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MANAGEMENT OF UNSAFE FOOD RECALL

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Abstract. The aim of this paper is to present the essence of effective management to recall unsafe food. The implementation of the development is reflected in its individual parts. Legal requirements oblige companies to take immediate action when an available product poses a threat to the consumer's health or life. These actions imply blocking of a suspicious batch or a possible product recall, as well as effective communication with supervisory authorities and consumers, if a product has already been available to them. The scope of these regulations is scrupulously listed in private safety standards and food quality, such as BRC, IFS, or in an international norm ISO 22000. The article emphasized the importance of the traceability system to ensure effective recall, also analysed the results of the research into the causes and evaluated the effectiveness of the food recall.

Key words: incidents, recall, unsafe food, food safety

INTRODUCTION

The food chain is constantly exposed to risks, greater awareness about consumer rights and fast reacting media house caused greater attention devoted to issues related with product recalls. Law requirements relating to food safety in case of such accidents necessitate the need to implement an effective traceability system, and to restore trust in the safety and quality of the food and its ingredients to the customers (Kher et al., 2010). Food safety can be insured only if all the steps of the food chain will have full identification of processes, half products and raw materials.

In case of any threat to food safety – the nonconforming product will be identified. The organization will be effective as far as the rules of supervision over incompliancy have been defined properly. On the other hand, an effective supervision over the incompliancy is conditioned by the identification system used in the company. According to the norm, a nonconforming product is a product that does not meet the requirements (ISO 9000, 2015). These requirements consist of: legal requirements, the requirements of industry standards, requirements defined basing on product specification, and client requirements.

The term: nonconforming product is being used in all standards of food safety management such as ISO 22000 (2006), BRC and IFS. This term does not occur, however there are terms of similar meaning such as products that do not meet health standards, or dangerous foodstuff. The term product that does not meet health standards has not been defined, however the food safety and feeding law is using this term (Taczanowski, 2009).

In Regulation (EU) No 178/2002 (Rozporządzenie…, 2002) there is a term of dangerous foodstuff. Art. 14 Regulation (EU) No 178/2002 defines a dangerous foodstuff as: a) harmful for health b) not suitable for human consumption.

Law requirements specify the obligation of recalling the product if there are any basics, to suspect that a foodstuff is hazardous. Those actions are related to blocking any suspicious product, eventual recall and efficient information towards supervising organs and clients if the product has already hit the shelves. Those requirements are very specifically regulated in private food safety and

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quality standards such as BRC, IFS or the international norm ISO 22000. Companies should, according to those standards, be able to identify incidents and be prepared to manage efficiently the situations that may occur later. The term incident has been defined in the BRC Standard as an event, which may lead to production or delivery of hazardous, illegal or nonconforming products (Globalna…, 2015).

The aim of this article is to present the essence of effective hazardous food recall management. The article highlights the importance of the traceability system to ensure effective recall, also analysed the results of empirical research into the causes and evaluate the effectiveness of food withdrawals from the market.

LAW AND STANDARDIZATION REQUIREMENT IN RECALLING OF HAZARDOUS FOOD OUT OF THE MARKET

Law requirements oblige companies to take actions in order to recall products, however, they do not determine any particular guidelines/ rules which would prepare the companies to do so in critical situations.

Product recall should occur when the product does not meet food safety requirements (Rozporządzenie…, 2002). Under regulation (EU) no 178/2002 there has been established a system called RASFF (Rapid Alert System for Food and Feed) – it is a fast warning system about hazardous food products and feeds. All the countries in the European Union, and countries of the European Economic Area (Norway, Lichtenstein and Iceland) take part in the RASFF system. The system is available also for other countries and international organizations after signing confidentiality and reciprocity deals – according to Regulation of the European Commission 178/2002 (Rozporządzenie…, 2002). The system has existed in the EU since 1978 when by decision of the Council 84/166/EEC, a system used for immediate notification of serious health or safety hazards associated with consumer products was created. With the rising hazard for food safety the later directive of the Council 92/59/EEC that issued the overall safety of products contains an article on a rapid alert system expanding the scope of its activities onto all products, that may be treated as food or products that may have contact with food. In February 2002 on the basis of the Regulation of the European Commission 178/2002 (Rozporządzenie…, 2002; articles 50 and 52) the hazard notification system took also the aspect of feeding animals and control of goods crossing the border. Within the RASFF system under the Regulation of the EU commission No 16/2011 we can distinguish the following kinds of notices:

1. Threat notice – means a notice about a threat that may require immediate action in another country being a member of the network
2. Information notice – a notice that does not require immediate action in another country being a member of the network
   - 2.1 Information notice for the purpose of subsequent actions – information notice related to the product, which was put into production or may be put into production in another country being a member of the network
   - 2.2 Information notice for the purpose of attention – information notice related to the product which:
     – is in rotation only in the notified country or
     – has not been put into rotation, or
     – is no longer in rotation.
3. Border rejection notice – a notice about a part of container or load of food or feed, according to art. 50 Regulation (EU) No 178/2002 (Rozporządzenie…, 2002).
4. Primary notice – border rejection notice, information notice or threat notice.

Complementary notice – a notice which contains additional information related to the primary notice.

Notices sent do the RASFF system have been archivized since the beginning of its functioning. The European Commission has been publishing reports about notices reported at a specified time (weekly and yearly) since May 2003 on the DG SANCO (Directorate-General for Health and Food Safety) webpage. This makes an eventual verification of media remittances possible. Detailed information about company's names, identity of individual companies are not given to public notice. According to art. 103 Act from 8 January 2010 about changing food and feeding safety and some other acts, who shall not recall from the market any food product which is hazardous to human health or life, any spoiled, or adulterated is under a financial penalty, the amount of which can be measured up to five times the worth gross

value of the questioned amount of product put into rotation as food.

Analysing the requirements from norm BRC and IFS the company should, in order to efficiently manage incidents and critical situations, firstly identify them. Incidents can be for example: interruptions in water supply, energy supply, failure of key equipment, lack of staff, information system failure, fire, sabotage or flood. Both norms determine a must of having a procedure of recalling the product by the company. Such a procedure should at least determine the crisis team, plan (order) of making decisions about recall, list of contacts (crisis team, emergency services, suppliers, clients, certification organs, organs of supervision, specialized laboratories, legal advisors), communication plan (clients, consumers, organs of supervision) and plan for organizing logistic identification of the product, reception, and utilization of the recalled product and reconciliation of the magazine state. Furthermore this procedure should be tested at least once a year. Food safety issues are aimed majorly at customers life and health, additionally from the organizations perspective, they influence the products' function in longer time perspective. A system look at the issues takes place in the concept of managing the continuity of action, at the same time it is related to social responsibility of the company (Zapłata and Kaźmierczak, 2011).

In the international ISO 22000 norm point 7.10.4 of recall it is said that the highest management should designate personnel with permissions to initiate recall and personnel responsible for the recall. Also, the organization should establish a procedure, which will include notifying the proper interested sides, proceeding with the recalled products, also the questioned parties of products remaining in the warehouse, continuity of actions, which need to be taken (ISO 22000, 2006). The requirements of this norm determine the necessity of verifying the efficiency of the recall program, by using a simulated or real recall. There is no information about the frequency of actions in this area, just as it was determined in the standard requirements BRC and IFS. All the standards mentioned in this article determine the necessity of having procedures of product recall. Law requirements oblige companies only to take action related to product recall, they do not determine any particular guidelines/rules that would force the companies to prepare for such eventuality.

IMPORTANCE OF IDENTIFICATION SYSTEM IN ASSURING EFFICIENCY OF THE RECALL

The obligation of tracking traffic and origin of food and feeds in order to ensure the safety of the supplied food is a result of the Regulation of the European Parliament and European Council nr 178/2002. Law requirements determine the obligation of identifying the first supplier and the first recipient of the food product, they do not determine the rules of function for the identifying system within the company. Norm ISO 22005 (PN-EN ISO 22005, 2007) identifies the term traceability as "the ability to trace the route of feeds or food by specified step/steps of production, processing and distribution. Also the traceability system is identified as data and action enabling maintainance of required information about the product or its components in the whole chain of production and use of the product or the part of the chain" (PN-EN ISO 22005, 2007). An efficiently designed traceability system should allow the company to determine from which components a product was produced and what packages were used, who and when supplied the components and packages, in which conditions the components and packages were stored/transported, what processes/operation actions where the components/products subdued, who made them (which shift?), which shift did the packaging, and to whom it was sold. The essence of traceability is the possibility of tracing the route of the material/product "forward" and "back", which means a possibility of identifying/ gathering all the information about the raw materials, steps of processing subdued until gaining the final product and the other way around. An efficiently designed traceability system can contribute to decreasing the number of actions causing the recall, only because it increases the chances of discovering incompatibility in an early stage. A recall should occur if a given product does not meet food safety requirements. The efficiency of actions in critical situations is dependent on the designed traceability system, which will condition the size and time of the recall of the hazardous product, efficient identification of the first recipients and suppliers, if necessary, of the particular parties of components. Standards of food safety management require regular tests, such as simulating recall or practical recall in order to work out efficient rules of action in such situations, verify the efficiency of a settled procedure of a product recall and the traceability system.

CAUSES AND EVALUATION OF THE EFFICIENCY OF RECALLING PRODUCTS OFF THE MARKET

According to the research conducted by the author in 2011, over 30% of the researched companies do not monitor the efficiency of the conducted recalls, do not have settled efficiency indicators, therefore cannot estimate the amount of the recalled products. The basis of the empirical research was a survey, which was sent to 966 companies in the meat processing. The population consisted of companies qualified by the Veterinary Inspection to V and VI section of companies approved according to Regulation no (EU) 853/2004.

In order to obtain information about recalls of products returned to the surveyed companies, they were asked whether in the last five years steps had been taken to withdraw the product from the market. 56.0% of the surveyed companies indicated that they did not take any action to withdraw the product from the market, while 44.0% of the respondents in the surveyed companies indicated an existence of such circumstances. Most of the questioned companies identified insufficient quality first, microbiological threats as second, physical threats as third, and chemical threats as fourth biggest source of necessity of product's recalls.

Willing to obtain more details about the sources of information being the cause to initiate a product recall, the author asked the companies to show if the recall was commenced as a result of (Fig. 1):

- information from a supplier
- complaints from the first recipient/distributor
- complaint from a detail customer
- nonconformities that occurred during a routine control process
- activate corrective actions as a result of the audits
- intervention control authorities
- storage cabinets studies.

The biggest percentage of representatives pointed that the direct cause of initiating the recall of the product is a complaint from the retail customer (69.3%), also a big percentage pointed a complaint from the first distributor/recipient (46.6%). Percentage of points for other variants, causes of recall was placed at a similar level and was in cases of nonconformities that occurred during a routine control process – 27.3%, in case of intervention of official organs of control – 20.5% and in case of information from the supplier – 15.9%. Therefore, most of the companies, which have conducted recalls from the market, have

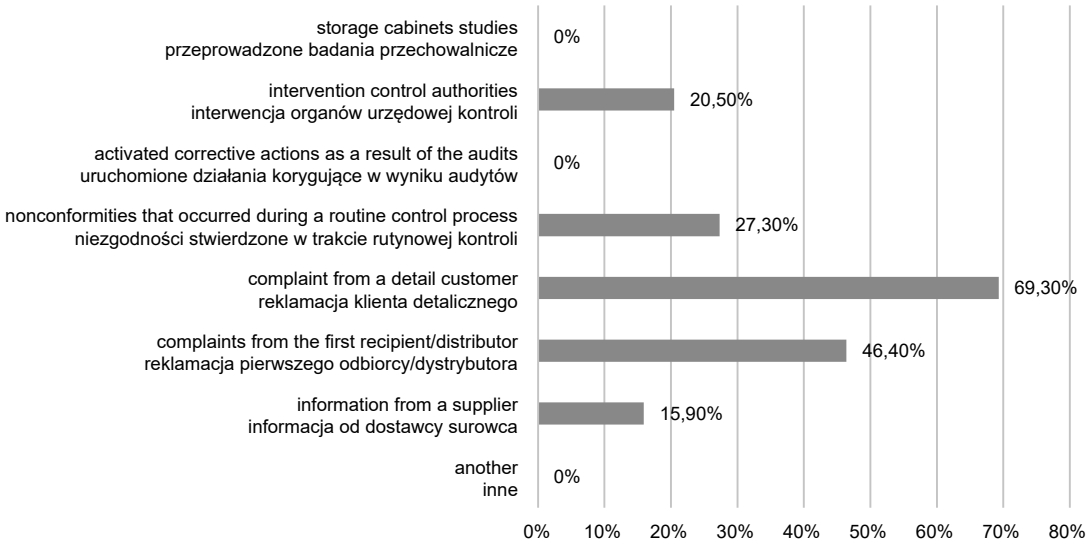

Fig. 1. Cause of recall initiating
Source: own research.
Rys. 1. Przyczyna zainicjowania wycofania
Źródło: badania własne.

gained information about nonconforming products based on complaints from retail customers, and also based on complaints from recipients/distributors. Why such a small percentage of indications concerned the identification based on nonconformities that occurred during the routine control processes?

One can deduct that companies have inadequate prevention systems. Monitoring processes and actions realized during the production process are inadequate, because they do not allow to capture misconduct, the retail customer or distributor must show defects in the product. This is adverse for the company, and primarily to the consumers, who are endangered of losing health, or sometimes also their life, especially when the company fails to recall a defective product.

Another question concerned the amount of the recalled product. The author asked the companies to estimate the percentage amount of their nonconforming product that has been recalled from the market within the last 5 years in admittance to the total amount of nonconforming product, using the following points (Fig. 2):

- managed to recall up to 50% of nonconforming product
- managed to recall from 50 to 70% of nonconforming product
- managed to recall 71–90% of nonconforming product
- managed to recall over 90% of nonconforming product
- no data
- I do not know.

The biggest percentage of companies (40.9%) recalled over 90% of the nonconforming product, next 19.3% declared that they manager to recall up to 50%, 8% of the questioned companies recalled 71–90% of the nonconforming product. 25% of companies showed lack of data concerning the amount of recalled products.

A small percentage of the questioned companies declared that they did not know the amount of the product, that they had managed to recall.

A satisfying level of recalled products should be around 95–99.5%. Of course it will depend on the situation, which has caused the incompatibility, whether the product has reached the retail client, or is it still at the distributors dis position, then the indicators may have other values. This measurement is one of the elements, based on which companies may conclude the efficiency, or inefficiency of their actions in the area of recalling products out of the market.

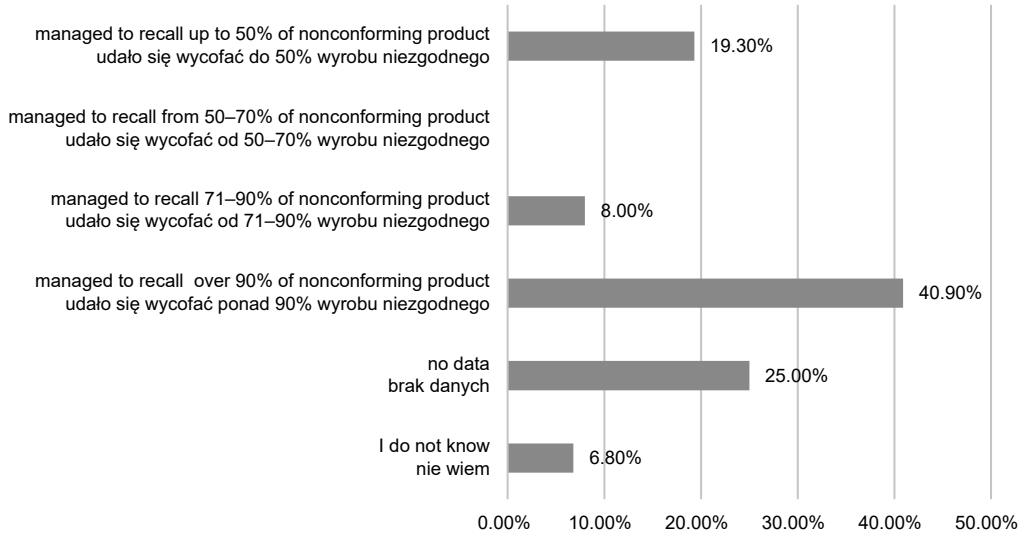

Fig. 2. Quantity of the nonconforming product of recall
Source: own research.
Rys. 2. Ilość wycofanego wyrobu niezgodnego
Źródło: badania własne.

CONCLUSION

The displayed above analysis of the gathered data proves, that companies have problems related to product recall. Organizations may reluctantly admit to recalling products and giving the reason of those actions. However, the research was anonymous and one can suppose that most companies had no issues with revealing this type of information. The amount of recalled products comparing to the total number of nonconforming products leaves much to be desired, especially that a big percentage of the questioned companies do not register these amounts, that surely makes evaluation of the efficiency of taken actions impossible. In the eventuality of a real threat a decision to commence the process of recalling a product off the market is very difficult. Efficient carrying out of the use of clear and transparent procedures and proper and complete information addressed to all recipients , and above all to the ultimate consumer , can influence the minimization of the negative effects of events such as. Loss of a good reputation will ultimately affect the acceleration of the process of rebuilding market position.

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ZARZĄDZANIE WYCOFANIEM ŻYWNOŚCI NIEBEZPIECZNEJ Z RYNKU

Streszczenie. Celem niniejszego artykułu jest przedstawienie istoty skutecznego zarządzania wycofaniem żywności niebezpiecznej z rynku. Realizacja celu opracowania znajduje swoje odzwierciedlenie w jego poszczególnych częściach. Wymagania prawne obligują przedsiębiorstwa do podjęcia natychmiastowych działań, gdy tylko się okaże, że produkt dostępny na rynku może zagrażać zdrowiu lub życiu konsumentów. Działania te są związane z zablokowaniem podejrzanej partii, ewentualnie z wycofaniem wyrobu z rynku i skutecznym poinformowaniem organów nadzoru oraz samych klientów, jeśli wyrób trafił już na półki sklepowe. Obszar tych wymagań jest bardzo szczegółowo uregulowany w prywatnych standardach zapewnienia bezpieczeństwa i jakości żywności, takich jak np. BRC, IFS czy w międzynarodowej normie ISO 22000. W artykule zaakcentowano znaczenie systemu identyfikowalności dla zapewnienia skutecznego wycofania, a ponadto przeanalizowano wyniki badań empirycznych w zakresie przyczyn i oceny skuteczności wycofań żywności z rynku.

Słowa kluczowe: incydenty, wycofanie z rynku, żywność niebezpieczna, bezpieczeństwo żywności

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