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9 **TITLE:**

10 **Dissemination of EAACI food allergy guidelines using a flexible, practical, Whole School allergy**
11 **awareness toolkit.**

12 **MANUSCRIPT ACCEPTANCE DATE: 22-FEB-2021**13 **SHORT TITLE:**14 **A template Whole School allergy awareness process toolkit**

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56

57 **ABSTRACT**

58 **Background**

59 Essential training for emergency adrenaline auto-injector administration alone provides
60 inadequate safeguard in school environments. Recent UK deaths have reinforced the urgency for
61 embedding whole school (WS) allergy awareness to minimise risk. We document development of
62 a practical, flexible WS Food Allergy Awareness Toolkit for UK secondary schools.

63 **Methods**

64 We used a multidisciplinary participatory action research methodology, involving successive
65 modification and retesting of a pragmatic toolkit in 3 case study schools. A School Allergy Action
66 Group drives WS risk assessment, helping schools gradually implement best practice policy in line
67 with their particular needs. Additional schools self-piloted the resulting toolkit with only remote
68 monitoring. School surveys, based on EAACI guidelines were developed to identify priorities and
69 assess change.

70 **Results**

71 Effectiveness of the resulting process toolkit, now available online, was independently
72 demonstrated via pre/post intervention questionnaires from 24/10 pupils with food allergy (FA)
73 and 97/6 pupils without FA, respectively. Pearson correlational analysis showed strong negative
74 relationships between Food Allergy Quality of Life Questionnaire (FAQLQ) at T0 and School
75 Support (SS) at T0 ($r=-0.8$, $p<0.01$), and between SS and Self-Efficacy (SE) ($r=0.73$, $p<0.05$). Mean
76 FAQLQ scores improved between T0 (3.3) and T1 (2.5). SE improved for those with FA (mean
77 difference =1.0). In those without FA, SE (mean difference =0.9) and Attitudes and Knowledge
78 (mean difference =0.7) also improved.

79 **Conclusions**

80 Full stakeholder involvement in toolkit development encourages usage and therefore
81 improves WS community awareness; reduces risk of reactions; fosters a more accepting societal
82 attitude; and empowers pupils with/without allergies to self-manage effectively.

83 **KEYWORDS:** adolescent, food allergy, participatory action research, risk assessment, self-
84 efficacy.

85

86 **Abbreviations:** AAI, adrenaline auto-injectors; AUK, Allergy UK; CS, case study; EAACI, European Academy
87 of Allergy and Clinical Immunology; EAPs, emergency action plans; FA, food allergy; FASEQ, food allergy
88 self-efficacy questionnaire; FAQLQ, food allergy quality of life questionnaire; HRQL, health related quality
89 of life; IHPs, individual health care plans; NFA, without food allergy; PAR, participatory action research;
90 QoL, quality of life; SAAG, School Allergy Action Group; SE, self-efficacy; SS, school support; T0, baseline;
91 T1, at follow up; WS, whole school.

92

93 **BACKGROUND**

94 Allergen avoidance education is primarily focussed on the home setting, however children spend
95 at least 20% of their waking hours in school.¹ Anaphylaxis due to food allergy (FA), occurs in
96 schools more than in any other community location with 18% of FA reactions and 25% of first-time
97 anaphylactic reactions occurring at school.^{1,2} Approximately 20 fatalities occur annually from
98 anaphylaxis in the UK.³ It has been reported that the primary reason for fatalities is a lack of
99 readily accessible adrenaline auto-injectors (AAIs).⁴ The age group 16-24 years are at highest risk
100 for anaphylaxis,⁵ yet guidelines principally focus on young children. Targeting secondary
101 schools and community settings with educational support is therefore crucial¹ in order to raise
102 general awareness, to empower adolescents to confidently self-manage FA, and to enable schools
103 to develop a protocol to prevent or minimise the impact of accidental adverse events if they
104 occur.

105 National school guidelines are written by clinicians and health agencies and published in medical
106 journals,^{2,6,7} whilst consumer-oriented guidelines are written by patient organisations;^{8,9}
107 however, there are few co-written guidelines for education settings.¹⁰ Research exploring FA

108 policies in schools remains limited.¹¹ Teachers are often unaware of school management plans,
109 with many not competent to manage severe allergic reactions.¹² Current school management
110 practices appear to have evolved without considering their impact. Assessment and evaluation of
111 practice is vital to ensure quality. The EAACI Food Allergy and Anaphylaxis guidelines, developed
112 to reduce the risk of accidental allergic reactions to foods in the community, including schools²
113 provide a sound basis for directing EU school allergy policy. However, EAACI recognise that their
114 clinically focussed documents require awareness of need as well as practical interpretation and
115 application for schools, so that they can be implemented in real world contexts. Similarly,
116 standard allergy policies, such as those supplied by Local Authorities, may lack school-specific
117 practical solutions, necessary for effective implementation.

118 Although there is continuing progress on Allergy Immunotherapy, it is generally accepted that
119 food allergen avoidance is the only current effective strategy to minimise the likelihood of a
120 reaction. However, simply banning food allergens is not a risk-free solution, because it may
121 provide a false sense of security for the food allergic student.^{2,13} This blanket policy may also lead
122 to stigma and a sense of difference. Restrictive policies focusing on school peanut bans are not
123 backed by evidence of success, appear not to reduce incident numbers and may contribute to
124 poorer health related quality of life (HRQL).¹ Furthermore, banning all 14 major food allergens¹⁴
125 would make the provision of a cost-effective, healthy, balanced school lunch impossible.¹⁵

126 A more effective strategy may be to raise awareness across the whole school (WS)
127 community.^{2,16,17} A WS approach recognises that all aspects of the school community can impact
128 pupil health and wellbeing.^{17,18} The approach targets skills for self-awareness; self-
129 management; social awareness; relationships; and social decision-making. This approach is
130 therefore likely to help reduce the social stigma and bullying associated with allergies through
131 correcting current misconceptions, improving knowledge, empathy and overall management
132 awareness.

133 Prevention is more effective than intervention. With increasing numbers of pupils experiencing
134 allergies,¹⁹ a WS approach ensures that schools are effectively able to manage this responsibility
135 in an ongoing manner, so that they are *always* prepared.^{2,20} Schools are encouraged to undergo
136 emergency anaphylaxis training and utilise standardised age-appropriate individual health care

137 plans (IHCPs), emergency action plans (EAPs) ^{1,21,22} and generic AAls, ²³ all essential to promptly and
138 effectively treat anaphylaxis. Current practice means that training for emergency AAI
139 administration does not take account of the context in which it occurs, and is therefore
140 an insufficient safeguard for the school environment. To use an analogy, *fire drill training is*
141 *beneficial for a fire, whereas reducing the risk of fire ever occurring is preferable.* WS risk
142 assessment and appropriated *daily* risk management aims to prevent incidents occurring, as well as
143 raise awareness, which may in turn positively impact the quality of life (QoL) of pupils with FA ^{24,25};
144 and reduce anxieties within school management teams.

145 Against a backdrop of schools being under increasing pressure to maximise performance with
146 less resources, it is unsurprising that many schools are slow to embrace effective risk
147 minimisation FA management policies, ¹ since this is not directly relevant to academic attainment
148 targets. Multidisciplinary training is proving an effective way forward to improve self-efficacy of
149 school staff. ²⁶ However to maximise the potential impact such trained staff could then achieve,
150 they also require the practical tools to equip them to embed effective WS allergy awareness
151 policies for risk minimisation throughout their school community. Consistent with the WS
152 approach methodology, community based participatory action research (PAR) offers a rigorous
153 research mechanism for implementing public health initiatives, within community
154 settings. ²⁷ Pragmatic resources can be developed using a case study (CS) model, recognising that
155 delivery of prototype interventions must occur prior to evaluation to ensure quality. ²⁸

156 Participatory research is a collaborative approach involving active engagement of school
157 community participants at various levels and stages of the research design and delivery (research
158 questions, data collection, analysis, decision on consequent actions). ²⁹ This equips individuals and
159 communities to make sustainable changes to processes and behaviour ³⁰ and the sense of
160 universal responsibility encouraged by this approach is ideally suited for management of FA. ³¹

161 This paper documents the development of an accessible WS Food Allergy Awareness and
162 Practical Action Management toolkit in UK secondary schools. We aimed to provide
163 overburdened schools with a supportive bridge from clinical guidance to effective
164 implementation. The template framework uniquely focuses on practical solutions for schools to
165 adopt and develop individualised school policy around best practice for WS risk management. We

166 hope that the toolkit will act not just as a resource to minimise risk of allergic reactions through
167 increased knowledge and awareness but also to foster a more accepting attitude generally,
168 within the school community.

169

170 **METHODS**

171 To ensure validity, we used multiple methods across six stages to develop the toolkit, based on
172 key guidelines and recommendations for UK schools^{2,13,32,33} (Figure 1).

173 **Stage 1:** A key stakeholder cross-disciplinary training and ideas workshop, with expertise in
174 education, policy development, allergy and health explored the development of age-specific, WS
175 allergy awareness and management policies (Table S2).

176 **Stage 2:** Successive CSs were recruited on a first come, first served basis, via invitation to
177 secondary schools in north London and south west England and selected to ensure diversity of
178 school types. The established policy development model for changing school food culture was
179 followed.^{34,35,36,37}

180 **Stage 3:** Initial resource materials for facilitating each school meeting were developed by the
181 Health Education Trust³⁴ using a thorough risk assessment/ risk management approach and
182 focussing on priorities for action identified in stage 1. A 'working group' structure (**School Allergy**
183 **Action Group** (SAAG)) was established, using pupil-centred teaching aids to simplify clinical
184 content.

185 Using PAR, each sequential CS enabled refinement of these practical resources via hands-on,
186 school-led, iterative evaluation of support materials, with user feedback justifying staged
187 modification, ready for re-testing.

188 **Stage 4:** Collaboration with **Allergy UK** (AUK) enabled creation of website pages showcasing
189 progress so that interested parties could immediately benefit from the experiences and solutions
190 learned during the CSs (Table S2).

191 **Stage5:**The 'toolkit' was further piloted by other schools, with only remote support and
192 monitoring (email/telephone). This tested the ease with which schools could independently
193 progress through the toolkit.

194 **Stage6:**Further toolkit refinements and training were provided to AUK by the research team, for
195 adaptation, to a more cost-efficient automated programme, ready for nationwide uptake by
196 schools through AUK's online portal.

197 **Measures**

198 A range of appropriate survey tools were developed to assist schools in determining their
199 priorities for action and demonstrate change across different parameters over time (Table S1).
200 School survey questions were based on EAACI guidelines² and designed to tease out specific
201 issues of concern. Inclusion of a series of validated and study specific questionnaires completed
202 online provided a measure for effectiveness of the toolkit development process.

203 Schools registering to utilise the SAAG toolkit were invited to participate in our independent
204 validated QoL survey (Table S1). The Food Allergy Quality of Life Questionnaires (FAQLQ) are
205 disease-specific developmentally appropriate measures of outcome that assess HRQL in FA for all
206 age groups and are the most frequently used HRQL tools in FA research and practice.

207 The Food Allergy Self-Efficacy Questionnaire (FASEQ) assesses a sense of personal competence to
208 deal effectively with a variety of management situations, including keeping safe in social
209 environments.

210 A series of study-specific questions (scale = 1-5) were developed for this research to evaluate the
211 level of (school specific) attitudes and knowledge for both those with FA and NFA (Table S1). .
212 Generic versions of the FAQLQ and FASEQ were used for those NFA so that results could be more
213 easily compared.

214 **Data analysis**

215 Means and standard deviations or percentage, as appropriate, are used to describe the data.
216 Pearson or Spearman correlational analysis, as appropriate, are used to examine relationships
217 between the measured variables. Simple Linear regression analysis with scores categorised as

218 above and below the mean at baseline as predictor and scores (scale) at follow up (T1) as
219 outcome is used to control for FAQLQ scores at baseline (T0). Paired t-tests are used to determine
220 significant mean differences in measured scores at T0-T1.

221 **Ethics**

222 Approval for working with each school was given through the school headteachers and all
223 interactions with each school were conducted formally via school-nominated key contacts. The
224 principles of GDPR³⁸ were adopted throughout to ensure personal confidentiality. Each CS
225 approved all website content describing their progress. All pupil, parent and staff surveys were
226 administered directly by the schools themselves. Parental consent was secured via the
227 Headteachers for pupils captured in photographs within the materials.

228

229 **RESULTS**

230 The initial material for resource development emanated from the (**Stage 1**) multidisciplinary
231 workshop (Table S2). Three CS schools were recruited (**Stage 2**) to be representative of different
232 school types. CS1, a 1500 pupil urban private, outer London school, with strong committed
233 leadership successfully completed the SAAG process within one school year. CS2, a 600 pupil city
234 state school took nearly 3 years to complete the SAAG programme due to conflicting school
235 priorities. CS3, a 280 pupil provincial Steiner school was unable to progress beyond SAAG4 due to
236 insufficient supportive senior leadership. All were mixed and had separate primary and
237 secondary sites, however the focus of the CS programme was with 11-18yrs only. No school was
238 able to confirm with accuracy their numbers of pupils with FA at the outset and this information
239 evolved during the SAAG process. Two SAAG meetings were set per term, although schools
240 progressed at their own pace. Each CS school and their progress through the SAAG toolkit is
241 summarised online (Table S3).

242 Table 1 outlines the structure and content of the refined 7-module, process toolkit for secondary
243 schools to independently progress through (**Stage 3**). SAAG toolkit samples are provided via
244 *supporting information 1-5*. The SAAG website pages (Table S2) offer secondary schools a quick
245 anonymous audit (Table S1) and online registration. In addition to the 3 CS, 57 secondary and 32

primary school registered for the SAAG programme during the 2yr project phase. Eighteen schools commenced on the programme and one school had completed the SAAG programme unaided by project close (**Stage 4 and 5**). Finally, automation of the SAAG programme (**stage 6**) was facilitated via AUK (Table S2).

Qualitative and quantitative changes in CS schools allergy awareness, pre and post input

The implementation process was iterative in that issues and obstacles experienced during the CSs directed successive process and tool modifications. **Critical outcomes** relating to these modifications are summarised in Table 2, for example, the importance of *effective* WS (two way) communications became apparent for this age group (SupplInfo2). Toolkit content modifications ensured that solutions are dependent on local conditions (e.g. availability of school nurse; mealtime arrangements) and may differ from school to school, hence the resource *content* is flexible for different scenarios.

Evaluation using the survey methodology (Table S1) guided schools to assess their unique initial priorities and measure progress. 181 baseline surveys were completed by eighteen schools, results from which were provided via a simple summary report to each CS school. Staff awareness of numbers of pupils with FA was identified as inaccurate from the online surveys, for all CSs (Table S3), making this a key priority for improvement. CS1 utilised results from pre, mid-point and post SAAG surveys, at their SAAG meetings.

Quantitative analysis

Quality of Life, Self-Efficacy and School Support (Table 3)

At baseline, CS1 and CS2 showed a similar pattern of results for FAQLQ, SE and SS, with no significant difference across scores at T0. The mean difference (0.8) exceeded the minimally important difference for FAQLQ (0.5). CS2 had a lower score on SS compared to CS1, corresponding with the slightly poorer FAQLQ and SE scores at baseline. For those NFA, SE also improved.

271 Pearson correlational analysis showed a strong negative relationship (using data from both CS to
272 boost power) between FAQLQ at T0 and SS at T0 ($r=-0.8$, $p<0.01$), and between SS and SE ($r=0.73$,
273 $p<0.05$) that is, poor QoL and low SE was associated with poor perceived level of SS.

274 Spearman correlational analysis showed a strong negative relationship (using data from CS1 only)
275 between participants who scored above (coded 1) and below (coded 2) the FAQLQ mean at T0
276 and at follow up ($r=-0.75$, $p=0.02$), suggesting that those who had the lowest QoL at T0 improved
277 most at T1. This result was confirmed using a simple linear regression with scores above and
278 below the mean at baseline as predictor and scores at follow up (T1) as outcome ($B=-2.6$,
279 $p=0.05$).

280 **Attitudes and Knowledge**

281 CS1 and CS1 had similar scores at baseline. Attitudes and knowledge increased from baseline (T0)
282 to follow up (T1) both for those with and without FA in CS1.

283 Pearson correlational analysis showed a strong negative relationship (using data from both
284 schools to boost power) between FAQLQ at T0 and Knowledge and Attitudes at T0 ($r=-0.8$,
285 $p<0.01$), indicating that worse QoL corresponds with poorer knowledge and attitudes for those
286 with and without FA (Table 3).

287

288 **DISCUSSION**

289 We adopted a collaborative, multidisciplinary, PAR approach to identify practical solutions to
290 raise awareness, embedding best practice firmly across WS systems and policies. The series of
291 iterative 'loops' of diagnosing, planning, taking action and evaluating solutions²⁸ via three CS
292 schools, enabled development and piloting of a practical toolkit that is fit for purpose, dynamic
293 and flexible, to accommodate the individuality of every school (e.g. number of pupils with FA;
294 regionality differences; staffing numbers; access to school nurse).

295 Strengths of this project include the simplicity of the SAAG toolkit which helps overcome barriers
296 to establishing effective FA policies in secondary schools; the recurring emphasis on 'making a
297 start' rather than completion, which encourages schools to raise their awareness, by simply

commencing the SAAG process; the stepwise analytical framework that enables schools to progress at their own pace, critical for facilitating school-specific changes to immediately begin to improve their WS practices; and resources that guide the SAAG committee to drive WS risk assessment, enabling creation of bespoke action plans that address school-identified priorities.

These CSs have shown that committed schools (Table S3) can implement robust allergy policy that embraces best practice and has automatic reappraisal firmly embedded.^{2,34,35} However, CSs aside, by the completion of this project only one school had independently progressed beyond SAAG1, illustrating that simply making this available to schools cannot compensate for insufficient capacity and motivation to complete the process. Whilst ideally schools would complete all SAAG stages swiftly, in reality, schools are overstretched for resources and time. Thus, from the perspective of school management, engaging in what seems to be an arduous and complex initiative, not directly related to educational targets, (with often a backdrop of misinformation and anxiety) tends to be repeatedly postponed, *until* an incident occurs. High profile supportive and persuasive educational communications, encouraging schools to prioritise allergy risk management are needed. Engaging with parents and pupils to challenge schools to raise awareness of the toolkit could stimulate uptake. A WS approach has proven effective for developing healthier food cultures in schools³⁶ and reducing bullying,³⁹ two pastoral issues that, like allergies can have long lasting effects after pupils leave school.¹⁸ The SAAG toolkit will help schools to constructively appreciate the practical benefits for pupil well-being (reducing allergy incidents, opportunities for learning, skills for self-management of allergy and life preparation), as well as the contribution that is made to raising community awareness of allergy.

As reported by others using the WS approach,³⁹ we identified the fundamental need for active senior management commitment throughout the process, without which progress can be impaired (Table 2). Only schools motivated by a shared consensus will engage with WS allergy awareness, so supporting and promoting these school exemplars will develop a momentum over time, encouraging more schools to follow suit, as occurred with changing food culture in UK schools.⁴⁰ More fatalities arise in young adults,²⁰ so it is likely that too many adolescents are leaving school without gaining some of the necessary skills for the larger world. With an increasing prevalence, it is likely that increased numbers of adolescents and young people will

327 enter secondary schools with a FA, hence the urgency for improvements to school allergy
328 management practices.^{2,41} Results from the AUK quick online audit reinforce the task ahead.
329 Although not a random survey population, this suggests that even proactive schools are not able
330 to correctly answer basic questions around FA school practices, with key identified issues
331 including storage of AAI and nut bans (Table S4).

332 A further strength of the SAAG toolkit is the division between the *process* and the *content*, which
333 extends its potential usage. The framework can accommodate future recommendations for best
334 practice in schools; and being a *process* toolkit, transferability to other settings, with relevant
335 *content* modification is straightforward. Management methods are similar regardless of the
336 allergy¹ and SAAG7 explores adaption to accommodate non-food allergies. Sharing tools will
337 hasten progress towards whole community allergy awareness. Automation of the online SAAG
338 toolkit has reduced overhead costs for allergy organisations (e.g. AUK in the UK), equipped to
339 manage the interface between end user and allergy experts. This provides opportunity for wider
340 utilisation of the toolkit, with local updates and audits for continued quality assurance.

341 A perceived shortcoming is the small number of CSs, however this research tests a
342 methodological process. Using a PAR approach, we have evidenced successive modification and
343 re-testing of the toolkit by each subsequent CS school, using hands-on facilitation to tease out
344 iterative improvements. Furthermore, early collaboration on validated QoL questionnaires
345 suitable for schools provided a concurrent, independent evaluation mechanism within the
346 original CS design, adding a measure of success (Table S1). Continuous testing of this co-
347 production model via facilitation of widescale access to the toolkit will immediately benefit risk
348 minimisation. Adoption of the collaborative ethos so established will stimulate collective
349 feedback and ongoing refinements to the toolkit. The unpredictability of FA means the toolkit
350 should remain under constant review and annual external audit of registered schools can help
351 maintain standards and drive school progress. Future updates to this development phase
352 baseline SAAG toolkit will be managed through AUK (Table S2).

353 The value of implementing the SAAG toolkit in secondary schools is the realisation from our
354 CSs, that reliance on person-centred, pupil-entry and emergency action strategies (e.g. IHCPs and
355 EAPS) alone are not enough to curtail incident scenarios. Although more difficult to achieve,

356 embedding co-produced WS management policy, within which pupil-specific IHCPs and
357 anaphylaxis emergency training reside, is essential for effective risk minimisation anywhere
358 across the school. Ensuring that the undiagnosed pupil, who first presents at school, can be
359 effectively accommodated, may reduce school, parent and pupil anxieties around allergies, which
360 schools themselves will increasingly see as a benefit.

361

362 **CONCLUSIONS**

363 Providing secondary schools with the appropriate tools to enable them to become WSallergy
364 aware, confidently, is as important for safeguarding young people as providing age-appropriate
365 IHCPs and EAPs for individuals with FA. Improving awareness of the WS community has the
366 potential to reduce risk of allergic incidents and empower adolescents with allergies to live
367 independent lives, assisted by consequent, changing societal attitudes.

368

369

Table 1: Whole School Allergy Awareness Process stages with module objectives

School Allergy Action Group (SAAG) programme and meeting objectives <i>Each module includes a self-report checklist (Progress Report) requiring headteacher signature confirming that the relevant module objectives have been completed- essential before advancing onto the next module. For each successfully completed module Schools receive a Progress Report to display goals achieved to date towards WS Allergy Awareness.</i>
Pre SAAG: Telephone introductions: To register and discuss the current situation in your school; and outline the process involved. To ensure the working group has the power to be effective across the WS, SAAG membership representation from school management is essential, plus teachers, pupils, parents, caterers and school nurse.
SAAG1: Where are we NOW in relation to food allergies? To introduce the project; explain the role of the SAAG; and find out what is currently happening in school in relation to FA management.
SAAG2: Where do we want to be in relation to food allergies? To provide information on why a WS Allergy Awareness Policy on FA Management is important; to give the whole group an insight into what it is like to live with a FA; to consider results of the pupil, parent and staff surveys carried out by SAAG members.
SAAG3: Empowering the consumer: To explore how the school can empower pupils with FA to make informed choices for themselves and thereby help prepare them for living in the wider world.
SAAG4: How are we going to get there? To reflect on the importance of time management when treating anaphylaxis and how this may inform practice in school; to compare current FA management practice in relation to the EAACI guidelines; and to start raising awareness of FA throughout school.
SAAG5: Drawing it altogether and creating policy: To draw on the conversations and discussions that have taken place in SAAG's 1-4 in order to: 1) Draft the <i>WS Allergy Awareness and Practical Action Management Policy</i>; 2) Draft the schools associated <i>Action Plan</i>.
SAAG6: The End Product: To consider the first drafts of the <i>WS Allergy Awareness and Practical Action Management Policy</i> and <i>Action Plan</i>; To agree how to disseminate the policy and action plan throughout the school; and to celebrate the work done.
SAAG7⁽⁺⁾: Regular re-assessment of the impact of your school's WS Allergy Awareness and Management Policy: To recap on the requirements of effective allergy management; to recruit, update and inform new SAAG members; to review progress against your action plan; to assess the impact of your policy and plan; to consider how the SAAG process could be utilised to start to consider non-food allergens; to troubleshoot as appropriate; and to embed timeline for regular review.

Abbreviations:FA, food allergy; SAAG, School Allergy Action Group; WS, whole school.

Table 2: Critical Outcomes (lessons learned)

School Allergy Action Group (SAAG) critical outcomes: Identified solutions to problems encountered during CSs were built back into the toolkit. Future adaptations of the toolkit should not overlook these subtleties.	
• ‘Bite-sized’, step by step content is more manageable for schools. Staged approach was an early lesson learned from the CSs so as not to overwhelm schools with the enormity of the task ahead for them	
• What if schools do not complete the SAAG? Each SAAG step sheds light and increases awareness somewhere in the school- this all contributes to reducing risks, hence better to progress partway along the path than not to start the climb at all. Progress starts at registration, so efforts should focus on encouraging schools to ‘make a start’, accepting that completion of the process will take time.	
• Time pressures are cited for schools not readily engaging with the process and our results suggest that schools appear insufficiently motivated to actively engage with ‘allergy awareness’ until they experience an incident that re-prioritises allergy management, relative to their other management activities. • Schools only engage with project when they have had an issue: Quote from Workshop: ‘Schools do not know what they don’t know until something goes wrong!’	
• Anonymity of quick online self-audit(Table S1) allows schools to assess their current situation <i>without</i> registering. Tool remains a useful adjunct to the SAAG process since all users receive full <i>answer sheet</i> with solutions to problems so identified.	
• Who in school need to be involved? Experience during the CSs showed that it is essential to have school senior management on the SAAG group from very early on in the process, with ideally at least 2 staff fully engaged, providing leadership to ensure agreement on progress and timelines for implementation. Now integral in toolkit as an objective for SAAG1.	
• Regular SAAG meetings help develop better two-way communications with parents on allergy matters, which reassures and improves cooperation. One CS school elected to continue termly SAAG meetings following completion of the SAAG process for this reason. This is now built into the SAAG7 review module.	
• Raising awareness of EAACI best practice guidance enables schools to tease out current bad practices and take control to rectify, at the same time as develop their own bespoke allergy policy to embed better practices as suited to their school systems. Common issues included: not having full records of all pupils with allergies on roll; incorrectly advising pupils having allergic incidents to go to reception; AAls only available in a locked cupboard in a locked room. • Providing template policy for schools to adapt fast-tracks progress. Sample policy is available on the Allergy UK website (Table S3).	
• What happens after SAAG?School staff and pupil populations are ever-changing, hence continuous review is	

cemented into the toolkit for risk reduction with SAAG7 providing a recurring agenda.

- To maintain freshness of this final review module an education resource around allergy in the news was designed to assess and address current allergy issues/ content. Hence the material informing each SAAG7 agenda is fluid. (SupplInfo5)
- To maintain standards achieved and drive progress forward in school, it is recommended that **annual external audit of registered schools** is built into the process.
- **What about liabilities?** The following aspects of the toolkit should provide reassurance to organisations considering their role in promoting the toolkit for their local schools.
 - Effective WS allergy awareness can only be achieved when school management take responsibility for ensuring allergy policy is integral with the school system and the school community is fully engaged. Therefore the SAAG toolkit offers a modular self- certification award ('school report') system, providing step-wise notification and reinforcement of achievements to date and what is still to do. This can be displayed within the school giving transparency around expectations (e.g. 'work in progress').
 - Toolkit framework is a conduit facilitating schools to engage with official best practice recommendations, guidance and legislation around FA; aiding schools to dovetail these within school management structures.
- **Does toolkit address all recommendations?** Toolkit developed as a process framework to enable regular update of content by operators and hence it lends itself to constant adaptation so remains fit for purpose. It is designed for evolution and adaption.
- **Is it realistic to reverse a nut-free policy?** Recognising the potential dangers of simply stopping a nut-free policy, before assured WS awareness is the norm, SAAG3 focuses on the importance of appropriate *communication* around FA to encourage constant vigilance by all. A key lesson is that *talking* about 'nut-bans' is not a *policy* for WS awareness. Alternative communication mechanisms for school catering are explored, to encourage pupils with allergy to ask questions and not assume the dining room is safe, recognising this as a more helpful approach for preparing pupils for independent living. In reality this may mean that whilst the caterer would not reintroduce nuts, they would stop promoting their nut-free menu, instead focussing on thorough and effective communications with the school community around ingredients.
- **Administration costs for liaising with individual schools will be prohibitive?** Developing a sustainable system that is cost effective was considered a key objective, recognising budget limitations for AUK or other organisations tasked with operating the SAAG toolkit process. As such the SAAG process was adapted to become a fully automated, online tool. As such organisations (e.g. AUK for UK) can move into fully operational mode relatively quickly and with low cost- to put themselves into a leading position to oversee/ manage schools through to developing WS awareness, with minimal time/resource input but also enable

updates and audits to ensure quality assurance.

Abbreviations:AUK, Allergy UK; Case study; FA, food allergy; SAAG, School Allergy Action Group; WS, Whole school.

Table 3: Independent validated questionnaire- mean and SD scores for quality of life; self-efficacy (FA and NFA); perceived school support for students with FA; and attitudes and knowledge for students (FA and NFA) for CS1 (T0 and T1) and CS2 (T0).

	Quality of life [†]	Self-efficacy [‡]		School support [§]	Attitudes and knowledge [¶]	
		FA	NFA		FA	NFA
Case Study 1						
T0 (mean, SD)	3.3 (1.5)	3.6 (1.7)	3.2 (1.4)	3.0 (1.4)	3.7 (0.8)	3.1 (0.6)
T1 (mean, SD)	2.5 (1.4)	4.6 (1.1)	4.1 (1.3)	4.2 (0.8)	4.0 (0.7)	3.8 (0.8)
Case Study 2						
T0 (mean, SD)	3.4 (2.3)	3.4 (2.4)	2.9 (1.4)	2.3 (1.4)	3.8 (1.0)	3.2 (0.9)

[†]Higher scores denote worse quality of life;Higher scores denote higher [‡]self-efficacy; [§]perceived school support;

[¶]level of attitudes and knowledge. CS1, students with FA: T0 n=11, T1 n=10; students with NFA: T0 n=16, T1 n=6.

CS2, students with FA: T0 n=13; students with NFA: T0 n=81. Scales used: 0-6 for quality of life and self-efficacy; and 1-5 for attitudes and knowledge and school support. Abbreviations:CS, Case study; T0, Baseline; T1, At follow up; FA, Food allergy; NFA, Without food allergy; SD, Standard deviation.Examplequestion used to evaluate the level of (school specific) attitudes and knowledge for both those with FA and NFA: 'If someone with a FA recognises or suspects that a food contains an allergen to which they are allergic, how safe do you think it is for them to consume it anyway?'

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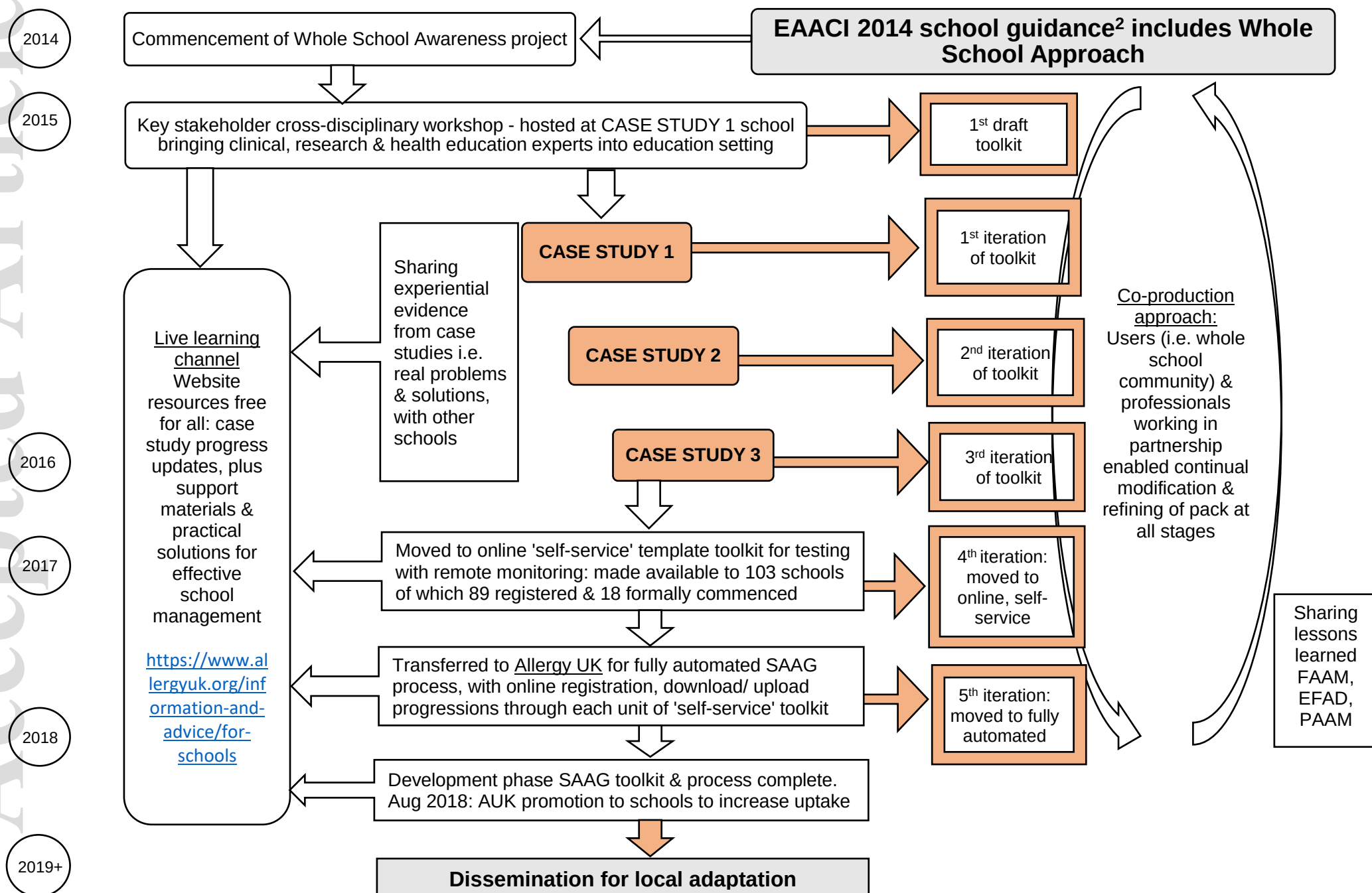
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Figure 1: Project flow diagram and timeline, illustrating all interfacing stages. Iterative approach enabled continuous modification and refinement of the Whole School Allergy Awareness toolkit, via establishment of a School Allergy Action Group (SAAG) within each case study.



Abbreviations: AUK, Allergy UK; EFAD, The European Federation of the Associations of Dietitians; FAAM, Food Allergy and Anaphylaxis Meeting; SAAG, School Allergy Action Group; PAAM, Paediatric Allergy and Asthma Meeting. Each iteration equates to further modification of toolkit.

Supporting Information

Figure S1: Key messages to emerge from Multidisciplinary Workshopⁱ

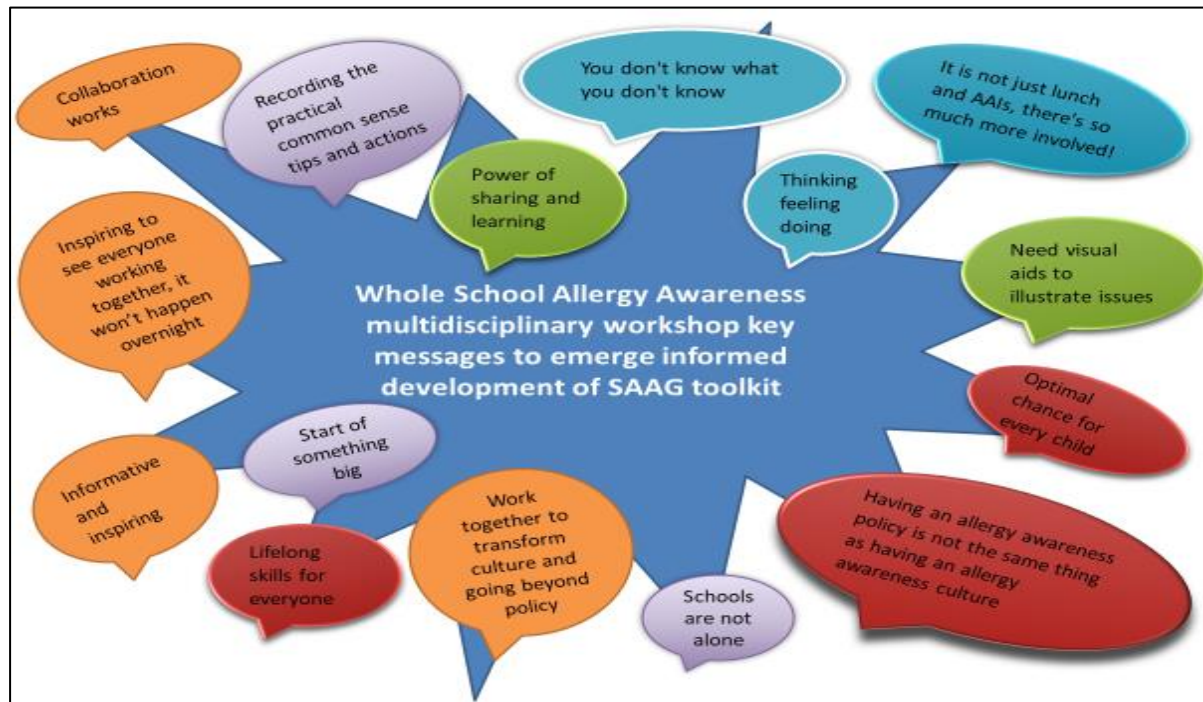


Table S1: Survey tools used during case studies to assess change over time and adopted within SAAG toolkit

Survey tools <i>*similar prime questions that address the most common, current issues facing UK schools.</i>	How survey used	Validity of survey tools
Secondary school self-audit tool* to encourage initial enquiry by concerned schools who are looking for support online ⁱⁱ	Head teachers can assess gaps/compliance of their current policy anonymously. Provides scoring system and feedback plus contact portal. Freely accessible.	Questions were based on EAACI guidelines and focussed on key issues of concern as identified at the multi-disciplinary workshop (stage 1).
School telephone survey* - provided baseline for assessing current status in secondary schools	Adopted as baseline survey for first two CS schools	Survey questions first developed and tested in 2012 for a telephone survey of 'current practice' across 40 English Secondary Schools, conducted through HET in conjunction with Bath Spa University nutrition undergraduates.
School online survey* ⁱⁱⁱ replaced telephone survey; serves as baseline for schools to assess current status and help inform SAAG priorities. Repeat use of same survey gauges change over time and for reassessing priorities	All schools registering to follow SAAG process encourage their staff to complete the Survey Monkey questionnaire prior to SAAG1; results are supplied to the school with correct answers to inform SAAG discussions and help prioritise actions.	Questions standardised from telephone survey above for conversion to Survey Monkey format.
SAAG in-house survey template - additional survey questions and survey tips included within SAAG1 enabling schools to develop bespoke investigations	SAAG encourages schools to develop their own survey of pupils, parents and staff to help identify school-specific needs. In-house results provide school-specific priorities for action within the SAAG working group.	In-house surveys not validated by project- sample questions and survey tips provided to encourage ownership of process by each school.
Self-efficacy and attitudes to management of food allergy ^{iv v,}	Validated QoL questionnaire completed online (via University of Cork).	External to project and included within original CS design, to allow for future pre and post toolkit evaluation.

Abbreviations: CS, Case study; SAAG, School Allergy Action Group; QoL, quality of life.

Table S2: Achievements at each stage of the project

Project stages	Key outcomes
Stage 1: Multidisciplinary workshop (February 2015) ⁱ with summary and recordings available via AUK website as resource material for schools. ^{vi vii}	• Recognition of need for multidisciplinary collaboration, given the operational differences between clinical and education worlds.^{viii} • Pragmatic messages emerging from the discussions informed the programme resources (Figure S1).^{vii} • Implementing policy effectively requires <i>both</i> WS awareness <i>and</i> daily practical action management
Stage 2 and 3: Table 1 outlines the structure and content of the refined 7-module, process toolkit for secondary schools to independently progress through. SAAG toolkit samples are provided via <i>supporting information 1-5</i> .	Registering schools receive an introduction to WS allergy policy (SuppInfo1). Each SAAG module includes template meeting agendas, pupil-friendly educational activities and resources, and all necessary materials to run effective meetings and to focus attention towards actions needed for implementing change (e.g. SuppInfo2). Planning and progress monitoring report forms are aligned with the UK education system, to facilitate and streamline adoption (SuppInfo3). Each module ends with a process review checklist, requiring headteacher signature (a prerequisite for releasing the next module), thus reinforcing school recognition of their responsibilities around allergy management (SuppInfo2, SuppInfo4). Schools then receive a '<i>Progress Report</i>' detailing achievements to date. The final module, designed to help schools stay current and avoid complacency, stresses the importance of regular review, essential for ever-changing school populations (SuppInfo5).
Stage 4 and 5: The SAAG website pages ^x	• CS progress updates with tips for other schools^x • Quick secondary school, anonymous auditⁱⁱ • Online school registration for the SAAG toolkit process.^{vii} • Since going live (11/2016) to 11/2018, despite no specific external promotion, there were over 6000 visits to the 'WS awareness and management' website pages; and from the 1500 visits specifically to the SAAG resource kit pages, 57 secondary and 32 primary school registered for the SAAG programme. Eighteen schools commenced on the programme and one school completed the SAAG programme unaided.
Stage 6: The full, automated SAAG programme is now available through AUK ^{xi}	Free for schools to register and download SAAG modules sequentially, following successful completion of each unit. Continuous review plus annual external audit are embedded to maintain momentum.

Table S3: Case study school details ^x

	CS1^{xii}	CS2	CS3
Pupil numbers on role	1,500 mixed	600 mixed	280 mixed
School type and location	Urban private, outer London	Inner-city state, London	Provincial Steiner school, south west England
SAAG progress	Completed full SAAG1-7 process within one school year	Completed full SAAG1-7 process over 2.5 years	Progressed from SAAG1-4 where it stalled
Comment	Strong, motivated leadership throughout illustrated by fact that school approached this project for help following an incident	Conflicting priorities for school and staff slowed progress despite desire to progress	Progress hampered due to insufficient senior management input
Staff awareness of number of pupils with food allergyⁱⁱⁱ (based on response to question 'How many pupils are you aware of that have food allergies in your school?')	Poor awareness amongst survey respondents of exact numbers, staff estimation ranged from 55-180 pupils at the start of the SAAG process to 9-150 at the end	Prevalence estimated to be 1-3 pupils at the beginning of the SAAG process to 12 at the end	No secondary school aged pupil with a food allergy (2 primary school pupils have a nut allergy, neither child has an adrenaline auto-injector)

CS, case study; SAAG, school allergy action group.

Table S4: School allergy management quick anonymous online self-audit resultsⁱⁱ	No. responses per question	% Responses per question
Q1: Do you have a school policy for managing medicines? [326]		
<i>Yes*</i>	280	86%
No	18	6%
Unsure	28	9%
Q2: Do you have a policy for managing food allergens in your school? [318]		
<i>Yes*</i>	143	45%
No	98	31%
Unsure	77	24%
Q3: How is the provision of nuts managed in your school? (Tick all that apply) [160]		
No policy around nuts in school	52	33%
Nut Free school	112	70%
<i>Managed alongside other allergens*</i>	93	58%
No nuts in school meals	89	56%
No nuts in lessons	55	34%
No nuts on school trips	47	29%
No nuts in vending/tuck shops	58	36%
Q4: Do all pupils with food allergies in your school have personalised care plans? [275]		
<i>Yes*</i>	182	66%
No	50	18%
Unsure	43	16%
Q5: Are Adrenaline Auto Injectors (AAIs) stored in a locked cupboard? [267]		
Yes, all AAIs	84	31%
Yes, some of the AAIs	38	14%
<i>No*</i>	145	54%
Q6: Are pupils with severe allergies encouraged to carry their own AAIs? [265]		
<i>Yes*</i>	151	57%
No	72	27%
Unsure	42	16%
Q7: Who is trained to prepare for allergic reactions/ anaphylactic shock? (Tick all that apply) [151]		
None	6	4%
<i>All Staff*</i>	119	79%
Nurse / First Aider	136	90%
PE Teacher	32	21%
Form tutors of allergic children	54	36%
Head Teacher	32	21%
Pastoral Care	48	32%
Other	48	32%
Q8: Is there an educational element within the curriculum that addresses food allergy and /or other key conditions? E.g. asthma, diabetes, epilepsy [259]		
<i>Yes*</i>	58	22%
No	103	40%
Unsure	98	38%

Survey represents schools that have actively and independently sought to find out more about school allergy policy. Audit structure offers a first step for these schools to raise awareness of the need to improve practices when they review their own results.

Results from school anonymous self-audit (26/10/15 - 10/12/18) indicate on average only 53% correct answers. Particularly concerning are that well over a third of secondary schools completing the survey still lock

AAIs away and do not encourage pupils to self-carry their AAIs; and that 20% record having no policy around any nuts.

[number] represents the number completing each individual question (326 tests started the audit, 259 completed all questions); * represents the correct answer to each question.

ⁱ Higgs J, Harvey J, Dunn Galvin A, McManus L, Warner A, Craig A *et al.* Whole School Allergy Awareness and Practical Management workshop. 2015.

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^{vii} Allergy UK. Whole School Allergy Awareness and Practical Action Management Video Soundbites.

<https://www.youtube.com/watch?v=JF1ecTGIsT4> Accessed September 24, 2020.

^{viii} Allergy UK. Consensus statement.

https://www.allergyuk.org/assets/000/001/370/Consensus_Statement.doc_original.pdf?1505460211

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^x Allergy UK. Case studies in action. <https://www.allergyuk.org/information-and-advice/for-schools/case-studies-in-action> Accessed September 24, 2020.

^{xi} Allergy UK. SAAG resource kit <https://www.allergyuk.org/information-and-advice/for-schools/school-allergy-actiongroup-resource-kit> Accessed September 24, 2020.

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Whole School Allergy Awareness and Practical Action Management

Process overview – getting started

Thank you for your interest in our School Allergy Action Group (SAAG) process resource pack as part of your work in becoming an **Allergy Aware** school. The resource pack has been developed following pilot case studies in schools, and will continue to evolve to reflect feedback and any relevant updates to National allergy policy or guidance.

There has been a dramatic increase in allergic diseases in recent years, it is therefore important that **everyone** in school knows what to do to make it as safe as possible for those with allergies, and to know how to help them if they have a reaction. These life skills will also be of benefit to everyone in the wider world too.

Why focus on secondary schools?: As young people become more independent, the pre-disposition to take risks and experiment and the desire to fit in can be a dangerous combination. This reinforces the importance of education, whole school awareness-raising and support for all to minimise risk of any allergic reactions; and better prepare young people to manage their allergy once they leave school. This resource pack, together with supporting information on Allergy UK's website (www.allergyuk.org) will help build the framework and develop policy around whole school allergy awareness and management using a whole school approach. It specifically addresses food allergy, although the same process could be utilised as a starting point for considering other allergens (this is explored in SAAG 7).

Step by step information and resources are provided to support your school to more effectively manage the risks associated with food allergies. This involves step wise risk minimisation and the creation of a Whole School Food Allergy Policy specific for your school. To achieve this we recommend you set up a **School Allergy Action Group (SAAG)**. This group will be the engine that will work together through the SAAG programme and drive the changes needed to become an allergy aware school. This working party should comprise those who have an interest in, and responsibility for, ensuring the safety of pupils with allergies, and the management of their medication so that they can engage fully in daily school activities.

Lessons from fire risk analogy: Fire drill training only helps when there's a fire – full and thorough risk assessment and risk management will help prevent that fire happening in the first place!

A lot emphasis is given to emergency anaphylaxis training for schools and ensuring pupils have personal care plans. Whilst both are essential, they are **not** an adequate safeguard to reducing risk of adverse events occurring in the first place, and so only part of the solution. At the end of this process you will have reviewed your schools approach to managing food allergies; and agreed a policy that is up to date, which will help reduce

the risk of anaphylaxis and less severe allergic incidents happening within the whole school.

Just by starting the SAAG process, Whole School Allergy Awareness will be an *immediate AND important* knowledge boost in your school. Subsequent meetings will build on both knowledge and awareness; help improve and implement policy and practices to benefit all within the school community; and empower pupils with allergies.

Food allergy policy in school

The Whole School Food Allergy toolkit and supporting resources have been developed to reflect European Academy of Allergy and Clinical Immunology (EAACI) best practice guidance on managing patients with food allergies^{1,2}; the Department for Education's guidance on supporting pupils at school with medical conditions³; and EU legislation for food labelling⁴.

EAACI emphasises the need for the development of age-specific, whole school, allergy awareness and management policies and stress that simply banning food allergens is not a risk-free solution.

Implementing policy effectively requires:

- whole-school awareness
- practical action management

What is a Whole School Allergy Awareness and Management Policy?

This is about creating a culture whereby those with allergies can participate in daily school life and not feel excluded or discriminated against. It is about raising awareness of food allergies and anaphylaxis so that they are normalised and help prepare young people for life in the real world. Most of all it is about ensuring knowledge and information systems are integrated so that everyone plays their part in keeping individuals with food allergies as safe as possible.

What is the purpose of a School Allergy Action Group (SAAG)?

A SAAG can enable everyone who may have experience of, or be affected by allergies to share knowledge, information and experience, to inform your action plan and to create your Whole School Allergy Policy and thereby ensure the safety of everyone in school. SAAG members will also be able to raise awareness of the project throughout the school

¹ Muraro A, Agache I, Clark A, *et al.* EAACI Food Allergy and Anaphylaxis Guidelines: managing patients with food allergy in the community. *Allergy* 2014; **69**: 1046–1057. Available at <http://onlinelibrary.wiley.com/doi/10.1111/all.12441/pdf>

² Muraro A, Clark A, Beyer K, *et al.* The management of the allergic child at school: EAACI/GA2LEN Task Force on the allergic child at school. *Allergy* 2010; **65**: 681–689.

³ Department for Education (2015) Supporting pupils at school with medical conditions. Statutory guidance for governing bodies of maintained schools and proprietors of academies in England. Available at https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/484418/supporting-pupils-at-school-with-medical-conditions.pdf {accessed 24/01/2017}.

⁴ REGULATION (EU) No 1169/2011 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 25 October 2011 on the provision of food information to consumers, amending Regulations (EC) No 1924/2006 and (EC) No 1925/2006 of the European Parliament and of the Council, and repealing Commission Directive 87/250/EEC, Council Directive 90/496/EEC, Commission Directive 1999/10/EC, Directive 2000/13/EC of the European Parliament and of the Council, Commission Directives 2002/67/EC and 2008/5/EC and Commission Regulation (EC) No 608/2004

and ensure engagement through consultation and discussion with their peer group or colleagues. This is vital if your policy and action plan are to be fully adopted and engaged with.

Who should be invited to join a SAAG?

Please ensure representatives from the following key areas are invited to attend, in particular aim to include someone from each group shown in **bold** to attend each SAAG meeting*:

- **Senior Management Team (SMT)**
- **Catering manager/school cook**
- **Pupil** (with an allergy)
- **Pupil** (without an allergy)
- Class/ subject teacher (possibly PSHE?)
- School Nurse
- Special Education Needs Coordinator
- Pastoral Care
- Parent of pupil with allergy
- Governor
- Parent of pupil without an allergy
- Administrator/school secretary
- PE teacher
- Teaching assistant

What is the minimum number of people who can take part in the SAAG?

To ensure full success it is important that the SMT and catering manager/cook are fully engaged with this process, and we recommend that a SMT representative is involved in the process by SAAG 2 at the latest, if not from the outset. Appointing a second SMT representative is also a good idea so they can deputise when needed. It is also important that at least one pupil (with or without an allergy) attends ALL full SAAG meetings.

***Whilst it is important to get full support from SMT and caterers throughout the project, the first most important step is to actually start the process – just by completing SAAG 1, general allergy awareness within your group will have improved, and you will start to understand the current situation in your school. Subsequent meetings will help you address solutions to improving Whole School Awareness and Policy.**

How can we encourage others to be actively involved in the process?

Please refer to the **Allergy FAQs** for further information on allergy; the importance of preventing an allergic reaction; and facts, figures and statistics to convince them of the importance of this work.

Is the programme formally recognised?

On successful completion of each SAAG unit a progress report will be issued to your school. This can be used in school and on all media to illustrate the stage your school has reached in working towards *Whole School Allergy Awareness*. The head teacher or deputy must sign the progress report submission to confirm that your school has met the essential requirements, following which the progress report for that SAAG unit will be issued for your school to display.

Following SAAG 6 a certificate will also be provided to all SAAG members, including pupils, to formalise their commitment to the SAAG and to Whole School Allergy Awareness.

What is the commitment?

We recommend asking everyone to be prepared to participate in **6-8 meetings**. Generally speaking the full SAAG will need to meet about 6 times, with the final one being 6-12 months later to review the progress. These meetings should be confirmed at the start of the process to reinforce the importance of the meetings. Additional sub groups meeting may be required to work on particular aspects of the policy development. We recognise the time pressures in school however, so it may be best to move one meeting at a time.

You will find model agenda's and supporting resources for your SAAG meeting in the SAAG resource pack.

What is the format of the meeting?

We appreciate that bringing together this group of people may be challenging, we therefore recommend that you aim to meet for **90-120 minutes** so you can make the most of your time together. If this feels too much you may prefer to meet more frequently but for shorter periods. In the initial phase of work we would advise meeting once per half term (6 week period), possibly with some additional sub group sessions in between.

Mornings are generally better for pupils, but your cook will probably prefer an afternoon (once service has finished!). Also it is unlikely your school cook will want to come to a meeting on a Monday or a Friday, due to the heavier workload in the kitchen. Some parents may not be able to attend during normal working hours – and then of course there is the issue of releasing staff.

In short, there probably isn't a 'best time' for meetings. It may be worth holding the meeting at different times of the school day and different dates to ensure most people attend at some point (it also saves pupils/ staff missing the same lessons all the time). Offering to pay those who are usually on an hourly rate can inspire greater commitment too.

Whatever you do, make sure the minutes of your meetings are circulated to everyone on your invitation list so they remain informed even if they don't attend and that SAAG meeting dates and commitments are outlined in SAAG 1.

How do we select pupils to be involved?

There are a variety of ways of approaching this and it is simply a question of what is most appropriate for your school. For example:

- Make the process formal by writing a job description and inviting pupils to apply for the post and run interviews.
- Use a subgroup from the school council or healthy schools committee to ensure good continuity.
- Use the opportunity to spread pupil voice.
- Hand pick students for developmental reasons eg to promote self-esteem, develop confidence, reward enthusiasm or inspire learning.

Whichever of these approaches you adopt be sure to be consistent and give the working group high status within your school community.

How do we engage everyone?

As your meetings will involve young people and adults we encourage you to think about methods that will engage all participants and enable everyone to have a 'fair say'.

It can be intimidating for pupils to be in a meeting with adults. Some of the following strategies may help to ensure their voice is heard.

- Pairing pupils with an adult or breaking into smaller groups for discussion on particular issues then asking the pupil rather than the adults to report back.
- Posing a question and asking everyone to write their response down first. This can provide thinking time! Participants can then read out their response or put their folded up reply into a hat for you to read out thus making it anonymous. Remember that no question is a silly or useless question!
- Pointedly going around the room to ask each participant whether they have anything to say on an issue before moving on (but re-assuring individuals there is 'no pressure' and they can say 'pass' if they wish).
- Having traffic light flash cards (red, amber and green) or using thumbs up/thumbs down or in the middle to check understanding and agreement with a point made. A red card can also be used to indicate someone has lost track of proceedings.
- Advising pupils of issues to be debated in SAAG in advance so that they can canvas opinion from class mates/peers and have extra time to think.

In other words think of the SAAG as a hybrid between a meeting and lesson eg include a snack that demonstrates you have thought about allergy issues and use it as a talking point, and have plenty of flip charts available!

Our model agenda's include activities to help understanding of the issues to be discussed.

What will be covered in the SAAG meetings?

Pre SAAG: Telephone introductions – to register and discuss the current situation in your school and outline the process involved.

SAAG 1: Where are we NOW in relation to food allergies?

SAAG 2: Where do we want to be in relation to food allergies?

SAAG 3: Empowering the consumer

SAAG 4: How are we going to get there?

SAAG 5: Drawing it altogether and creating policy (this will be a sub group meeting)

SAAG 6: The End Product

SAAG 7⁽⁺⁾: Regular re-assessment of the impact of your schools Whole School Allergy Awareness and Management Policy

How will the SAAG process be evaluated?

Several evaluation tools are used throughout the SAAG process resource pack and these are designed to help assess needs and priorities; measure progress over time; and also to help evaluate the SAAG programme so that we can keep improving the resource pack. The evaluation tools are built into the SAAG programme where relevant to help your school explore current knowledge and practices around allergy and so help to determine priorities for action towards establishing effective whole school allergy awareness policy and practices. The table below outlines the full range of evaluation tools, when they are used and by whom and the purpose of each.

WHEN?	WHO?	PURPOSE?
1. Self-efficacy and attitudes, (Quality of Life) validated questionnaires: Managed through Independent partner, Dr Audrey Dunn Galvin, University of Cork		
At baseline before SAAG 1 and at the end of process: a) Students with a food allergy: https://www.surveymonkey.com/s/JMTLJ53 b) All other groups: https://www.surveymonkey.com/s/J6QXRYK	• Pupils with allergy • Pupils without allergy • Parents of a child with a food allergy • Parents of a child without a food allergy • Teachers • Caterers	• An independent external measure of the success of this project. The questionnaires are designed to measure change within the school ethos as a result of the project intervention, in terms of knowledge, attitudes and confidence (self-efficacy) around food allergy matters within the school • Results from this external survey will be provided as part of the overall results and this will enable each participating school to compare their own results to the (averaged) results of the whole project (i.e. all participating schools collated together)

2. Staff allergy survey

At baseline (at least one week before SAAG 1) <u>and</u> at least one week before SAAG 7 (which should be 6-12 months after SAAG 6) https://www.surveymonkey.co.uk/r/TT3NQPZ	- The Head teacher; and - School staff	- Serves as baseline for the individual school highlighting the current practices and knowledge around allergy within the school. This will help identify some initial key areas for discussion/ action and help inform their SAAG priorities. - Assesses the change over time in the practice and ethos within the school - from the commencement of the SAAG journey to just before SAAG 7 Can be repeated at half way point if school requires feedback on progress to date
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3. School Allergy 'Awareness' Report Cards

Carried out during SAAG 1; results of which are discussed further in SAAG 2; <u>and</u> repeated in SAAG 7	Completed individually by SAAG members	- To aid discussion within the SAAG meetings around '<i>what do we know about our school and allergies?</i>' and to assess current views on schools allergy management - To identify key issues and priorities that need to be addressed - Assesses how awareness has changed over time
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4. Allergy awareness in our schools questionnaires

Introduced during SAAG 1; and to be developed, completed and analysed ready for discussion in SAAG 2	- Pupils; - Parents; and - Staff	- To help guide schools to develop their own survey of pupils, parents and staff - To explore the current situation across the school community - To help identify SAAG priorities and school specific needs
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5. Secondary school self-audit tool

Anytime – available online https://www.allergyuk.org/information-and-advice/for-schools (NB this is replaced by point 2 above for schools utilising the SAAG resources)	- Head teachers; and - Anyone connected to a secondary school that's interested	- A quick assessment available to any secondary school - Schools can assess gaps/compliance of their current policy anonymously - Provides scoring system and feedback plus contact portal - Freely accessible
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Additional Support

If you require assistance in planning your SAAG's or addressing issues that arise from them please contact allergy@foodtofit.com who will ensure that your query is distributed to the

relevant expert in our collaboration to respond. Please make sure you include a contact phone number (with best time to call) and an e-mail address.

Any relevant updates to the resources will also be emailed to the named contact.

There is a library of information available at <https://www.allergyuk.org/information-and-advice/for-schools> that can be used as part of the education for schools and can be presented to pupils, staff and parents.

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School Allergy Action Group 3: Empowering the consumer

Here is a model agenda and supporting resources to help you deliver your third SAAG meeting. Whilst it is not meant to be prescriptive we hope you will find it supportive. To help the meeting run smoothly pre meeting preparation is provided in the **grey box** below.

Meeting Objective: To explore how the school can empower pupils with food allergy to make informed choices for themselves and thereby help prepare them for living in the wider world.

SAAG 3 Preparation: Task to be completed/ prepared prior to the meeting:

	Complete?
1) To get the best results from the SAAG meeting please ensure that they are attended by: a member of the senior management team; at least one pupil; and the catering manager/cook.	
2) Download the video to your computer or ensure that there is internet connection is in the meeting room. Set up a computer and power point projector/white board in the meeting room to show the video #takethekit available at http://www.takethekitcampaign.co.uk/	
3) Ensure that the caterer (and anyone else involved in food provision eg for vending) is available to attend the meeting, as their input is required for agenda item 2	
4) Do Nut Bans Help? (p7-9): a. Print the Do Nut Bans Help? Instructions ; b. Print and cut the Nut Ban Role Play Cards ; and c. Have a 'cloak' available	
5) Print the Master agenda (p2-5) for the chair and a copy of the Agenda (p6) for <u>each</u> SAAG member	
6) Have a white board/flip chart and pen available for recording comments for each agenda item identified by the following symbol:- 	
7) Have pens and paper available to take notes, and complete the activities	
8) Agree a chair and minute taker prior to the meeting to note attendees; topics covered; and actions points, including who is tasked with each action	
9) Print one copy of the Process overview for reference	
10) Print one copy of the Allergy FAQs for reference	
11) Print one copy the SAAG 3 Whole School Allergy Awareness Progress Report Submission (p10)	
12) Have a copy of SAAG 2 minutes available	
13) Familiarise yourself with SAAG 3 materials and resources	
14) The meeting is estimated to last 105 minutes	

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School Allergy Action Group 3 meeting:

Empowering the consumer

MASTER AGENDA

Meeting Objective: To explore how the school can empower pupils with food allergy to make informed choices for themselves and thereby help prepare them for living in the wider world.

1) Welcome (approx. 10 mins)

- a) Additional introductions if new members have been recruited.
- b) Review and agree minutes from SAAG 2.
- c) Update on actions (if not covered elsewhere on the agenda)
- d) Set the scene on the importance of empowering pupils by show the **#takethekit** video (2:10 minutes) available at <http://www.takethekitcampaign.co.uk/>

2) Current practice in the communications and labelling of ALL allergens (approx. 10 mins)

- a) Invite the **caterer** to outline the current practice in relation to labelling and communications about the 14 major food allergens:
 - i. in the kitchen; and
 - ii. in the wider school eg vending machines.
- b) NB is there anyone else that has responsibility for snacking and vending facilities in the school?

3) Allergy awareness and current food allergy policy (approx. 10 mins)

- a) **Generally discuss the following:**
 - i. The **European Academy of Allergy and Clinical Immunology**¹ (EAACI) emphasises the need for the development of age-specific, whole school, allergy awareness and management policies and stress that simply banning food allergens is not a risk-free solution, and *'a general 'allergen-ban' in isolation is inadequate, falling short of a 'whole school management' approach to instil allergy awareness*

¹ Muraro A, Agache I, Clark A, et al (2014) EAACI Food Allergy and Anaphylaxis Guidelines: managing patients with food allergy in the community. *Allergy*. **69**; 1046–1057.

For further information on the Whole School Allergy Awareness visit <https://www.allergyuk.org/information-and-advice/for-schools>

*throughout the school'. See **FAQs** for further details on the EAACI guidance.*

- ii. Food allergens are not restricted to nuts and peanuts - there are 14 major food allergens which also include milk, eggs, fish, sesame seeds and cereals containing gluten.
- iii. Common food allergens form an important part of a healthy diet for many people.
- iv. **The School Food Standards (as part of the School Food Plan²)** states that schools should supply oily fish; milk and dairy; and non-dairy protein options for vegetarians (ie this could include nuts, soybeans and sesame seeds).
- v. The Public Health England (2017) **Healthier and More Sustainable Catering: Nutrition principles³** states that a menu should include dairy (or dairy alternatives) and oily fish twice a week. Although these recommendations are for adults, they could apply to adult visitors and teachers. For children, the nutrition principles refer back to the recommendations of the School Food Plan.
- vi. Refer to **Why don't we just ban allergens?** question in the **FAQs**

b) Nut bans:

- i. Use the **Do nut bans help?** (p7-9) role play exercise to explore the potential impact of a nut ban policy on pupil welfare in the wider world
- ii. Banning allergens from the school grounds will merely push the problem under the carpet and does little to help the pupil with a food allergy or the population without, to be prepared for an event that could happen. The highest rates of serious food allergy incidents are in the 18-25yr age group, so once young people are no longer in a 'protected' environment. It makes good sense therefore to ensure that during the school years we help pupils with allergies (and their friends) to prepare for independent life.
- iii. Policy should address all 14 allergens. Anaphylaxis is not confined to nuts, and a nut ban does not address the wider needs for allergy management in school. For example, a fatality in a Birmingham school (March 2017) was reported as being due to a possible fish or milk allergy. Banning allergens is not a *policy* –because it does not: engender effective allergy awareness training (of pupils, parents, caterers and staff); engender effective allergen communications and labelling; empower pupils and encourage them to ask questions eg *what ingredients are in this dish?* etc; and does not safeguard all pupils.

² <http://www.schoolfoodplan.com/>

³ Public Health England (2017) Healthier and More Sustainable Catering: Nutrition principles. The scientific principles for developing nutrient-based standards for planning nutritionally balanced menus. Available at https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/595126/Healthier_and_more_sustainable_nutrition_principles.pdf [accessed 02/03/2017]

For further information on the Whole School Allergy Awareness visit <https://www.allergyuk.org/information-and-advice/for-schools>

c) What's the alternative?

The SAAG process will help schools to develop whole school allergy awareness across the whole school population, which is important for developing effective policy and practices that embraces this principle and meet the needs of everyone. Aim for a controlled environment where allergy information is managed and communicated in an appropriate way; and where it reflects the realities of the 'real world' outside of school. Note where schools have previously exercised a nut ban, it is NOT recommended that nuts are suddenly reintroduced onto the menu. It is first essential to ensure effective whole school allergy awareness and practices become the norm. This may take some time to achieve and during this period the important change is that all communications centre around '*allergen awareness*' as opposed to '*no allergens here*'. Allergen vigilance therefore becomes an established norm for the whole school. When appropriate there are several ways to consider management of allergens following risk assessment and effective management, for example utilising well signposted vending machines in a set room in the school with hand washing facilities; have a rule that food purchased there is consumed there; and allergen-free tables⁴ for pupils with packed lunches.

4) Transition process – what might it look like? (approx. 45 mins)



- a) Invite SAAG members to explore how your school can help prepare pupils to manage their food allergies as they develop into adults by adapting messages about the **management of allergens** in the following 9 scenarios:
 - In the kitchen
 - In the dining hall
 - In the classroom
 - Trips and sport events outside of school
 - On the schools website
 - In printed materials
 - With pupils
 - With parents
 - With staff
- b) Write each scenario on 9 large pieces of paper, and place around the room.
- c) Split your SAAG into small groups and allocate them to a scenario.
- d) Give them 2 minutes to write their thoughts on that scenario, and then ask them to rotate to the next scenario.
- e) Continue to rotate until they return to their original piece.
- f) Which ideas do the SAAG like the best? Which can be implemented easily?
- g) Agree actions as appropriate.

⁴ Bartnikas L, Huffaker M, Sheehan W, *et al.* Impact of school peanut-free policies on epinephrine administration. J Allergy Clin Immunol 2017; doi: 10.1016/j.jaci.2017.01.040.

For further information on the Whole School Allergy Awareness visit <https://www.allergyuk.org/information-and-advice/for-schools>

5) Conveying allergy awareness messages about last minute ingredient/menu changes (approx. 15 mins)

- a) Invite SAAG members to explore how they would alert pupils with allergies to last minute ingredients/school menu changes.
- b) Make notes and agree actions as appropriate.

6) Agree actions (approx. 5 mins)

Summarise actions, with a named person taking responsibility and a date by which they will be completed being agreed.

7) Any other business (approx. 5 mins)

- a) Complete the **SAAG 3 Whole School Allergy Awareness Progress Report Submission** (p10)
- b) Discuss any other issues
- c) Future SAAG meetings: List dates of **all** agreed and confirmed SAAG meetings

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School Allergy Action Group 3 meeting: Empowering the consumer

DATE:

TIME:

LOCATION:

SAAG 3 AGENDA

- 1) Welcome
- 2) Current practice in the communications and labelling of ALL allergens
- 3) Allergy awareness and current food allergy policy
- 4) Transition process – what might it look like?
- 5) Conveying allergy awareness messages about last minute ingredient/menu changes
- 6) Agree actions
- 7) Any other business

Do Nut Bans Help? Instructions

Objective:

There are 14 major food allergens including peanuts, nuts, milk, mustard and celery. This exercise uses peanut allergy and nut bans as an example to explore current approaches to allergen management in schools:

- To raise awareness of the false sense of security a nut ban can give someone who has a nut allergy compared to those with other allergies.
- To encourage consistency in ways that ALL allergens are treated in school.
- To encourage the adoption of a whole school allergy awareness approach such that pupils are more fully prepared for adult life.

Materials Required

- **Nut Ban Role Play Cards** (p9)
- A 'cloak'

Description

- 1) Ask for 8 volunteers to take part in the role play. Give each volunteer a role play card and ask them not to show their card to anyone else.
- 2) Ask the person who has the role of the pupil with a **peanut allergy** to identify his or her self.
- 3) Explain to the pupil with a **peanut allergy** that the school s/he attends has a nut ban and hand him or her the 'nut ban cloak' to put on. Explain that this 'cloak' represents the nut ban and will keep him safe. Ask the recipient - *How does this make you feel?*
- 4) Now ask for the other pupils with **milk, celery and mustard allergy** to step forward and identify themselves. Tell them they cannot have 'cloaks' for their allergies. Ask them *How does this make you feel?*
- 5) Explain to everyone that we are now going to observe what happens when each of these people with food allergies goes to purchase food from a different food establishment. Invite the person representing each food establishment to talk in turn to each customer (ie the pupil with an allergy) following the instructions on their cards:
 - a. School cook;
 - b. Indian takeaway worker
 - c. Waiter in a posh restaurant; and

- d. Café owner
- 6) Then discuss:
- a. *What happens?*
 - b. *Is everyone served something they can eat safely?*
- 7) If the role players follow their instructions correctly we should find the pupils with a **peanut allergy** is served something containing peanuts by the Indian takeaway worker and the cafe owner, therefore they are not safe and are at risk of a severe allergic reaction. Ask the group:
- a. *To reflect on what they have just seen?*
 - b. *Do they think peanut bans help prepare young people with a peanut allergy for adult life?*
 - c. *How else might we approach peanut allergy in schools?*

Nut Ban Role Play Cards



You have a peanut allergy

- Your school has a nut ban.
- You do not ask whether a dish contains peanuts wherever you go because you are not in the habit at school.

You have a milk allergy

You always ask if a dish contains milk wherever you go.

You have a celery allergy

You always ask if a dish contains celery wherever you go.

You have a mustard allergy

You always ask if a dish contains mustard wherever you go.

School cook

Today your menu includes:

- Chilli con carne (contains celery)
- Vegetarian lasagne (contains milk and mustard)

You know the students who have allergies and tell them what they can and can't have.

Indian takeaway worker

- You have recently swapped the almond powder you use in your curry for a cheaper peanut powder.
- You only disclose this if asked.

Waiter in a posh restaurant

You have been trained to ask guests if they have an allergy before taking their order.

Café owner

- It is almost closing time and you only have ham and mustard sandwiches left which were made in the kitchen where you had also been making peanut butter sandwiches for your children.
- You only disclose this if asked.

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Whole School Allergy Awareness Progress Report Submission: SAAG 3

Following completion of each SAAG, you will be issued with a progress report to display in your school. This will illustrate the stage your school has reached in working towards *Whole School Allergy Awareness*. Please ensure that this unit's objectives, as outlined below, are initialled by the appropriate staff member, and this sheet is signed by your head teacher.

Once successfully completed you will be provided with the next SAAG agenda.

There are 7 SAAG units. You can progress through the units at your own pace. Once the SAAG process has been completed, your school will have the necessary systems in place and understand the responsibility for managing allergy risk minimisation, including whole school communications.

SAAG 3 process objective	Please initial
✓ Has explored how our school can empower pupils with food allergy to make informed choices for themselves and thereby help prepare them for living in the wider world.	

Your feedback is important for continually improving this toolkit. Thank you:

1. What went well in this SAAG unit?
2. What would you do differently?
3. What have been the barriers to change within your school?
4. Overall was this SAAG unit accessible and informative? Please suggest any improvements:
5. If you have specific questions or require additional information, please request it here:

I confirm that the SAAG 3 process objectives as outlined above have been completed to my satisfaction.

School name		Date	
Head Teacher name			
Signature			

Please scan and email a signed copy of this progress report submission to allergy@foodtofit.com and progress to the next SAAG unit.

For further information on the Whole School Allergy Awareness visit <https://www.allergyuk.org/information-and-advice/for-schools>

SAAG 5: Whole School Allergy Awareness Action Plan Template

Use this template to summarise the actions you need to implement your allergy awareness policy

What?	How?	Who?	Timescale	Evidence	Completed?
School Leadership Team involvement					
Policy					
Curriculum					
All staff to be aware of pupils with allergies and have knowledge to treat pupils with allergic reactions					
Pupils know symptoms of allergy, know what to do and how to keep safe					
School meal service					

Use of food as a reward or 'treat' and at school events					
Ensure safety of pupils with allergies on visits and trips					
Communication with parents/carers and wider school community					
Ensure system established for regular review and updating of policy and practices					

SAAG process review checklist: Please complete the following checklist to confirm that all areas of the SAAG process and EAACI guidelines have been addressed in your school*:

The SAAG toolkit provides a framework process to aid schools to increase allergy awareness, enabling each school to develop a unique policy and action plans to suit their needs.	Signature: Checklist items to be signed by appropriate SAAG members	Position (eg SAAG member, SMT etc)
Our school has completed the SAAG 1-6		
We are committed to running SAAG reviews termly and a full SAAG 7 review annually to review the certification		
We are committed to working through areas yet to be actioned within our Action Plan		
We have a comprehensive school policy for food allergy. All staff are responsible for implementation of this policy. Please send a copy of your policy with the checklist		
Systems are in place to identify food-allergic children at school entry		
Systems are in place to identify food-allergic children to school staff, especially catering or new/ temporary staff		
We have a clear communication line to parents		
We can identify all children with food allergy in our care, and each child has a Personal Care Plan, which states which foods are to be avoided, and what action should be taken in the event of an accidental reaction		
We engage with local allergy specialists to provide input into the PCPs, training staff on food allergen avoidance, and how to treat reactions		
Emergency medication for each child is stored as recommended by the allergist or GP. Medication is readily available and a protocol is in place to deliver AAI's from storage to site of emergency treatment		
We carry out periodic checks of AAI availability and expiry		
Food allergy is integrated into our key pastoral policies eg bullying, safeguarding, behaviour		
Allergy awareness is applied to cooking and handling of food anywhere in the school		
The scope of the comprehensive school policy extends to extra-curricular activities e.g. school trips, exchanges and excursions		
We have re checked the Allergy UK website for updates to the SPRP resources termly during the last 12 months and incorporated these into practices		
We have completed the 'Self-efficacy and attitudes, (Quality of Life)' independent external validated questionnaires' These questionnaires help gain appreciation of the impact of food allergy on individuals. Surveys can be completed at - a) Students with a food allergy: https://www.surveymonkey.com/s/JMTLJ53 b) All other groups: https://www.surveymonkey.com/s/J6QXRYK		
We have completed the 'Staff allergy survey to assess current practices and knowledge' questionnaire, as a minimum by the head teacher (and other staff if possible) at least one week before SAAG 7 (which should be 6-12 months after SAAG 6). This is a repeat of the survey done at baseline and allows you to assess change in your school over time. Surveys can be completed at - https://www.surveymonkey.co.uk/r/TT3NQPZ		
What new steps have you taken as a school during the last 12 months to improve your allergy awareness policy and practices?		

*Developed from the EAACI community guidelines recommendations (Muraro A, Agache I, Clark A, Sheikh A, Roberts G, Akdis C *et al.* EAACI Food Allergy and Anaphylaxis Guidelines: managing patients with food allergy in the community. Allergy 2014; 69: 1046–1057. Available at <http://onlinelibrary.wiley.com/doi/10.1111/all.12441/pdf>

Allergy News: fact or fake?

Objective:

- To encourage SAAG members to research latest news and information about food* allergies and anaphylaxis;
- To enable SAAG members to assess the quality and trustworthiness of the information they find;
- To create a pool of materials for discussion at the SAAG meeting; and
- To consider whether relevant news stories might impact on SAAG action plan or policy.

Materials required:

- Access to internet searches; social media platforms; library; newspapers; magazines; journals; radio; TV; or word of mouth reports.
- One copy of **Allergy News: Fact or fake matrix** (p9-10 worksheet per SAAG member
- One copy of examples of '**sensationalising headlines**' (p11-13).

Description

- 1) Send a copy of the **Allergy News: Fact or fake matrix** worksheet with your invitation to the next SAAG meeting.
- 2) Ask participants to research the news for any information about food allergies and/or anaphylaxis*, use the matrix on p9 to assess the information and bring a printed copy or recording to the meeting.
- 3) Alternatively, you might prefer to ask everyone to conduct the research but complete the evaluation of their findings collectively in the meeting.
- 4) During your SAAG meeting invite everyone to share their stories and reflect on them:
 - *Did they find any fake stories?*
 - *How did the stories affect them?*
 - *Might either type of story impact on your school policy or plan in anyway?*
- 5) This research could be part of a wider project within school to look at fake news and support the development of critical thinking skills. For more information check out the National Literacy Trusts (2017) Fake news and critical literacy. Available at: <https://literacytrust.org.uk/resources/fake-news-and-critical-literacy/>

**NB in subsequent meetings you may choose to extend the scope of your research/conversation to non-food allergies or all allergies in general.*

Allergy News: Fact or fake matrix

Introduction

Before our next SAAG meeting, we would like you to find out whether there has been any news about food allergic reactions and/or anaphylactic shock since we last met.

You might want to do an internet search, check out social media platforms, visit your local library, read some newspapers, magazines or journals or listen to the radio or watch some TV. You might even pick up some news by word of mouth.

Effective searching

Remember when searching a large database like the internet, a query will most likely return millions of results. Use more keywords to improve accuracy and to reduce a high volume of results.

For example, the following search will get increasingly accurate results:

1. allergy
2. fish allergy
3. fish allergy news
4. fish allergy news 2017

Remember too that anyone with access to a phone or computer can publish information online. The internet is not regulated for quality or accuracy. It is good to get into the habit of checking whether the information you find on the internet is:

- accurate
- up to date
- unbiased, telling the whole story
- from a trusted source, e.g. Allergy UK www.allergyuk.org
- confirmed by other reliable websites or sources (www.bbc.co.uk, www.direct.gov.uk, www.nhs.uk, <http://sparepensinschools.uk/>, www.bsaci.org, <https://www.gov.uk/government/organisations/department-of-health>)

Allergy news: Fact or fake matrix

1. Use this matrix to assess stories.
2. If you answered yes to most of the questions below, your material is probably reliable.
3. Do follow up any areas you are unsure of!

Definition of ‘fake news’: news or stories that are not true. Fake news is published on the internet/social media, in newspapers and shown on TV and radio to mislead people. Fake news stories often have shocking, exaggerated or false headlines to grab people’s attention. The internet means that fake news can be spread very quickly through the use of fake news websites and social media.

	Yes/No/Comment
The story	
What story did you find? (add reference eg title, weblink, date of publication:	
Is the information factual?	
Does it provide sources so information can be checked?	
Has the story been reported elsewhere? If so, where eg the radio, TV or newspapers?	
The author	
Is the name of the author/creator on the page?	
Is the writer qualified to write on this topic?	
Is there contact information, such as an email address, somewhere on the page?	
The website	
Does the website address at the very top of the page look real? Is the end of the address normal eg .co.uk or .com, or is it unusual?	
When was the site last updated? Is it recent?	
Is the information free of spelling and grammar errors?	
Do the photos or videos look normal?	
The organisation	
Have you heard of the organisation (company, government, university) that published the story? Can you check who they are/ their credibility?	
Do you think the content is free from sponsorship/ no-one has paid for it?	
The audience	
Who was the content meant for?	
Why has it been written?	

Sensationalising headlines – can you spot what's really news from what's dubious, distorted or unsubstantiated reporting? It isn't always easy because some stories that are lacking in evidence sound very convincing and some that are true sound counter-intuitive.

Take a look at these three stories. Do you think they are fact or fake? ^a

1. Independent (2016) Girl with severe nut allergy died after kissing boyfriend who had eaten peanut butter sandwich. Available at: <http://www.independent.co.uk/news/world/americas/girl-with-severe-nut-allergy-died-after-kissing-boyfriend-who-had-eaten-peanut-butter-sandwich-a7073501.html> [accessed 19/12/17]
2. The daily mash (2014) Army to weaponise food allergies. Available at: <http://www.thedailymash.co.uk/news/war/army-to-weaponise-food-allergies-2014060487177> [accessed 19/12/17]
3. Birmingham Mail (2017) Boy allergic to fish died after being served fish fingers, inquest hears. Available at: <http://www.birminghammail.co.uk/news/midlands-news/boy-allergic-fish-died-after-13509038> [accessed 19/12/17]

^a Stories 1 & 2 are FACT; 2 is FAKE