure the pillars with cement to make sure it’s secure. You dig the holes and put the pillars in.

Seán

Accidents are rare when you take care. We’re building a house, a two-storey house. Sometimes I go onto it and I see my dad working on it. Last year he put on the roof. He wears these kind of special shoes. When he’s cutting metal he wears special glasses ‘cause a tiny bit of metal could go in your eye. Patryk

“What are the hazards? Holes, sharp nails, different sharp things... bricks, broken-up debris and stuff.”
If you’re too confident you could get hurt. If they were working on a building site for a long time they might feel like they were safe. They wouldn’t wear their hard hat or they wouldn’t wear their protective gear. They’d get hurt. You might not be paying attention to what you’re doing. What are the hazards? Holes, sharp nails, different sharp things... bricks, broken-up debris and stuff. Tools you might have are: hammers, screwdrivers, saws, drills, sledgehammers and stuff like that. I used a hammer and a saw and a screwdriver and stuff like that. The dangers are: hurting your fingers when you’re hammering or cutting your hand when using a saw. **Drew**
Whatever kind of building you are making, you have to make sure that it’s secure and that you don’t fall. **Lily**

I drew windmills and builders. I drew a crane and there was a house near it and one of the builders was saying, “watch the house”. The crane could hit the house. All the windows would be broken. **Ciara L.**
Children are very curious. They might go into a building site to see if they could play games, like catch or hide-and-seek. Just say to them that it’s really dangerous and there’s no point going in there and they could hurt themselves. There could be big holes in the ground. Ciara H.
Stay safe and be safe on building sites. Be safe in case bricks fall on your hands or feet. If you fall off a ladder when you’re building the house, you would bang your head and you would have to stop building for a couple of years. **Maeve**

My dad fixes some cracks in the wall or if an animal got in, he would take it out. He’s a farmer. He builds sheds and he fixes our car and he fixes tractors. He has a toolbox with screwdrivers, nuts and a hammer. **Once a piece of metal went into his eye and we had to get something to get it out.** He had to wear glasses for a little while. **Louise**

The building plan. We will need: Bricks, wood, paint, drill, cement, builders, a wrecking ball. This is to wreck the house and build it again because the house is old and they want to do it new. It would be dangerous if you were standing on the building site. There are the signs: **Keep out, Wear ear protection, Wear eye protection, Wear foot protection.** The builder has his foot protection because if a brick fell on his foot it would break. The drill is really noisy and it breaks the floor. **Dawid**
The main problem with our structure was that it was tilted to one side and we fixed that by putting some shorter bamboo sticks on the side to hold it up. On one side the bamboo sticks were shorter so if somebody was keeping it up they would be off the ground and if they were on the ground it would be tilting. Next time I would make sure that all the bamboo sticks would be just as long as each other. I’d make sure I had all the pieces to make it. Evan

“The builder has his foot protection because if a brick fell on his foot it would break.”
My dad makes tools for machines and he does DIY stuff and so does my uncle. Once we had a leak just after we moved in. My uncle fixed it and plastered up the wall. And we had another leak in the playroom and my dad had to knock it down so they could see what happened in the pipe. They need to be careful that nothing falls on their head so they don’t knock themselves out. **Jaymee**

My dad’s a block layer and he roofs and plasters. I watch him build tons of houses for my aunts and uncles. Sometimes blocks fall down or the scaffolding wobbles. **You have to get the foundations deep enough so the house wouldn’t fall down or sink. The radon barrier is so the gas can’t get into the house.** The government sends out these things, they’re like clocks that measure how much radon is in the house. It’s really dangerous. It can kill you. You have to make sure there’s lots of open windows. **With the blocks he has a special way with the cement of putting it on and spreading it out. If you didn’t do it properly it wouldn’t stick and it would all fall down.** He was changing stuff in the house and he fell off the ladder and he tore a ligament. **Sarah**

I drew a hotel building with a crane and a block on it. There’s a gate and a boy building. **It’s dangerous because the tractor might roll over you.** There’s a ladder and he has to hold on tight. He’s wearing a hat and the thing for the eyes and the coat. **Chloe**

“**Big heavy stones will break your bones.”**
If a pipe breaks or something my dad would fix it. I drew a digger with stones falling down on somebody’s head, someone who wasn’t looking where she was going. Big heavy stones will break your bones. **You should wear a helmet and a high-viz jacket.** *Ellie*

On the construction site, you have to show your safety pass. You have to wear goggles to protect your eyes and rubber boots, and gloves to protect your skin from cracking. Remember, always wear a helmet around scaffolding towers. *Hannah*
My grandad built our house and he built lots of his neighbours’ houses. And he built the fire station in Mullingar. He built our playroom.

He has lots of building tools: hammers, saws, screws. I think he wears a high-viz jacket, a helmet and the metal toe boots. My auntie’s an architect and she designed my house. They have to kind of make sure the house is the way you want it to be. An architect would help when you’re building a house. You don’t have anything else to worry about. **Ada**

My uncle is a carpenter. He makes stuff out of wood – tables and doors. I’ve seen him working once when he was building wardrobes in our house. **He stays safe by making sure his saw and all his tools are in good condition.** He might try to fix the angle grinder. If they break he might hurt himself because there’s sharp things. He was cutting wood and his thumb went under the saw thing and he cut it. He didn’t cut it off but it kind of went down the middle. **Eve**

My uncle’s a carpenter and he works on houses and he puts the floor in and when he hammered a nail he kind of hit his head. It was sore but it got better. He needs to be careful if a splinter goes into him. You need a helmet, goggles and visors. **There needs to be signs and fences on a building site.** The signs should say ‘Construction Safety. Keep Out.’ I looked up some signs on the internet. One said ‘No hat, no boots, no job.’ **Larry**

“He was cutting wood and his thumb went under the saw thing and he cut it.”
I thought of strong men and decided to draw them. Ear muffs, boots, high-viz jackets. The boots keep rocks from falling on your feet - it won’t hurt. Ear muffs protect you from loud sounds like jackhammers and trucks. The high-viz jackets keeps you seen. **If there’s a hole, there’s a cone to stop people falling. It’s a warning.** The jackhammer is for digging holes. People wear earmuffs and helmets. The sign is to keep children away from the site. It’s dangerous there. **Marko**

**Grandad**’s a builder. He helped build our house and he helped build his own house. He helps put down cement. He does a job on the roof. He puts down the tiles and drainage pipes. **The dad of my sister’s friend was handling cement with no gloves and when he came home he had burns all over his arms. I think there’s a chemical in it that does something to your skin.** You should wear gloves and long-sleeved shirts. **Anna**
Always wear safety clothes. **If you don’t have a helmet anything could fall on you and you could die.** And if you don’t have boots you could hurt your foot and if you don’t have a jacket they might not see you. Ava

My cousin works on the construction sites. He sometimes does roofs and a bit of carpentry and he mostly builds houses. He was doing a bungalow and he was doing tiles on the roof and he fell off and he broke his arm. The ground wasn’t level where he had the ladder. It was last year around February. First of all he should make sure the ladder is level at the bottom so the roof is properly done and then he can keep his balance. **Ryan**

The builders have hard hats on to keep them safe. Scaffolding is for building the house. Test it before you go on it to make sure it doesn’t wobble! **Eleanor**

If builders fall and hurt their backs you wouldn’t know what would happen. One mistake is all it takes. If a builder was going up on scaffolding or driving machines around I’d be worried. Make sure you’re always aware of your surroundings and that you have the proper equipment. I think that when builders sign up to the job they know about the risks but they’ll try to prevent them as best they can. **If a child runs onto a building site, there’s these massive machines and the drivers wouldn’t see the child because they’re so small. Katie**

“One mistake is all it takes.”
My uncle PJ, he was cutting and his hand slipped and he cut off his two fingers. And my uncle Eddie, he was at work and he got stung by a bee and he all swelled up and he fell and he fainted and he had to go to hospital. My neighbour was putting sheeting on the roof and it fell and it cut his toe off. Eddie always says you should wear steel toecap boots. My mum’s friend’s son - his friend was tying up a digger to a lorry and the chain broke and the digger rolled back and rolled onto his leg and he lost his leg. Don’t stand behind any machinery. Ciara “The digger rolled back and rolled onto his leg and he lost his leg. Don’t stand behind any machinery.”
My dad fits windows and he built my house and he does carpentry. And he makes candlesticks and fruit bowls. He cut his little finger and it was pretty deep. You know those spinning lathe things that cut wood. He did it on that. His uncle-in-law was a carpenter. He had a workshop and my dad has it now. Méin

My uncle was a builder. We were gone shopping a few days before Christmas and when my dad was making the dinner he got a text saying my uncle John was after falling through the floor. He was in the hospital in Cork. He broke a vertebra in his back. Another time, my dad and my sister were on a building site in Dungarvan and my dad had to measure the ground with a level. It was a fairly stormy day and it was a house by the sea and a big wave came and drenched them. They came home all wet. He’s an architect. He’d be giving the builders drawings or checking the foundations. He’s checking: Do they have enough sand in them? Are they deep enough? Did they dig them properly? Adam

My uncle is a builder. He had his helmet on and a brick fell on his head and he bit his tongue off. He had to get it sewed back on. He has his own business. The brick slipped from someone’s hand. Dawid
My grandad is like a handyman. He does electricity, carpentry, building... but he mostly works with wood. He’s making gates for someone right now. Sometimes in the summer he was basically fitting in bricks (because he was building an extension) and he fell back and he fell off the scaffolding. It was at least this high (5ft). He couldn’t breathe but he managed to call my aunt and she came back and took him to the hospital. Another time he was sanding wood and the wood moved and he sanded his hand. Áine

“My grandad’s a farmer and two of my uncles are farmers. My grandad has chickens and sheep and dogs. I’m not sure if he has cows. Sometimes my daddy cuts wood because the tree fell and he came to help cut the tree. It fell at nighttime and loads of the neighbours came with cranes and stuff. They didn’t have any machines. They just used saws. The blade was zig-zaggy on my dad’s saw and on my grandad’s saw it was kind of straight and bumpy. Ailbhe

“The wood moved and he sanded his hand.”
My dad dropped a 10 tonne brick on his foot and he had crutches for 2 years. John

What are the hazards? Holes, sharp nails, different sharp things... bricks, broken-up debris and stuff. Drew

He stays safe by making sure his saw and all his tools are in good condition. Eve

These are just some of the comments and stories that children shared during conversations about construction safety. Through this project - commissioned by the Health and Safety Authority - Kids’ Own conducted a series of workshops, which took place in Education Centres around Ireland, at which children were invited to create artwork and to share their knowledge and their experiences of construction safety. The result is this book, Grandad built our house, a combination of poignant tales and cautionary advice from children from all across Ireland.