

# Public Engagement Training the handbook



# Contents

**This booklet has been designed as an accompaniment to the BBSRC Public Engagement Training Course and gives an overview of what public engagement is, why it is important and how you might go about doing it. It aims to inspire and support you to carry out effective public engagement.**

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# What is Public Engagement?

There are a lot of different definitions of public engagement and science communication. BBSRC has taken a view, outlined below, on the differences between public engagement and science communication.

### Public engagement...

... involves dialogue, **interaction** and **participation**, drawing in researchers and non-academics. It is as much, or more, about **listening** to the views and values of others as it is about offering your view.

Public engagement includes public dialogue, two-way discussions around an area of research or an issue with the aim of informing research direction, policies or strategy. It also includes public attitude studies and consultation - extractive opinion gathering to help understand public views, values and attitudes around an area of research. Finally, public engagement may take the form of collaborative partnerships where researchers and non-academics work together to develop a shared understanding and design and implement a research programme.

An example of public engagement:

**BBSRC Bioenergy Dialogue**

[www.bbsrc.ac.uk/bioenergydialogue](http://www.bbsrc.ac.uk/bioenergydialogue)



## Science communication...

... is primarily a **one way** communication process although there may be some, limited, opportunities for discussion; it aims to **inform, enthuse and inspire**.

Science communication might involve disseminating the outcomes, outputs and processes of research to raise awareness or promote understanding.

It can also include activities which aim to inspire the next generation of scientists or which aim to equip young people with the tools and knowledge to aid them in future debates around science and technology.

### Examples of science communication:

- press releases
- podcasts
- web video
- public exhibitions
- public lectures

## Knowledge exchange and commercialisation...

... activities involve the **dissemination** of research findings with an aim to develop **collaborations** with relevant **stakeholders** in order to enable successful **applications** of the outcomes of research. These activities are often interdisciplinary, involving partners across a range of different sectors. If these people are involved because they have a direct professional interest in the outcomes of your research and BBSRC would classify these people as stakeholders.

Examples of stakeholders include:

- Farmers when discussing agricultural research such as vaccine development, crop breeding or land-use issues
- Industry when discussing potential approaches to developing novel pharmaceuticals or potential applications of new enzymes
- Policy makers when discussing how research can improve policy or practice

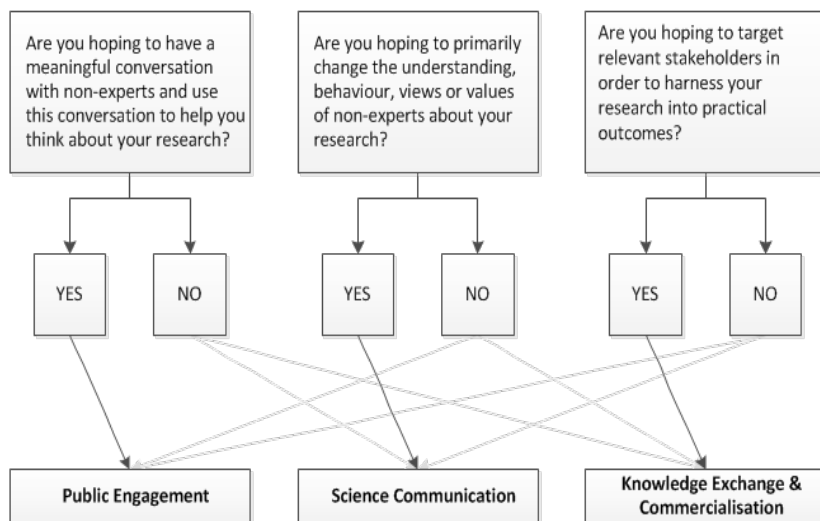
## Other types of communication

If your activities are not aimed at members of the general public and are not about research then BBSRC does not consider them public engagement or science communication.

Examples of activities that are not science communication or public engagement include:

- Corporate communications, for instance promoting your institution or managing its reputation
- Student or staff recruitment
- Product promotion or sales

If you're unsure about whether you're setting out to do science communication, public engagement or knowledge exchange and commercialisation, ask yourself these questions:



There is a continuum between public engagement and science communication (and indeed knowledge exchange) and any given activity may not fall neatly into one area or another – there are grey areas!

All of these activities are important so what is **key** is that:

- i) You are as clear as possible about the **motivations** for your activity
- ii) You consider, over a number of activities, whether you have a **good balance** between doing science communication and doing public engagement.





# Why is Public Engagement important?

Public engagement will be important to different people for different reasons. What are the benefits of doing public engagement for:

- i) The public who take part
- ii) You, researchers
- iii) Your organisation
- iv) Society as a whole?

Previous participants on BBSRC's public engagement training suggested the following:

#### The public:-

- Increased understanding, of the outcomes and process of science
- Fun and enjoyment
- Chance to be part of science

#### Researchers:-

- Improve communication and other skills
- Helps to see the bigger picture, reminds you why you're doing it
- New ideas, challenge thinking
- It's rewarding

#### Your organisation:-

- Raise the organisation's profile positively
- Grant funding, e.g. Public Engagement is included more in EU grants
- Provide opportunities for staff to develop

#### Society as a whole:-

- So we all make better, more informed choices
- Inspire next generation of scientists
- Challenge stereotypes, e.g. equality and diversity
- Increased impact from science, engagement enables the appropriate progress of technologies

BBSRC values public engagement highly for the following reasons:

- There is a **moral obligation** to be open and transparent about, and engage the public with, research that is **publicly funded**
- It allows us to **listen and respond** to public hopes, concerns and aspirations and helps to identify the **best outcomes** for research, technology and policy
- It helps to underpin **social relevance** of research, which can then be more useful and have **greater impact**.

BBSRC expects grant holders to invest time in public engagement and science communication and funded researchers should be routinely spending a minimum of **two days a year** to engage the public with the work of their research group.

When bidding for new research projects, BBSRC encourages researchers to use their Pathways to Impact statements to articulate what public engagement, science communication, and knowledge exchange and commercialisation activities they will undertake and what time and resources they will require to deliver these activities.



# How to engage the public

Once you have identified that you would like to do some public engagement – how do you go about it?

## Aims

The first really important thing to do is identify what the aim, or aims, of your engagement will be.

Do you want to seek public views on a specific question, or general comments on a wider topic for example?

Maybe your primary aim is focussed around science communication but you have a secondary aim to develop some public engagement.

### Aims

Why are **you** doing **this** activity?

What will the **topic** of your engagement be?

## Who do you involve?

The next thing to think about is who should be involved. This includes thinking about who you need to involve in the organisation of the activity as well as which members of the public you want to involve.

### Organisers

There will be lots to do as you plan and make arrangements for your activity so it is a good idea to share the load and put together a team of people to help. You might want people who know about the topic, or who can prepare easy-to-read written materials or who can help with logistical arrangements.

It is also worth considering whether there are individuals you could involve who have a different point of view to your own, an NGO, end user or a policymaker for example. Even if they cannot attend the event they could make valuable contributions as you prepare your materials.

Don't forget there are likely to be people in your organisation who, as part of their jobs, will know about things like advertising or the media and some organisations also have public engagement staff who can provide guidance and support.

Who might be able to help you organise your event?



## Participants

The public aren't one homogenous group – we are all members of the public but in different situations we fall into different groupings, by age or gender, roles or interests for example.

When you are considering who you might engage with, some questions to think about are:

Is it important whether your participants are already interested in science or do you want to engage with people who might not usually think about science?

Do you want to engage with a diversity of people, or do you want to gather a diversity of viewpoints? Is there a particular group of people whose views you want to hear?

Do you want to engage with lots of people quite briefly or fewer people in a way that is more in-depth?

It is important to be aware of which 'public' you plan to engage with as they will have different expectations when they interact with you and there will be different barriers for you to overcome when you engage with them.

Who will you engage?

What will their expectations be?

What might barriers to engagement be?



## Where and when?

There are lots of different options for where you might hold your activity and which you choose will depend on who you want to engage with and what opportunities are available to you, as well as the type of activity you are planning.

Is there space you could use at your university or institute? This might be appealing for some participants but others might find it daunting.

Are you engaging a group who already meet at a regular venue?

Is there a space at a neutral location that you could use? Local hotels, cafes or pubs might have rooms to hire.

Could you link your activity to an existing event e.g. local café scientifiques, festivals or country shows?

Or somewhere else, be creative!

You will also need to consider when to hold your event depending on who you want to engage with and whether daytime, evenings or weekends will be most accessible to them.

Where and when will your activity be?



## Engagement formats

As you plan the format of your event you will want to think about how you will provide participants with **information**, how you will generate **discussion** and how you will capture **feedback**.

For an effective two-way discussion you need to make sure that everyone has **enough information** for them to feel they can contribute. There are many options for how you could do this, including one or several short talks, written material, playing a video or asking participants to talk through a short script, or a combination of the above at different times during the event.

There are lots of different ways of generating discussion. Depending on the purpose of your event you could ask one very open question or a series of very specific questions. You could engage the whole group in one task or spilt into smaller groups to discuss different topics at the same time. There are lots of possibilities and you will learn what works well by experience.

Considering how you will feedback the content of the discussions to your colleagues or the organisation is a really important part of planning your engagement. You could capture feedback by using note takers, feedback forms, or flipcharts or just by having a wash-up meeting with facilitators – it depends on what your aims are and how much detail you need.

How will you provide participants with information?

How will you generate discussion?

How will you capture discussion and feed it back to the organisation?

## Social and ethical issues

It is always worth considering whether your research might raise any concerns for anyone. Even the most benign research can be questioned:

‘What is the value of this research? Why isn’t the money being spent on other things?’

but some research raises deeper ethical questions:

‘Are the risks and benefits likely to be shared evenly across society, or might these disproportionately affect certain communities?’

‘Could your research lead to significant changes in land use, habitats or biodiversity, or impact upon pollution or water conservation?’

Some areas of controversy are obvious e.g. GM or the use of animals in research but even if your research isn’t in those areas, it is still worth considering what the issues might be.

It is always best to be transparent when you engage with the public. You don’t need to dwell on the issue if you don’t want to but it is important to acknowledge the concerns and you may find they trigger the most interesting discussions with people.

What social and ethical issues might come up?



# Practicalities of running public engagement events

## Preparations before the day

### Advertising

There are many advertising routes. Think about whether you can use:

- Flyers and posters, in shops, on community noticeboards etc.
- University and Research Institute websites
- Media offices at your University to contact local press
- Social media
- Word of mouth

You may wish to seek advice from staff at your institution with expertise or experience in this area.

You may be engaging with established groups of people who meet regularly anyway, in which case additional advertising will be less important or unnecessary.

### Venue booking

Ensure that the venue has the facilities and room layout that you require.

Some things to consider are:

Is the layout of the space flexible?

Do you need to project images, is the venue suitable (can you make it dark0 and do you need to/can use your own laptop?

Do you need a PA system?

Have you allowed plenty of time in the booking for setting up the event and clearing up afterwards?

It is helpful to establish who will deal with requests for catering or audio visual equipment and when deadlines are for confirming your requirements.

### Resources and materials

Ensure that you have sufficient copies of any resources you plan to use as well as any materials such as post-it notes, pens etc.

If you are using slides have a backup plan in case the technology fails.

Ensure everyone on your team knows the plans for the event and are clear about their roles.

### Safety

Make sure you know what the arrangements are at your venue if there is a fire alarm or if someone is taken ill. Complete any necessary risk assessments and ensure that you are covered by public liability insurance if required.

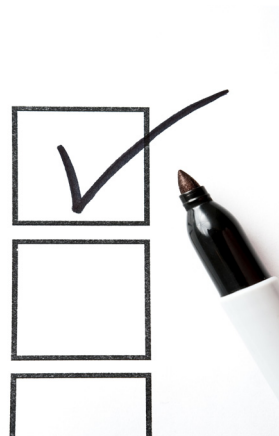
### Working with children

You are required by law both to protect children and young people from harm.

It is particularly important if you engage with children to avoid the use of inappropriate language, such as swearing, or inappropriate behaviour, for example avoid being over familiar and making fun of young people.

There should be no need to touch a young person. However, not all scenarios can be foreseen so it is therefore recommended that if unavoidable any contact is kept to a minimum.

Bear in mind there may be a range of issues that children are uncomfortable talking about, use common sense and change the topic if a child appears reluctant to engage with a certain topic.



## Guidance on accessibility in public engagement

There are over 11 million disabled people in the United Kingdom (UK GOV, 2014), this is nearly 20% of the population. 'Disabled' includes people with mobility disabilities, sensory impairments, learning disabilities, mental health issues, medical conditions e.g. epilepsy and other impairments.

The Equalities Act 2010 includes a legal duty to think about access for disabled people when planning events. In addition, if your public engagement events are not inclusive, disabled people will not engage with the event and their experience can influence their friends, family and wider professional circles so your event is likely to be less successful in achieving its aims.

The following are some suggestions of things to think about to help you make your public engagement suitable for the widest audience. This is not an exhaustive list and you will need to take into account the requirements of your own event when deciding how you can ensure your event is as accessible as possible.

### Making your event accessible

#### The venue

Each venue should have an **accessibility assessment** which highlights where there may be barriers preventing disabled people from accessing your venue and what adaptations are available to remove those barriers; you can request a copy from your venue contact.

#### Event content

*Before your event:* You should also consider your **plans** for the event itself – what are the barriers that disabled people might experience and can you remove those barriers? If you will be asking people to register for your event, you can ask if participants have any access or special requirements. If this is done in advance, you can then plan your event so it works well for disabled guests.

*At your event:* Even once your event is underway you will still want to think about accessibility. If a person identifies themselves to you as having a disability during your event or if the disability is obvious, you **can** ask the person what adaptations they need to engage with your event. Remember, you can't anticipate every situation so **don't panic** if something unexpected does come up. A willing attitude to make adaptations and an open friendly persona goes a long way in being inclusive!

Some things to think about:

## Written communication

Some people with certain disabilities can have trouble distinguishing serif fonts on white backgrounds.

Using a sans serif font like Arial and an off white background can help this group of people read more easily without pain and discomfort.

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As can be seen in the example above, for people with disabilities like dyslexia, Irlen's syndrome and autism, minor adjustments are required in written information to enable reading without difficulty, eyestrain or headache.

At your event for any form of written communication, it is suggested you:

1. Give verbal as well as written instructions.
2. Avoid using Times New Roman or other serif fonts.
3. Avoid using red and green writing.
4. Avoid using writing and backgrounds with sharp contrasts e.g. black print on white background. Pastel or off-white backgrounds with dark coloured text are likely to be accessible to the largest group of people.
5. Be prepared to offer other formats by request even if they are sent to the individual after the event e.g. large print. If you can ensure the materials are in electronic format in advance of the event, people with visual impairments have time to digest the information and put it in to an accessible format (many blind and visually impaired persons have screen readers etc.)

## Verbal communication

For people with hearing impairments, ADHD/ADD or autism, it can be difficult to follow conversations or instructions in a busy event with lots of background noise. The following suggestions can help someone with these difficulties to engage with your event.

1. Always face directly onto the person you're talking to so they can see all your face. Many cues in conversations can come from the facial expressions as much as the movements of the lips. Ensure the light in the room is adequate so your face can be seen clearly.

2. Ensure you have the speaker's attention before you speak.
3. Avoid wearing large pieces of jewellery, particularly face and ear piercings as they can distract from people's concentration when lip reading. (Small pieces of jewellery are fine!)
4. Avoid mumbling or overly enunciating your words or shouting. It will make lip reading much harder and for non-lip readers, will not assist communication or understanding.
5. Consider if you can provide a "quiet space" to move too, if background noise is a problem.

If your event is particularly busy, an available quiet space also allows autistic people to regroup when feeling over-loaded with noise.

### Visual impairments

People with visual impairments will encounter different challenges when engaging with your event, the following are some suggestions to help:

1. Give blind and visually impaired persons optimal time to explore props
2. Not all blind and visually impaired persons have had their impairments since birth. It may be helpful to establish (with sensitivity), the type of visual impairment the person you are engaging with has - for example when describing a prop, some persons will have no appreciation of colour, micro sizes, and other descriptive words
3. Address blind and visually impaired persons by lightly tapping them on the shoulder and introducing yourself
4. When moving on to other participants, or leaving to start a new activity, state that you are moving on and the procedure for the next part of the event
5. Consider the lighting at the event for those with visual impairments

### Visual and/or physically interactive props

Interactive props are a great way to engage your audience; however they must also be accessible.

The following are points to think about when designing props.

1. Consider whether your material would be interesting and accessible to blind and visually impaired persons. Are your event materials tactile, could they be handled?
2. If an activity requires good muscular strength or hand-to-eye co-ordination, can it be adapted to allow those with disabilities affecting muscles or co-ordination to take part?



3. Is the prop height adjustable for people with dwarfism, in a wheel chair or otherwise below average height and/or reach?
4. If you are using an app or computer as part of an event, do you have staff present to assist people to use it if people have issues with manual dexterity or coordination? Or can the user adapt the technology to their requirements? (e.g. change mouse click speed).

### Accessibility in web-based events and/or using Apps to connect with your audience

When designing apps, webpages and web-based activities there are guidelines available to help you make sure your materials are accessible (see resources). You may need to make fonts, text size and background colours changeable and ensure it is compliant with accessibility software. It's also helpful to have asked disabled people to test the software and offer advice at least twice during development.

If you are using slides have a backup plan in case the technology fails.

Ensure everyone on your team knows the plans for the event and are clear about their roles.

#### Check list:

- Have you asked for a copy of the accessibility assessment for your venue?
- Is your written information in a sans serif font and without a harsh background contrast?
- Are you prepared to offer written information in alternative formats if requested e.g. large print?
- Do you know how to speak to someone with a hearing impairment?
- Do you need to provide a quiet space for more effective communication and/or a space for autistic people to regroup?
- Are your interactive materials and props adaptable to people of below average height, reach, muscle strength or co-ordination? If no, do you have staff available to assist if needed?
- For web based activities or Apps have disabled people tested the software at least twice and offered feedback during development?
- Is your App or webpage compliant with the minimum AA standard Web Content Accessibility Guidelines (WCAG) 2.0?

## Preparations on the day

Leave plenty of time to arrive and set up for the event. You may find that participants arrive 30 minutes or more before advertised start times.

Lay out the room, bearing in mind:

- routes to emergency exits for fire safety
- lines of sight to screens, facilitator's location etc.
- access to resources (flipcharts, paper sheets on walls etc.)
- any accessibility issues participants may have

Familiarise yourself with any projection and PA equipment you will be using.

Check any catering arrangements are in place and confirm timings for refreshment breaks.

Establish where toilets and emergency exits are located, and whether you should expect a fire drill.

Establish who is the appropriate person to contact if you have any difficulties during the event or if there is an emergency.

## Opening the event

It is important to start promptly, then:

- Briefly introduce yourself and anyone else involved in facilitating/supporting the event
- Cover domestic issues, location of emergency exits and toilets
- Outline the timetable for the event - including planned breaks and finish times.
- If you or others (local media) plan to take photographs you should ask, before photographs are taken, if participants are happy for their image to be used. Make it clear that you will respect anyone's wishes not to be photographed.
- Describe the purpose of the event and the different activities participants will be involved in.

It is good practice to display a simple timetable, on a large (A0) sheet of paper and to refer to it occasionally (when changing activities for example) to help orientate the participants.

## Skills for public engagement

There are lots of skills that you will use or develop through doing public engagement: e.g. team working, communication skills, organisational skills, project management skills.

What skills will you need to run your event?

### Facilitation skills

One of the most important skills that is needed for effective public engagement is that of facilitation.

A **good facilitator** will:

- prompt discussion by asking open questions e.g. ‘How do you feel...?’ or ‘What do you think...?’
- acknowledge different voices and opinions and make people feel valued
- challenge the group to think more widely and not concentrate on one/a few topics or points of view
- be observant and draw in quieter members of the group (and encourage louder members of the group to give others an opportunity to speak)
- encourage deeper consideration of the issues, e.g. ‘Tell me more about that...?’, ‘What makes you think that...?’ or ‘How would you go about doing that...?’
- listen to the group
- be able to summarise the discussion and different positions

## Challenging situations for facilitators

A good facilitator will be observant of their group and ask themselves 'What is going on in the group? How are people behaving?'

You might find that the discussion becomes diverted from the set task or that particular individuals are disrupting the rest of the group. There are many ways to handle these situations but some tools that can be useful are:

- Set up ground rules for behaviour at the beginning – you can then refer back to them if they are being ignored

Basic 'rules of engagement' might include:

- respecting one another's views
- allowing everyone to have a voice
- not dominating discussion and debate
- not attributing comments to individuals outside of the meeting
- turning mobile phones to silent

You could also ask whether there are there any rules participants would like.

- Ask clear, open questions, either to draw out quiet members of the group or redirect the conversation if it has become 'stuck' or gone off topic
- Use a flipchart and post-its to record and 'park' ideas and allow the group to move on to discussing other topics

# **An introduction to evaluation**

Evaluation is a huge subject; this section gives a taster and some ideas for you to explore further.

### Why evaluate?

It is really important to evaluate your public engagement activity because it will:

- Help you run an even better activity next time
- Help you understand what you and the participants have gained from the experience
- Provide evidence that your event was valuable (e.g. demonstrate that public money was well spent) and credible (e.g. demonstrate that the event was unbiased)

### What to evaluate?

The most important thing for evaluation is to be very clear about what the **purpose** of the public engagement event is, so that you can understand whether you have achieved it or not. It is therefore really important to have good, clear aims before you even embark on the engagement.

There are two types of information that you can gather as part of an evaluation:

- Quantitative e.g. numbers of people, ages, genders
- Qualitative e.g. how participants found the activity, their views and opinions

In both of these categories it is easy to gather lots of bland information that doesn't really help you evaluate against your purposes and aims. You should be careful to only ask questions that are specific to your event aims and which will give you meaningful answers.

You might want to know about:

- Practicalities of your event, e.g. was the venue easy to find and were the refreshments ok?
- Impact of your public engagement e.g. who have you reached? what did they think? What will organisers/participants do differently as a result?
- The format of your event, was the length appropriate and were the activities successful?

- Whether participants thought the event was run fairly, e.g unbiased information; unbiased participants; good and fair facilitation; appropriate time and material resources...)

Plus there will be other topics specific to your event. Remember to think about capturing all the things that went well, as well as the things you would change next time.

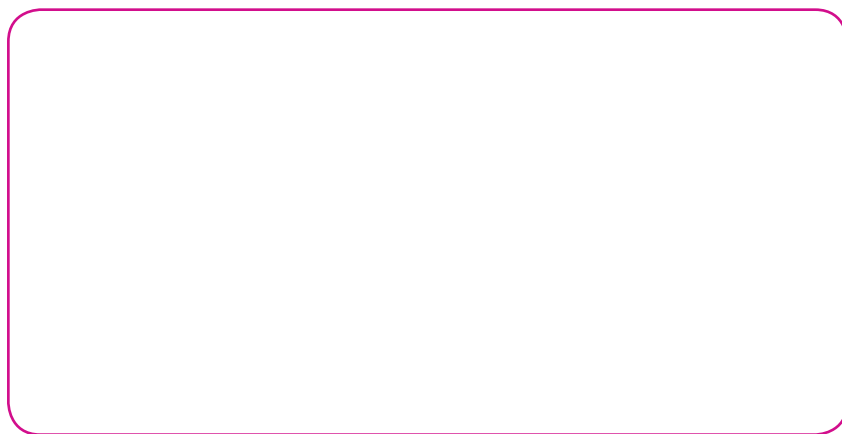
### How to evaluate?

There are lots of ways to gather feedback for your evaluation:

- Questionnaires, in hard copy at the event or online afterwards (both methods have advantages and disadvantages)
- Observation, one member of the team could be dedicated to observing the event and gathering data against a set of predetermined questions or areas of interest for the evaluation
- Postcards, these could be used in the same way as a questionnaire but could also be used as a fun way to gather one comment from each participant
- Short interviews with a subset of participants
- Don't forget to also ask the organising team! A wash-up meeting can be a good way to capture initial thoughts after the event.

Two-way public engagement should also affect you. As part of your evaluation, perhaps in the wrap up, you should think about what the event did for you. **Did it give you new perspectives on your research? Or help you develop new skills?**

### How will you evaluate your activity?







# Annexes

## BBSRC Public Engagement Planning Tool

### Aims

Why are **you** doing **this** activity?

What will the **topic** of your engagement be?

### Who?

**Who** will you engage?

What will their **expectations** be?

What might **barriers** to engagement be?

Where and when will your activity be?

What will the format of your event be?

How will you provide participants with information?

How will you generate discussion?

How will you capture discussion and feed it back to the organisation?

What social and ethical issues might come up?

What skills will you need?

How will you evaluate your activity?

## Resources

BBSRC's Public Engagement Training and this handbook can only be an introduction to public engagement. There is lots more information available at the following links:

[RCUK public engagement with research webpages](#)

[www.rcuk.ac.uk/pe/researchers/](http://www.rcuk.ac.uk/pe/researchers/)

[National Co-ordinating Centre for Public Engagement](#)

[www.publicengagement.ac.uk](http://www.publicengagement.ac.uk)

[Sources of Public Engagement funding](#)

[www.publicengagement.ac.uk/how/funding](http://www.publicengagement.ac.uk/how/funding)

[BBSRC public engagement webpages, including examples of the public engagement and science communication BBSRC does](#)

[www.bbsrc.ac.uk/society/science-in-society-index.aspx](http://www.bbsrc.ac.uk/society/science-in-society-index.aspx)

['Science For All' public engagement conversational tool: The Public Engagement Triangle](#)

[interactive.bis.gov.uk/scienceandsociety/site/all/files/2010/10/PE-conversational-tool-Final-251010.pdf](http://interactive.bis.gov.uk/scienceandsociety/site/all/files/2010/10/PE-conversational-tool-Final-251010.pdf)

[Beltane Dialogue Handbook](#)

[Reference/webpage no longer available – Feb 2016]

[Preventing or controlling ill health from animal contact at visitor attractions \(Provided by the Health and Safety Executive\)](#)

[Reference/webpage no longer available – Feb 2016]

[Examples of public engagement activities](#)

[collectivememory.britishtscienceassociation.org](http://collectivememory.britishtscienceassociation.org) and <http://www.publicengagement.ac.uk/how>

[RCUK Evaluation: practical guidelines](#)

[www.rcuk.ac.uk/publications/policy/evaluation/](http://www.rcuk.ac.uk/publications/policy/evaluation/)

## Accessibility resources

### Equality Act 2010:

<http://www.legislation.gov.uk/ukpga/2010/15/contents>

### Equality and Human Rights Commission:

<http://www.equalityhumanrights.com/>

### Guidelines for computer or web-based activities:

<https://www.gov.uk/service-manual/user-centred-design/accessibility>

<http://www.w3.org/TR/WCAG/>

If your event is specifically tailored for blind and visually impaired persons, you can contact the RNIB for advice or training

# Notes

# Notes

## BBSRC Contact details

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